# JURISDICTIONAL TRANSFER OF HIGHWAYS IN IDAHO: PAST, PRESENT, AND FUTURE

# A Thesis

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# **AUTHORIZATION TO SUBMIT THESIS**

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# **ABSTRACT**

Jurisdictional transfer is the act of transferring all funding and operating responsibilities for a particular roadway, or roadway segment, to a different organization when that facility has either become an essential component of the state highway system, or has been deemed unnecessary. While jurisdictional transfers are quite common, very few states have established policies and/or procedures to help guide the process.

This thesis summarizes the jurisdictional transfer process used by the states in Region 10 of the United States Department of Transportation (USDOT) (Alaska, Washington, Oregon, and Idaho). It provides a historic review of the jurisdictional transfer process used by the Idaho Transportation Department (ITD) since its inception in 1977 to present day and highlights the many changes that have occurred over the years. This thesis identifies weaknesses with ITD's current process and makes several suggestions for modifications that would make it more efficient, objective, and better aligned with ITD's vision and goals. The recommendations in this thesis were presented to ITD and are currently under consideration. Other states that are developing formal procedures can use the review and recommendations in this thesis for guidance.

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# **DEDICATION**

This work is dedicated to my wife, Katie Hawkins, for her support and belief in me, and to my children, Carter, Cohen, and Casen, for bringing joy (and chaos) into my life. Without their sacrifices this thesis would not have been possible.

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# 1. INTRODUCTION

# 1.1 The Challenge of Jurisdictional Transfer

State departments of transportation (DOTs) are constantly faced with four compounding issues: increasing traffic volumes, changing travel patterns, rising construction and operation costs, and decreases in State and Federal transportation funding. These issues have been exacerbated in many of the large, rural western states over the last few decades as they have experienced unprecedented population growth in their more urbanized areas and a steady decline in their rural populations. These population shifts have caused major land use changes which have, in turn, drastically altered travel patterns over this time period, substantially increasing traffic on some routes (*i.e.* state highways, county roads, and city streets) while virtually eliminating traffic on others.

Mounting fiscal constraints, steady traffic volume increases, and travel pattern changes have left many state DOTs scrambling to improve safety and increase capacity on these newly emerging high-use routes, while still trying to maintain the other routes within their jurisdictions. These issues make it essential that state DOTs objectively evaluate their transportation networks to determine the most efficient and effective way to improve the statewide system, with the limited resources they have available to them. One option that state DOTs have for working toward a solution to these compounding issues is jurisdictional transfer.

Jurisdictional transfer is the act of transferring all funding and operating responsibilities for a particular facility (*i.e.* roadway, or roadway segment), to a different organization; typically a transportation agency or municipality. These transfers are often executed upon the completion of one or more conditions, typically set by the receiving party (*e.g.* financial compensation; continued maintenance for a set period of time; surface rehabilitation or other construction needs such as the installation of a traffic signal; the concurrent acceptance of jurisdiction of a different roadway, or roadway segment, by the transferring party; etc.).

There are two primary types of jurisdictional transfer that occur: an acquisition (addition to the receiving party's transportation system), and a deletion (removal from the transferring party's system). Two additional actions that fall under jurisdictional transfer are abandonment, and in some cases, decommissioning. In the case of abandonment, there is no receiving party to take on the funding and operating responsibilities of the roadway, or roadway segment – it is simply left to crumble over time. In the case of decommissioning, the roadway, or roadway segment, is physically removed and an attempt is made to return the land back to its natural state.

Roadway abandonment and decommissioning is almost always associated with the relocation of an existing route (*e.g.* a narrow, winding section of roadway is replaced by a safer, more direct route, eliminating the need for the existing section). However, some scenarios exist in which a roadway, or roadway segment, is simply no longer needed and is therefore abandoned (*e.g.* a dead end route specifically designed to serve a large mining or logging operation that has since closed down).

The aforementioned fiscal constraints and the historic layout of most transportation systems make transferring the jurisdiction of a roadway a challenging undertaking. This is particularly true for rural western states due to the sheer size of their transportation systems and the fact that many of their rural routes still in use today were originally established more than 50 years ago, some as early as the 1920s. These old state highways serve sparsely distributed rural towns and cities and are often times the only link between these rural areas and the state's economic activity centers. Further compounding these issues is the fact that many of these rural state highways serve as the only connections to rural highways in adjacent states. Despite these challenges, many rural western states engage in the jurisdictional transfer of roadways on an annual basis, although the methods utilized to conduct these transfers vary substantially from state to state.

#### 1.2 The Need for Review and Critique

Very few state DOTs have established policies and/or procedures for determining the jurisdictional transfer of roadways. Of the states that have established policies and/or

procedures, many lack documentation, utilize qualitative methodologies, base much of the decision making process on subjective criteria, and are conducted in an ad-hoc manner. This is problematic for various reasons. First, decision making in the transportation industry typically involves many individuals with different agendas, backgrounds, and biases. Inconsistency on the part of a state DOT can result in accusations of unfair treatment or consideration, lawsuits, political unrest, and a loss of confidence and trust. Second, jurisdictional transfers have an impact on traffic safety and ultimately affect the performance (*i.e.* traffic flow) of the entire transportation system.

Adding or deleting a roadway, or roadway segment, from the state highway system at the improper time (or failing to do so) can result in an increased number of traffic related accidents and poor performance; both of which will have a direct, negative economic impact on both the region in which the transfer occurred (or should have occurred) and the state as a whole. Because of these reasons, objectivity and consistency are critical for determining jurisdictional transfers.

A review and critique of the procedure used for the jurisdictional transfer of highways in Idaho is necessary for several reasons. First, the Idaho Transportation Department (ITD) has been utilizing a formally documented procedure for almost 40 years. While the methodology has undergone a number of changes over the years, a full review of the process has never been conducted. Second, because no formal review exists, a thorough critique of ITD's procedure has also never been conducted. Such a critique is important because it will highlight any procedural challenges or methodological issues that could be affecting the efficiency and accuracy of the procedure, and any that may have been overlooked. Finally, a full review and critique will pave the way (pun intended) for recommendations on improving ITD's jurisdictional transfer process.

#### 1.3 Thesis Organization

Chapter 2 provides a summary of the jurisdictional transfer methods found in the literature and used by the states neighboring Idaho. Chapter 3 provides a historical look at the evolution of ITD's jurisdictional transfer policies and procedures over the last 39 years and highlights relevant federal legislation changes that coincide with this time period.

Chapter 4 provides a critique of ITD's current jurisdictional transfer procedure and offers recommendations for improvements. Chapter 5 summarizes the accomplishments of this thesis.

#### 1.4 Research Approach

The research approach for this thesis included a review of the literature concerning jurisdictional transfer including journal articles, documents found at various state DOT websites, ITD's internal document warehouse, and various other sources. When possible, interviews were conducted with the person(s) responsible for overseeing jurisdictional transfers at the state DOTs of the states defined by the United States Department of Transportation (USDOT) as Region 10 (*i.e.* Alaska, Washington, Oregon, and Idaho).

During the first year of research for this thesis, I was on staff with the Planning and Program Management (2PM) section of ITD as a Transportation Planning Consultant. While in that role, I was able to speak with various ITD employees, including District Planners, District Engineers (DEs), and other planning staff that had first-hand experience with ITD's jurisdictional transfer process. This consulting position also afforded me the ability to access all of ITD's policies, records, meeting minutes, and any other documentation needed to conduct this research.

While I was on staff with ITD, one of my tasks was to develop a tool that would allow 2PM to evaluate every route under ITD's jurisdiction (*i.e.* the State Highway System (SHS)) at the same time, using the current jurisdictional transfer process. I created a spreadsheet tool that allowed, for the first time, the ability to evaluate all of the SHS routes simultaneously (see APPENDIX D). Prior to creating this tool, only routes with a specific jurisdictional transfer request were evaluated independently. My experience creating the spreadsheet tool provided me in-depth insight with ITDs jurisdictional transfer process and lead me to the critique and recommendations presented in this thesis. The recommendations in this thesis were presented to ITD and are currently under consideration. Other states that are developing formal procedures can use the review and recommendations in this thesis for guidance.

# 2. STATE-OF-THE-PRACTICE

#### 2.1 Jurisdictional Transfer in the Law and Literature

In most states, the authority of jurisdictional transfer is granted to the state department of transportation (DOT) through an act of legislation. While much of this legislation addresses the purpose and need for jurisdictional transfers (*e.g.* to ensure economic prosperity, provide a safe means of travel for residents, etc.), little guidance is provided as to how the process should occur. Even still, when such process guidance is provided, it is generally very generic and only speaks to the need for stakeholder collaboration and public input to help inform the evaluation process. In some instances, specific evaluation metrics are even provided, but when it comes to understanding how the specific evaluation process of a requested transfer is to occur, virtually no guidance is provided (O'Connel, et al., 2010).

In the academic literature, there is very little written on the topic of jurisdictional transfer. In fact, a search for articles from the last 30 years (1990 – 2010) in *Transportation Research Record*, as well as similar searches using Google Scholar, revealed very little existing literature with the terms "jurisdictional transfer", "roadway decommission", "roadway acquisition", "transportation system adjustment", and "highway additions".

When the topic of jurisdictional transfer is discussed, it is usually a byproduct of discussions surrounding the economic impacts of operating a route with substandard maintenance or outright abandoning maintenance responsibilities (National Cooperative Highway Research Program, 2015); or discussions around whether or not National Forest Service (NFS) roads should be decommissioned (*i.e.* removed) or considered for other uses, and determining what is the minimal road system possible while still being able to manage and protect NFS lands (The Wilderness Society, 2012).

#### 2.2 Jurisdictional Transfer in The Pacific Northwest

To better understand the state-of-the-practice, Alaska, Washington, and Oregon were selected for a review of any policies and procedures currently being utilized by the DOTs in those states for jurisdictional transfers. When combined with Idaho, this group of states makes up Region 10 of the USDOT, most commonly referred to as the Pacific Northwest. With the exception of Alaska, the state legislatures, transportation networks, and economies within Region 10 have all been evolving together for about the last 150 years.

Interviews were conducted with the person(s) responsible for overseeing the procedures (when available), and any related documents, either found online or furnished by the interviewees, were reviewed. A summary of the jurisdictional transfer process for each of these states is presented below:

#### Alaska

Alaska is unique in that air and water transportation are often a primary mode of transit between communities. In fact, many communities are only accessible by boat, ferry, or airplane. As such, these communities tend to only have a small network of local roads and trails to serve the residents. This can be challenging for the Alaska Department of Transportation and Public Facilities (DOT&PF) as they are charged with planning, building, and maintaining a network of "highways" (*i.e.* the Alaska State Highway System) with the objective of "…linking together cities and communities throughout the state (thereby contributing to the development of commerce and industry in the state, and aiding the extraction and utilization of its resources)…[to] improve the economic and general welfare of the people of the state." [AS 19.05.125].

To help meet the aforementioned challenge and objective, the DOT&PF utilizes the periodic statewide transportation planning process to determine which surface facilities, both existing and planned, should compose the state highway system. This planning process, which is backed by legislation [AS 19.05] and guided by administrative code [17 AAC 05], establishes a team of DOT&PF staff (*e.g.* headquarters, regional offices, etc.) that evaluates

and scores all proposed surface transportation projects that are up for consideration. It is during this planning process that jurisdictional transfers are evaluated and scored, right alongside the other transportation project.

While 17 AAC 05.175 provides a good amount of detail on the evaluation component of this planning process, including the identification of specific evaluation criteria and language referring to scores, it does not define how the actual scoring is to take place; no scoring ranges are included in the legislation. During this process, projects are first evaluated and scored independently by each reviewer. When that evaluation is complete, the evaluator multiplies the individual score for each criterion by the weight of each criterion and then adds the resulting numbers to arrive at a single reviewer score. The reviewer scores are then averaged together to establish a final project score. These project scores are used to establish project priority.

Once all of the projects are scored, including the jurisdictional transfer requests, there is a period of time provided for public comments. Once that is concluded, and any issues that arose have been addressed, the Alaska Transportation Commissioner approves the project list. If jurisdictional transfer requests were included in that project list, the process becomes a matter of negotiation between the DOT&PF and the local authority.

# Washington

RCW 47.01.425 [Jurisdictional transfers.] provides that the Washington Transportation Commission (WTC) "shall receive and review letters of request from cities, counties, or the department of transportation requesting any addition or deletion from the state highway system. The commission must utilize the criteria established in RCW 47.17.001 [Criteria for changes to system.] in evaluating requests and to adopt rules for implementation of this process."

WAC 468-710 [Route jurisdiction transfer rules, regulations and requirements.] defines the procedure for jurisdictional transfer in Washington. Per this code, jurisdictional transfer requests are, at the discretion of the WTC, opened up for public testimony at a

regularly scheduled WTC meeting. Once the meeting is complete, the WTC compiles and summarizes the public testimony in the form of meeting minutes (WAC 468-710-060).

Using the jurisdictional transfer request and the meeting minutes, the WTC prepares a preliminary finding and provides written notice to any stakeholder groups that might have an interest in the request (*e.g.* various divisions within WSDOT: planning, safety, maintenance, environmental, etc.; the regional representative(s) for the Federal Highway Administration (FHWA); local transportation organizations; local highway districts; etc.). Each stakeholder group has thirty (30) days to review the jurisdictional transfer request and provide comments, and/or recommendations based on their particular expertise regarding the facility in question.

For the final step of the jurisdictional transfer process, the WTC prepares a final report of findings and a recommendation based on the initial request, feedback from the various stakeholder groups and public testimony, the criteria defined by RCW 47.17.001, and their own evaluation. The WTC sends the report and their recommendation to the Washington State Senate and House Transportation Committees for consideration. All changes to the SHS in Washington are made by the legislature.

#### **Oregon**

ORS 366.290 [Adding or removing roads from the state highway system.] grants the Oregon Department of Transportation (ODOT) the authority to "...select, locate, establish, designate, improve and maintain out of the highway fund a system of state highways..." This statute does not however, provide any guidance or establish any process by which jurisdictional transfers are to occur.

However, documentation provided by ODOT regarding jurisdictional transfers suggest that "ODOT should also consider off-system improvements as a means of enhancing the state/regional transportation system. Off-system improvements may provide a cost-effective alternative to increasing the capacity of the state highway system, while helping to meet both state and local needs." This internal ODOT document basically encourages

project specific partnerships in which ODOT can help fund improvement projects on routes not within their jurisdiction to positively impact the SHS.

Jurisdictional transfers occur on an ad-hoc basis in Oregon. The process by which they are conducted is generally a negotiation that looks at the condition of the route at the time of transfer, required funding for maintenance, and ongoing operational responsibilities. The internal ODOT document also suggests that "[t]hese transfers should occur on a more systematic basis." When a transfer negotiation becomes finalized, a Jurisdictional Transfer Agreement is executed and by the appropriate local authorities and ODOT's Right of Way Manager.

#### Idaho

The formal policy currently in place, which is backed by Idaho Legislation [IC 40-310 (1)], is ITD Administrative Policy (A-09-06) (see APPENDIX A). Per ITD's current policy, all jurisdictional transfer requests are referred to an ITD Board-appointed System Adjustment Committee for initial consideration. If the consensus of the System Adjustment Committee is that the jurisdictional transfer request warrants further review, the request is passed to the Planning and Program Management (2PM) division within ITD.

Using a process called System Action Ranking (SAR), the 2PM division utilizes a series of 9 qualitative and quantitative criteria to evaluate and score both the operational and network characteristics of the facility associated with the jurisdictional transfer request. ITD Administrative Policy (A-09-06) requires a minimum SAR allocation of 70 points before the jurisdiction of a route can be transferred to ITD for placement on the State Highway System. Conversely, a maximum SAR allocation of 30 points is required for 3 consecutive years before the jurisdiction of a route can be transferred away from ITD. Once the SAR process is completed, a report is prepared by the 2PM division that includes scores for each of the nine criterion, the summation of these scores, and the original jurisdictional transfer request. This report is then sent to the System Adjustment Committee for review.

Upon review, the System Adjustment Committee submits the report, the jurisdictional transfer request, and a recommendation (based on the required SAR allocations) to the ITD Board for final consideration. However, Idaho Legislation [IC 40-203B] requires ITD to get the consent of the associated jurisdiction before any transfer can occur. For example, if the transfer request was submitted by one of the ITD district offices (*e.g.* to remove a section of highway from the state highway system), the proposed receiving jurisdiction has the power to simply say no. If the receiving jurisdiction agrees to the transfer in writing (see APPENDIX C), and if the ITD Board decides to approve the request, a resolution describing the transfer is written, signed by the ITD Board, and recorded as an "Official Minute" of the ITD Board (see APPENDIX B).

### 2.3 Summary

TABLE 2.1 provides a comparison of the jurisdictional transfer process characteristics amongst the Region 10 DOT's. While the jurisdictional transfer process for both Alaska and Washington have many of the same characteristics as Idaho's process, this review revealed that Idaho's process is both comprehensive and innovative. In fact, several of the Region 10 interviewees indicated that most state DOTs would like to establish a formal scoring procedure similar to the one utilized by ITD.

TABLE 2.1 Jurisdictional Transfer Process Characteristics for Region 10

	Region 10 State				
Process Characteristic	Alaska	Washington	Oregon	Idaho	
Standard Process or Procedure Exists	X	X		X	
Formal Document Exists	X			X	
Backed by Legislation	X	X	X	X	
Includes Stakeholder Collaboration	X	X			
Includes Quantitative Metrics	X			X	
Includes Qualitative Metrics	X	X		X	

# 3. THE EVOLUTION OF JURISDICTIONAL TRANSFER IN IDAHO

ITD has been utilizing formal written policies and procedures for making jurisdictional transfers since 1977. This chapter describes the evolution of these policies and procedures over the past 39 years and highlights relevant federal legislation changes that coincide with this time period. The information presented here was gathered via interviews and reviewing internal documents during a one-year internship with the Planning and Program Management (2PM) section under the Division of Highways at ITD. Addition research was conducted using newspaper archives and a carefully selected group of state and federal government websites (*e.g.* www.itd.idaho.gov, www.fhwa.dot.gov, etc.).

#### 3.1 1977 - 1992

In 1977, the Idaho Department of Highways (8-years before ITD was established), created a formal procedure to help ensure that the correct adjustments (*i.e.* jurisdictional transfers and route relocations) were made to the State Highway System. This procedure, which is the oldest on record relating to jurisdictional transfers in Idaho, established a rating system for evaluating key operational and network characteristics of rural, low-volume highways. Under this system, six rating criteria were used to assign points to the route in question, for a maximum possible score of 100. The six criteria and associated point distributions for this original procedure are as follows: average daily traffic (10 pts), vehicle miles of travel (20 pts), need of roadway to meet statutory goals (40 pts), proximity to parallel or duplicate service roads (10 pts), need of roadway to maintain interstate systems continuity (10 pts), and importance of roadway to the state highway system grid (10 pts).

In 1985, the Idaho Legislature passed Title 40, which established the Idaho Transportation Board (IC 40-301) and the ITD (IC 40-501), among other things. Through this legislation, the Idaho Transportation Board was "...vested with authority, control, supervision and administration of the [transportation] department" [IC 40-301]. Title 40 also grants the Idaho Transportation Board the authority to "[d]etermine which highways in the state, or sections of highways, shall be designated and accepted...as a part of the State Highway System" [IC 40-310 (1)] and to "...abandon the maintenance of any highway and

remove it from the State Highway System, when that action is determined by the unanimous consent of the Board to be in the public interest" [IC 40-310 (3)].

Furthermore, Title 40 incorporated four written evaluation guidelines, to be used in conjunction with the original rating system from 1977, to aid in determining that the correct adjustments were made to the State Highway System. The statute requires that the following guidelines are also to be considered by the Idaho Transportation Board when requested adjustments to the State Highway System have been made: 1) Relative importance of each roadway to cities, existing business, industry and enterprises; 2) Development of cities, natural resources, industry, and agriculture; 3) Safety and convenience of highway users, and the common welfare of people and cities of the state of Idaho; and 4) The state's financial capacity to build and maintain the State Highway System.

In 1987, the Surface Transportation and Uniform Relocation Assistance Act (STURAA) was signed by the United States Congress. STURAA, also called the Federal-Aid Highway Act of 1987, was the last bill of the Interstate Highway System era – preceded by a long line of Federal-Aid Highway Acts dating all the way back to 1916. STURAA granted the Secretary of Transportation the authority to allocate funds, granted states the authority to raise the speed limit on rural interstate highways to 65 miles per hour, and was the first and only "highway" bill in the 20<sup>th</sup> century to receive a presidential veto, though the veto was eventually overturned.

In response to STURAA, in 1990, the Idaho Legislature passed Idaho Code 40-203B that requires the Idaho Transportation Department to "...obtain the consent of the applicable local highway jurisdiction before it may abandon or assume control of the highway. Consent shall be obtained by passage of a resolution by the local highway jurisdiction assenting to the requested action of the transportation department" [IC 40-203B]. The transfer of jurisdiction to either party is considered null and void until the local agency passes the resolution.

In 1991, the Intermodal Surface Transportation Efficiency Act (ISTEA) was signed into law. ISTEA, the first post-Interstate Highway System era federal legislation to address

transportation planning and policy, required collaborative planning and granted significant authority to metropolitan planning organizations. Most notably, ISTEA defined numerous High Priority Corridors to be included as part of the National Highway System. Among these is corridor number 43, United States Route 95 that runs from the United States-Canadian border in Eastport, Idaho, south to the Idaho-Oregon border near Nampa, Idaho.

Shortly after the passage of this new federal and state legislation, the Idaho Transportation Board determined that its strategy for jurisdictional transfer moving forward would be to not add highway miles to the State Highway System unless an equal amount of miles could be removed. As part of this new strategy, Board Policy B-09-06 "State Highway System Adjustments" was signed into action in 1991. This policy mandates that all requests concerning changes to the State Highway System must first be referred to the Board Subcommittee on State Highway System Adjustments, a committee established by this policy, before any actions or studies be carried out.

This policy also solidified the use of a scoring system, to be implemented by Administrative Policy A-09-06, and determined that a minimum rating of 70 points would be required in order for a roadway, or roadway segment, to be considered for addition to the State Highway System. Conversely, for roadways, or roadway segments with a rating of 30 points or less, efforts would be made to remove them from the State Highway System.

#### 3.21993 - 2009

In 1993, a few modifications were made to the rating criteria. First, the criterion used to rate a route's impact on statutory goals was divided into four separate criteria to assess if the primary function of the route is for statewide through traffic or local use; and to rate it according to its impact on economic activity, safety, and maintenance. Next, the point distribution was changed to prioritize the rating criteria, placing a greater emphasis on routes supporting more through traffic, higher vehicle miles of travel (VMT), and higher average daily traffic (ADT). Lastly, routes that are parallel to each other and/or in close proximity to each other would now be penalized by points being subtracted.

The end result of these modifications was 9 criteria, each with a different range of points, but still totaling to a maximum possible score of 100. The modified criteria and point allocations are as follows: statewide versus local use (16 pts), vehicle miles of travel (14 pts), average daily traffic (13 pts), proximity to parallel or duplicate service roads (12 pts), support of economic activities (11 pts), importance of roadway to the state highway system grid (10 pts), need of roadway to maintain interstate systems continuity (9 pts), importance of roadway for safety (8 pts), and impact of maintenance (7 pts).

These modifications however, did not affect the minimum and maximum rating strategy adopted by the Idaho Transportation Board in 1990 (*i.e.* routes receiving 30 points or less should be considered for removal; routes need a minimum of 70 point to be considered for addition).

In 1996, the Idaho Transportation Board passed a resolution establishing four additional guidelines to be followed when evaluating requested system modifications. The new guidelines emphasized that: 1) Great weight be given to an addition that requires no right of way acquisition by the State; 2) Approximately an equal miles state highway should be removed when miles are added; 3) Additions to/removals from the SHS are to be prioritized based on the state rating system; and 4) Partnerships and cooperative efforts between and among jurisdictions are emphasized.

Between 1996 and 2009, numerous staff and policy changes occurred at ITD. In addition to welcoming a new Director, many of the separate divisions within ITD were realigned, several key administrative positions changed hands, and ITD developed and adopted a long range strategic plan; all in an effort increase ITD's overall efficiency and effectiveness as an organization. Also during this time period, the guidelines and rating system was modified several more times. Each modification adding a little bit more detail to a particular evaluation guideline, scoring criteria, and scoring procedure; and making minor adjustments to the point ranges.

#### $3.3\ 2010 - 2016$

In 2010, the scoring criteria were finalized and are still in place today. The resulting nine scoring criteria and point allocations are as follows: supports economic activities (20 pts), statewide versus local use (16 pts), vehicle miles of travel (14 pts), average daily traffic (13 pts), proximity to parallel or duplicate service roads (12 pts), importance of roadway to the state highway system grid (10 pts), need of roadway to maintain interstate systems continuity (10 pts), importance of roadway for safety (8 pts), and impact of maintenance (7 pts).

In 2012 all routes were scored at the same time, for the first time ever, instead of a specific requested route. This gave the ITD Board a comprehensive perspective of the data. Based on this exercise, and the critique and suggestions in the following chapter, the ITD Board determined that a variety of the factors should be reconsidered.

3.4 Summary: 1977 - 2016

TABLE 3.1 illustrates the evolution of the scoring process used for jurisdictional transfers in Idaho from 1977 through 2016.

TABLE 3.1 Evolution of Idaho's Jurisdictional Transfer Scoring Process

	Time Period				
Scoring Criteria	1977-1992	1993-2009	2010-2016		
Needed to Meet Statutory Goals	40 pts				
Supports Economic Activities		11 pts	20 pts		
Local Use vs. Through Traffic		16 pts	16 pts		
Vehicle Miles of Travel	20 pts	14 pts	14 pts		
Average Daily Traffic	10 pts	13 pts	13 pts		
Parallel or Duplicate Route	10 pts	12 pts	12 pts		
Importance to SHS Grid	10 pts	10 pts	10 pts		
Interstate System Continuity	10 pts	9 pts	10 pts*		
Significance of Safety Needs		8 pts	8 pts		
Imapct of Maintenance		7 pts	7 pts		
<b>Total Possible Points</b>	100 pts	100 pts	110 pts		

<sup>\*</sup>Only considered if the route crosses a state line.

# 4. CRITIQUE AND SUGGESTED IMPROVEMENTS FOR IDAHO

This chapter provides a critique of the current jurisdictional transfer process utilized by ITD and recommendations for improvement. The critique and recommendations are based on interviews with ITD staff and other stakeholders involved with the transfer of roadways in the past few years. Many of the recommendations were identified while creating a spreadsheet tool for ITD's current scoring system.

The issues/weaknesses are organized in this thesis by theme, with recommendations for each theme. The recommendations described here have been shared with ITD through various presentations and are under consideration for a new process that is currently under development.

# 4.1 Pre and Post Screening

The jurisdictional transfer process begins when a formal request is referred to the System Adjustment Committee for initial consideration (pre-screening). Only if the consensus of the committee is to proceed will the request be sent to the 2PM section where the route will be evaluated and scored. While this first step could save the 2PM section time and effort that would have otherwise been wasted evaluating and scoring an unwarranted request, it could prevent the evaluation and scoring of a request that was warranted.

The jurisdictional transfer process ends when the System Adjustment Committee sends their final recommendation of action to the ITD Board for execution (post-screening). This final recommendation is based on the committee's consideration of the 2PM section's report, the SAR summation score, the merits of the route, and the relative standing of the request in relation to any other requests being considered at that time.

Allowing the System Adjustment Committee to subjectively pre- and post-screen jurisdictional transfer requests is a major weakness because there is no guidance as to how the committee is supposed to consider all of the information that has been presented to them, and because it is introducing potential biases and increasing the likelihood of inconsistency

on both sides of a mostly data-driven process. For example, current economic conditions, political climate, and/or personal preferences could sway the decisions of the individual committee members; and as the membership of the committee changes over time, so too will personal preferences and any level of cohesive thinking amongst committee.

One possible solution (Recommendation 1) to this issue of subjectively pre- and post-screening the jurisdictional transfer process would be to establish some objective pre- and post- SAR guidance (*e.g.* a small series of "tests" that identify omissions of required information or a certain baseline for consideration). Doing so would ensure that each time the System Adjustment Committee is facing a request, the process would begin with consistency and objectivity, regardless of who is on the committee or what happening in the Idaho economy. The pre-SAR guidance would also help non-ITD jurisdictions by providing them with a list of minimum requirements or a certain baseline for their request.

Another possible solution (Recommendation 2) would be to maintain a system-wide scoring system that can be continuously updated. With this in place, there would be little to no need for the subcommittee to pre-screen jurisdictional transfer requests as it would allow the 2PM section to quickly produce a SAR summation score for all jurisdictional transfer requests of routes that are not currently part of the SHS. It would also allow ITD to monitor existing SHS routes that continuously generate a low SAR summation score, indicating that they are nearing a point at which a jurisdictional transfer should be considered.

#### 4.2 Isolated Process

Jurisdictional transfer in Idaho is an isolated process among ITD's many activities, which creates a number of weaknesses. First, it is only utilized for ad-hoc transfer requests. There is no discernable pattern to help estimate when or how often transfer requests will be submitted to ITD. Requests can happen multiple times in a given year, which can lead to inconsistencies and/or errors in the evaluation and scoring process due to the 2PM staff being overburdened with an unexpected influx of work. Requests can also be as infrequent as one every few years, which can lead to inconsistencies and/or errors in the evaluation and

scoring process due to the 2PM staff loosing familiarity of the SAR process and/or due to the knowledge losses that accompany staff turnover.

Second, the jurisdictional transfer process isn't associated with any of the other ITD programs or systems. For example, ITD has: a Transportation Asset Management System (TAMS) for monitoring the physical condition of the SHS (*i.e.* pavement, culverts and bridges, signage, etc.); a corridor planning program for developing strategic plans around the transportation corridors that are most critical to the state; a program that monitors the "system health" of highways; and a Project Management System (PMS) that is used to monitor all ongoing transportation improvement projects and all future project needs. Many of these programs and systems incorporate various data metrics that are supplied by other ITD programs and systems, with the only exception being the SAR process. This type of isolation is inefficient as it can lead to duplication of efforts in developing and/or procuring common data metrics that could have easily been acquired from existing ITD sources.

ITD should integrate jurisdictional transfer into existing scheduled activities, much like how Alaska incorporates the process into regular statewide planning (Recommendation 3). This will remove many of the potential for inconsistencies and/or errors in the SAR process that stem from ITD staff turnover, lack of use, and time constraints. Additionally, any weaknesses associated with the input metrics and/or scoring criteria found in the existing SAR process could potentially be replaced by data from ITD's other programs and/or systems. Likewise, the SAR summation scores could be used by some of ITD's other programs and/or systems. For example, the PMS could incorporate SAR summation scores to help inform SHS project priority.

### 4.3 No Use of Automation or GIS

Another major weakness of the current jurisdictional transfer process is that the SRA process does not use any sort of automation or support tools (*e.g.* system-wide SAR model that was created as part of this research, GIS, etc.). The entire evaluation and scoring process is conducted manually for each route under a jurisdictional transfer request. In fact, using the system-wide SAR tool to evaluate and score all of the routes under ITD jurisdiction is

the first time automation (semi-automation in this case) has ever been used during the SAR process. Not using automation support is a problem, both for the reasons previously described (*i.e.* to inconsistencies and/or errors in the evaluation and scoring process), as well as for the fact that the SAR process can be very time consuming.

ITD should create a system-wide scoring tool for a GIS software platform (Recommendation 4). Not only would this allow for the visualization of the SAR summation scores for each route on the SHS, it would also allow for further automation of certain evaluation inputs. For example, determining the average distance to a parallel route would no longer be a manual process. The GIS software could easily calculate the distance between the route under review, and all other routes that could be considered parallel. These distance calculations could be produced at numerous locations along the route (*e.g.* measure the parallel distance at every station point) to allow for a better average. Additionally, the GIS software could take into consideration natural barriers, like mountains, rivers, etc. to ensure proper scores were applied.

# 4.4 Not Aligned with ITD's Mission & Goals

ITD's 2011 Strategic Plan outlines the mission and three primary goals that are to serve as the foundation from which all decisions at ITD are supposed to be made: *Improve Safety* by providing the safest transportation system possible; *Enhance Mobility* by providing a mobility-focused transportation system that will improve quality of life; and *Increase Economic Opportunity* by investing in transportation infrastructure that will drive economic opportunity.

If ITD's jurisdictional transfer process is to be the primary means by which a route is considered for addition to or removal from the SHS, then all aspects of the evaluation of that route should be focused on how the requested transfer will improve safety, enhance mobility, and increase economic opportunity in Idaho. One major weakness of ITD's current jurisdictional transfer process is the fact that it is not well aligned with these goals. There are three areas in which it is failing to do so.

First, only two of the nine scoring criteria are directly related to ITD's goals of improving safety and increasing economic opportunity (*i.e.* Economy and Safety). Of the remaining seven scoring criteria, three are loosely related to ITD's goal of enhancing mobility (*i.e.* Parallel, SHS Grid, and Interstate), one is loosely related to ITD's goal of increasing economic opportunity (*i.e.* Through), and the final three are loosely related to all three of ITD's primary goals, in some way or another (*i.e.* VMT, ADT, and Maintenance).

Second, even though the SAR scoring criteria are related to ITD's primary goals (whether directly or loosely), the evaluation inputs used, and the process by which the points are allocated, fail to adequately assess how adding or removing a particular route from the SHS will positively impact those goals. For example, ADT is a scoring criterion that can account for up to 12% of the total point allocation for a route. While ADT is an important metric that is frequently used in transportation studies, by itself, ADT does little to assess a route's influence on improving safety, enhancing mobility, and increasing economic opportunity.

Third, the three primary goals are of equal importance to ITD. Therefore, the point allocations for the scoring criteria related to these goals should also be weighted equally. This is not the case for the current SAR process. Of the two scoring criteria are directly related to ITD's goals of improving safety and increasing economic opportunity, Economy can allocate up to 20 points whereas Safety can only allocate up to eight points. For the three scoring criterion that are loosely related to enhancing mobility, Parallel can allocate up to 12 points, SHS Grid can allocate up to 10 points, and Interstate can allocate 10 points. If Maintenance was linked with safety, and VMT and ADT were linked with mobility, the total possible points for each of the primary goals would be: 15 for improving safety, 59 for enhancing mobility, and 36 for increasing economic opportunity.

ITD should revise the SAR process so that the scoring criteria and the resulting point allocations are in fact aligned with ITD's mission and three primary goals (Recommendation 5). The revised SAR process should go as far as grouping each of the scoring criteria into three goal-oriented evaluation categories, which would be named after the specific goal they

are meant to address (*i.e.* Improve Safety, Enhance Mobility, and Increase Economic Opportunity), so that it is clear what each is meant to evaluate.

To ensure alignment with ITD's mission and three primary goals, the following questions should be considered when determining what scoring criteria and associated evaluation inputs should be used: 1) What characterizes a safe highway? 2) What aspects of a highway enhance mobility? 3) What characteristics of a highway increase economic opportunity?

# **4.5 Evaluation Inputs**

Another major weakness of ITD's current jurisdictional transfer process is the issue of double counting, redundancy, and subjective determination amongst the 12 individual evaluation inputs that are used to allocate points to scoring criteria during the SAR process. The evaluation inputs are as follows: Highest ADT on a Route, Lowest ADT on a Route, Average ADT, Percent Car-Commercial Vehicle Split, Economic Activity Intensity, Length, Average Distance to Parallel Route, Importance to the SHS Grid, Average Shoulder Width, Average Lane Width, Statewide Activity, and Interstate Continuity.

In total, these evaluation inputs are utilized 20 times during the process of allocating points to the nine scoring criterion. TABLE 4.1 illustrates which of these 12 evaluation inputs are utilized by each of the scoring criterion during the SAR process. As depicted by this table, two of the inputs are used four times, two of the inputs are used two times, and the remaining eight inputs are only used once. These four redundant evaluation inputs are all measures of ADT and they are used by six of the nine scoring criteria. Of these 6 criteria that use an ADT input, four use two or more, and one criterion is actually based solely one of these ADT inputs (*i.e.* scoring criterion ADT exclusively uses evaluation input Average ADT). Overall, 60% of total uses of evaluation inputs that occur during the SAR process are a measure of ADT. This issue of redundancy and double counting puts far too much weight on ADT.

TABLE 4.1 Relationship between Evaluation Inputs and Scoring Criteria

	Scoring Criterion <sup>a</sup>					Times				
Evaluation Input	Economy	Through	VMT	ADT	Parallel	SHS Grid	Interstate	Safety	Maint.	Used
Highest ADT on Route <sup>b</sup>	X	X						X	X	4
Lowest ADT on Route <sup>b</sup>	X	X						X	X	4
Average ADT			X	X						2
% Car-Comm. Vehicle Split	X								X	2
Economic Activity Intensity <sup>c</sup>	X									1
Length			X							1
Avg. Dist. to Parallel Route					X					1
Importance to SHS Grid <sup>c</sup>						X				1
Average Shoulder Width								X		1
Average Lane Width								X		1
Statewide Traffic Activity <sup>c</sup>									X	1
Interstate Continuity <sup>c</sup>							X			1
Total ADT Inputs Used	3	2	1	1	0	0	0	2	3	12
Total Other Inputs Used	1	0	1	0	1	1	1	2	1	8
Total Inputs Used	4	2	2	1	1	1	1	4	4	20

<sup>&</sup>lt;sup>a</sup> X = used by criterion, -- = not used. See TABLE 3.1 for scoring criteria information.

In addition to redundancy and double counting, 4 of the 12 evaluation inputs are determined subjectively. As was introduced in section 4.1, allowing for the subjective determination of any aspect of the jurisdictional transfer process is a major weakness because it introduces potential biases and increases the likelihood of inconsistency to a mostly data-driven process. Further compounding this weakness is the fact that 2 of these 4 subjective evaluation inputs are the only input used by their respective scoring criterion. The remaining 2 are both used by scoring criteria that also use 3 ADT inputs.

To address issues of redundancy, double counting, and subjectivity in the input data, ITD should re-examine the current input to determine which can be revised and which will need to be replaced so that the resulting inputs are more closely related to the scoring criterion they are helping to inform (Recommendation 6). For example, rather than simply using the ratio of lowest ADT to highest ADT to determine how much through traffic is being served by a route, the difference between annual average daily traffic (AADT) and annual average weekday traffic (AAWT) could be used.

<sup>&</sup>lt;sup>b</sup> Same value used for all segments of a route.

<sup>&</sup>lt;sup>c</sup> Determined subjectively.

# 4.6 Inadequate Scoring Criteria

Another major weakness of ITD's current jurisdictional transfer process is that most of the SAR scoring criteria do not adequately address what they are intended to address. ITD should review and reformulate all of the existing criteria (Recommendation 7).

For example, the scoring criterion, Economy, is intended to highlight routes that support existing or proposed industrial, recreational, agricultural, or commercial activities. Of the four evaluation inputs currently used by this scoring criterion, one is directly related to this intent (*i.e.* Economic Activity Intensity), but this input is determined subjectively, 1 is related to economic activity (*i.e.* % Car-Comm. Vehicle Split) in that commerce is a big part of any economy, and the remaining two inputs are basic measures of ADT that have little to no relevance on supporting economic activity.

One approach that might better address the intent of supporting economic activities could be evaluating land use. Various land use designations (*e.g.* industrial, commercial, agricultural, residential, etc.) could be weighted to reflect their potential contribution to the economy (possibly based on gross regional product (GRP) or gross state product (GSP)). Points could be awarded based on the percentage of land that holds specified designations within a certain proximity of a route. For example, 20% of the land within 10 miles of Route A is zoned for commercial use, therefore Route A is awarded nine points.

Three more scoring criteria to consider here are SHS Grid, Parallel, and Interstate. These scoring criteria are all related in that they are each concerned with mobility, however they do not adequately address it in their current form. The evaluation inputs used to determine the importance of a route with respect to the SHS and the need for maintaining an interstate link with a state highway are subjective and have a lot of room for variability. The inputs used to evaluate the need for, or the reasoning against a parallel route is very time consuming and also has a lot of room for variability.

One approach that might better address mobility could be to combine these three scoring criteria, and to create a measure of "Connectivity". This new measure would

simultaneously consider the relationship between interstate linkages, parallel routes, and the overall physical structure of the SHS network. Using a concept like Grid Theory or Space Syntax, each route/segment could be weighted/scored based on its level of connectivity to all the other routes. Scenarios could quickly be run to model how removing and/or adding different routes would impact the SHS as a whole.

Yet another scoring criterion that does not adequately address what it is intended to is Safety. This criterion is intended to determine whether or not the majority of traffic utilizing the route is of a statewide nature (*i.e.* through traffic), and if so, whether or not the route has serious safety problems. If this combination exists, the route is to be awarded points in consideration of adding it to the SHS. There are 4 evaluation inputs used by this criterion; 2 are a measure of ADT and the other 2 are average shoulder width and average lane width. While there is a correlation between lane widths, shoulder widths, and safety, these two inputs, even combined with ADT inputs, have little to no relevance on evaluating serious safety concerns.

One approach that might better address the intent of this Safety criterion could be to replace the current evaluation inputs with inputs directly linked to safety problems. Incorporating crash data or some form of safety rating would be good options. Also combining condition issues related to maintenance could help to inform safety problems (*e.g.* surface condition in terms of cracking, potholes, etc., in terms of seasonal ice buildup or water pooling, etc.).

One final inadequacy of the current SAR process to make note of is a failure to address the importance of supporting emergency response and evacuation needs. This should be incorporated as a scoring criterion because emergency responses and evacuations are a function of mobility and have a direct connection to safety and economy. Evaluation inputs that could be used to assess the level to which a route supports emergency response and/or evacuation needs could include existing evacuation maps and emergency response maps. GIS software could be used to model and prioritize routes based on emergency and disaster scenarios, and/or emergency response facilities (*e.g.* hospitals, fire & police stations, etc.), with weight assigned to routes based on the number of times they are deemed critical in a given scenario.

# 5. CONCLUSION

This thesis reviewed the process for jurisdictional transfer in Idaho since it first appeared in documents produced by the Idaho Transportation Department in 1977 until present day, and highlighted the many changes that have occurred over the years. It also reviewed the jurisdictional transfer processes in the other three states that make up Region 10 of the USDOT (Alaska, Washington, and Oregon) and found that, in comparison, ITD's current process is both innovative and comprehensive.

Another key contribution of this thesis is a critique of the current method and description of seven recommendations for improvement. ITD should

- 1. Develop objective pre and post screening criteria,
- 2. Use data that is part of ITD's continuous data collection process,
- 3. Integrate with existing scheduled activities, such as the STIP,
- 4. Create a GIS tool to automate the scoring process,
- 5. Align with ITD's mission statement for safety, economy, and mobility,
- 6. Remove criteria that double count AADT as a performance measure, and
- 7. Revise and add certain criteria.

If ITD were to follow all seven recommendations, the resulting process would be a powerful planning tool that could evaluate, score, and monitor all of the roads in Idaho, across all jurisdictions, to show how each are currently functioning (*e.g.* local road, regional route, state highway) and how each is projected to function over time. It could also be built to accommodate "what-if" scenarios so that proposed transportation improvement projects (*i.e.* inputs from the PMS), land use and traffic volume changes, emergency road closures, etc. could be modeled to show how they might impact various roads throughout the statewide transportation network.

Many of these recommendations have been shared with ITD and are currently under consideration as ITD develops a new process for jurisdictional transfer called Integrated Corridor Analysis and Planning System (ICAPS). ICAPS, which was approved for development by the ITD Board in 2012, is a direct result of this body of work.

# **REFERENCES**

# O'Connel, Lenahan and Ted Grossardt

2010 Review of State Laws and Practices for Disposition of Re-aligned or Bypassed Segments and Associated ROW. Kentucky Transportation Center: University of Kentucky College of Engineering. Lexington, Kentucky.

# National Cooperative Highway Research Program

2015 NCHRP Synthesis 480: Economic and Development Implications of Transportation Disinvestment. *Transportation Research Board*. Washington, D.C.

# The Wilderness Society

2012 Travel Analysis Best Practices: A Review of Completed Travel Analysis Process Reports. The Wilderness Society. Washington, D.C.

#### **APPENDIX A**

# Idaho Transportation Board Administrative Policy A-09-06



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#### STATE HIGHWAY SYSTEM ADJUSTMENTS

The Division of Transportation Planning and Programming shall maintain a record of all requests, studies, and results for any adjustment proposals for the State Highway System and shall use the following procedures whenever considering State Highway System adjustments:

### Adjustment to the State Highway System

Whenever a local highway jurisdiction proposes a change to the State Highway System (addition/removal/relocation/etc.), the Division of Transportation Planning and Programming shall refer the request to the Board Subcommittee on State Highway System Adjustments. Upon board subcommittee concurrence, the highway's operating and network characteristics shall be determined using a point rating criteria that has been approved by the Idaho Transportation Board. Rural routes shall be rated on statewide versus local use, vehicle miles of travel index, average daily traffic, duplicate or parallel service, economics, importance to state highway system "grid," interstate system continuity, safety, and maintenance. For urban loops and spurs, the rating shall include average daily traffic, system proximity, population, and statutory goals.

The Division of Transportation Planning and Programming shall evaluate and rank low-volume state highways that serve five percent (5%) or less of the cumulative total vehicle miles of travel (VMT) for removal consideration. The VMT shall be determined by multiplying the lowest average daily traffic (ADT) between activity centers by the distance in miles between the activity centers. Other criteria such as through traffic highway usage, economic significance in relation to all state highways, etc. shall be rated.

#### **System Action Ranking**

Prior to the Board Subcommittee on State Highway System Adjustments meeting, the Division of Transportation Planning and Programming shall prepare a report that ranks the requested adjustments and the low-volume highways based on the composite score of the rating criteria contained in Tables A through F, and Appendix A or B (attached to this policy). A minimum point rating of 70 shall be required for a recommendation of a State Highway System addition adjustment and a point rating below 30 over a three-year period shall be required for a State Highway System removal adjustment, unless otherwise requested by a local highway jurisdiction.

The Board Subcommittee on State Highway System Adjustments shall analyze the Division of Transportation Planning and Programming's report, the point rating, and the merits of the routes proposed for system adjustment, and the relative standing in relation to all requests received to determine routes that are appropriate for further consideration.

#### State Highway System Adjustment Process

Upon board subcommittee recommendation of a State Highway System addition, removal, or other State Highway System adjustment, the following actions shall be taken:

- The board subcommittee or District Engineer shall contact the local highway jurisdiction and city
  officials, when involved, to further investigate the proposed system action. If the local highway
  jurisdiction is interested, negotiations will be conducted to reach an agreement on the action. The
  board subcommittee shall consider all feasible options, including monetary appropriations and
  maintenance assistance such as snowplowing and striping. The date of the system action shall also
  be discussed to assure minimal revenue and budgeting impact.
- 2. The results of the negotiation meeting shall be conveyed to the board subcommittee, the Director, and the Chief Engineer.
- 3. If required, an opportunity for a public hearing shall be coordinated with the involved parties. The ITD Public Involvement Coordinator shall provide news releases and other assistance as coordinated with the local highway jurisdiction. The public hearing shall be conducted as is appropriate for the system action.
- 4. Draft agreements shall be prepared by the district and sent to Roadway Design, Legal, and the Division of Transportation Planning and Programming for review. At the direction of the board, the District Engineer shall present a Highway System Agreement to the affected local highway jurisdiction for signature. The agreement shall address all issues from the public hearing testimony (if a hearing was required), include reference to the maintenance reimbursement option selected by the local highway jurisdiction (if applicable), and outline the process for conveyance of the right-of-way.
- Once an acceptable agreement has been made, an Official Minute shall be presented to the Idaho Transportation Board for a system action determination.
- 6. If financial payment is agreed to, the Chief Engineer shall ensure that the paperwork is completed and payment made to the local highway jurisdiction.

#### Official Minute

An Official Minute shall be prepared by the Division of Transportation Planning and Programming in concurrence with the Board Subcommittee for all system action determinations that are presented to the Idaho Transportation Board. The Official Minute shall provide the reason for action, describe the changes to the State Highway System, and establish an effective date. The Official Minute is also the basis for title transfer of the real property to the proper owners. The original Official Minute shall be filed by the Secretary to the Board in the exhibit book and approval/disapproval shall be so noted in the minutes of the Idaho Transportation Board meeting. Copies of the approved Official Minute shall be sent by the Division of Transportation Planning and Programming to the affected district, local highway jurisdiction, city officials (when involved), the Port of Entry section in headquarters, and others as appropriate.

#### ADMINISTRATIVE POLICY A-09-06 Page 3 of 14

Signed	Date	6-20-07	
PAMELA K. LOWE, P.E.			
Director			

This policy based on:

- Sections 40-120(4), 40-203 (c), 40-203B, and 40-310(1)(a) and (3), Idaho Code
- B-09-06, STATE HIGHWAY SYSTEM ADJUSTMENTS

PUBLIC HEARINGS

Department-wide supervision and coordination assigned to:

 Board Subcommittee on State Highway System Adjustments, the Transportation Planning and Programming Administrator, and the Secretary to the Board

Direction of activity and results delegated to:

 ChiefEngineer, District Engineers, Roadway Design, Legal, a Division of Transportation Planning and Programming Senior Planner, and the Public Involvement Coordinator

Department procedures contained in:

This policy

Former dates of A-09-06:

A-20-03,

9/31/91 and 9/21/93 (02/01 incorporated A-14-10, Highway System Adjustments into this policy)

Cross-referenced to related Administrative Policies:

ross-reierence	to related Administrative Policies:
<ul> <li>A-03-</li> </ul>	01, ACQUISITION AND DISPOSAL OF REAL PROPERTIES AND THEIR IMPROVEMENTS
<ul> <li>A-05-</li> </ul>	16, MAINTENANCE OF STATE HIGHWAYS
• A-09-	02, URBAN LIMITS AND FUNCTIONAL CLASSIFICATION SYSTEMS
• A-09-	03, NUMBERING OF STATE HIGHWAYS
• A-09-	04, CORRIDOR PLANNING FOR IDAHO TRANSPORTATION SYSTEMS
• A-11-	04, ALLOCATION OF SURFACE TRANSPORTATION PROGRAM APPORTIONMENTS TO
	LOCAL PUBLIC AGENCIES
• A-11-	06, SURFACE TRANSPORTATION PROGRAM RURAL (STPR) EXCHANGE PROGRAM
<ul> <li>A-12-</li> </ul>	15, HIGHWAY ACCESS CONTROL
<ul> <li>A-13-</li> </ul>	02, PUBLIC INVOLVEMENT FOR LOCATION AND DESIGN DETERMINATIONS
• A-19-	01, FINANCING CONSTRUCTION OF STATE HIGHWAY IN CITIES
<ul> <li>A-20-</li> </ul>	01, RELEASE OF DEPARTMENT INFORMATION TO THE MEDIA

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## TABLE A

# Statewide vs. Local Use Point-Rating

(maximum score: 16)

Data determined by the route's ratio of lowest Average Daily Traffic (ADT) to highest ADT.

RATING	RATIO (%)
0	0
1	3
2	6
3	9
4	12
5	15
6	18
7	21
8	24
9	27
10	30
11	33
12	36
13	39
14	42
15	45
16	48

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TABLE B (Maximum score: 14) Vehicle Miles of Travel Index

	RATINGS				LOWEST	ADT				
MILES	14	13	12	11 .	10	8	6	4	2	0
1	10000	9000	8000	7000	6000	5000	4000	3000	2000	1000
2	5000	4500	4000	3500	3000	2500	2000	1500	1000	500
3	3333	3000	2667	2333	2000	1667	1333	1000	667	333
4	2500	2250	2000	1750	1500	1250	1000	750	500	250
5	2000	1800	1600	1400	1200	1000	800	600	400	200
6	1667	1500	1333	1667	1000	833	667	500	333	167
7	1429	1286	1143	1000	857	714	571	429	286	143
8	1250	1125	1000	875	750	625	500	375	250	125
· 9	1111	1000	889	778	667	556	444	333	222	111
10	1000	900	800	700	600	500	400	300	200	100
11	909	818	727	636	545	455	364	273	182	91
12	833	750	667	583	500	417	333	250	167	83
13	769	692	615	538	462	385	308	231	154	77
14	714							214	143	71
		643	571	500	429	357	286 267			67
15	667	600	533	467	400	333		200	133	63
16	625	563	500	438	375	313	250	188	125	
17	588	529	471	412	353	294	235	176	118	59
18	556	500	444	389	333	278	222	167	111	56
19	526	474	421	368	316	263	211	158	105	53
20	500	450	400	350	300	250	200	150	100	50
21	476	429	381	333	286	238	190	143	. 95	48
22	455	409	364	318	273	227	182	136	91	45
23	435	391	348	304	261	217	174	130	87	43
24	417	375	333	292	250	208	167	125	83	42
25	400	360	320	280	240	200	160	120	80	40
26	385	346	308	269	231	192	154	115	77	38
27	370	333	296	259	222	185	148	111	74	37
28	357	321	286	250	214	179	143	107	71	36
29	345	310	276	241	207	172	138	103	69	34
30	333	300	267	233	200	167	133	100	67	. 33
31	323	290	258	226	194	161	129	97	65	32
32	313	281	250	219	188	156	125	94	63	31
33	303	273	242	212	182	152	121	91	61	30
34	294	265	235	206	176	147	118	88	- 59	29
35	286	257	229	200	171	143	114	86	57	29
36	278	250	222	194	167	139	111	83	56	28
37	270	243	216	189	162	135	108	81	54	27
38	263	237	211	184	158	132	105	79	53	26
39	256	231	205	179	154	128	103	77	51	26
40	250	225	200	175	150	125	100	75	50	25
41	244	220	195	171	146	122	98	73	49	24
42	238	214	190	167	143	119	95	71	48	24
43	233	209	186	163	140	116	93	70	47	23
44	227	205	182	159	136	113	91	68	45	23
45	222	200	178	156	133	111	89	67	44	22
46	217	196	174	152	130	109	87	65	43	22
47	213	191	170	149	128	106	85	64	43	21
48	208	188	167	146	125	104	83	63	42	21
49	204	184	163	143	122	102	82	61	41	20
50	200	180	160	140	120	100	80	60	40	20
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# TABLE C Parallel Service Rating

(Maximum score: 12)

	AVG. DISTANCE* TO PARALLEL STATE
RATING	ROUTE (MILES)
12	20
11	19
10	18
9	17
8	16
7	15
6	14
5	13
4	12
3	11
2	10
1	9
0	8
-1	7
-2	6
-3	5
-4	4
-5	3
<b>-</b> 6	2

Consideration: Significant geographical barrier gives full points.

<sup>\*</sup>Calculated by measuring the distance at the beginning plus the distance at the end and dividing by two. (May require interpolation)

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## TABLE D

## **Economic Point Assignment**

Maximum Score Possible: 20

#### Considerations:

- If the ratio of lowest ADT to highest ADT is 30% or more, use TABLE A below.
- If the ratio of lowest ADT to highest ADT is less than 30%, use TABLE B below.
- Roads that serve:
  - A. Major industrial, recreational, agricultural, or commercial areas
  - B. Some industrial, minor recreational, agricultural, or commercial areas
  - C. No industrial or recreational or few agricultural, or commercial areas

## TABLE A

	LC	DW ADT			HIGH ADT	Ī
Car-Commercial %	90-10	80-20	70-30	90-10	80-20	70-30
A	10	12	14	16	18	20
В	5	6	7	10	12	14
С	0	2	4	5	6	7

## **TABLE B**

	LOW ADT				HIGH ADT	Γ	
Car-Commercial %	90-10	80-20	70-30		90-10	80-20	70-30
A	5	6	7		8	9	10
В	3	4	5		5	6	7
С	0	0	1		2	3	4

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## TABLE E

## Safety Point Assignment

## Maximum Score Possible: 8

#### **Considerations:**

- If the ratio of lowest ADT to highest ADT is 30% or more, use TABLE A below.
- If the ratio of lowest ADT to highest ADT is less than 30%, use TABLE B below.
- Low ADT < 400
- High ADT > 400
- N = Numerous substantial curves
- F = A few substantial curves
- O = No substantial curves

#### TABLE A

		I	HIGH AD1	Γ			
Lane Width	10 Ft.	9 Ft.	8 Ft.		12 Ft.	11 Ft.	10 Ft.
Shoulder width = 0 ft./N	5	6	7	Shoulder width < 2 ft.	6	7	8
Shoulder width = 2 ft./F	3	4	5	Shoulder width < 4 ft.	3	4	5
Shoulder width = 4 ft./O	0	1	2	Shoulder width < 6 ft.	0	1	2

#### **TABLE B**

		I	HIGH ADT	Г			
Lane Width	10 Ft.	9 Ft.	8 Ft.		12 Ft.	11 Ft.	10 Ft.
Shoulder width = 0 ft./N	3	4	5	Shoulder width < 2 ft.	4	5	6
Shoulder width = 2 ft./F	2	3	4	Shoulder width < 4 ft.	3	4	5
Shoulder width = 4 ft./O	0	0	1	Shoulder width < 6 ft.	0	1	2

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## **TABLE F**

## Maintenance Point Assignment

Maximum Score Possible: 7

#### Considerations:

- If the ratio of lowest ADT to highest ADT is 30% or more, use TABLE A below.
- If the ratio of lowest ADT to highest ADT is less than 30%, use TABLE B below.
- Low ADT < 400
- High ADT > 400

## TABLE A

	LOW ADT				HIGH AD	Γ	
Car-Commercial %	80-20	70-30	60-40		80-20	70-30	60-40
Statewide	4	5	6		5	6	7
Local	3	4	5		2	3	4

## **TABLE B**

1/1022 0							
LOW ADT				HIGH AD	Γ		
Car-Commercial %	80-20	70-30	60-40		80-20	70-30	60-40
Α	2	3	4		3	4	5
В	0	1	2		2	3	4

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#### APPENDIX A

#### CRITERIA FOR RATING RURAL ROUTES

#### RATING CRITERIA TABLE

#### CRITERIA POINT RATING SCALE Economics 0 to 20 Statewide vs. Local Use 0 to 16 Vehicle Miles of Travel (VMT) 0 to 14 Average Daily Traffic 0 to 13 Parallel or Duplicate Service - 6 to 12 Importance to State Highway System "Grid" 0 or 5 or 10 Safety 0 to 8 Maintenance 0 to 7 Total Possible 100 Interstate System Continuity 10 (Added if it is an issue) Total Possible 110

#### **ECONOMICS**

If a route supports existing or proposed commercial, industrial, recreational, or agricultural activities, the route may be in the State's interest to be included in the State Highway System. Local highway jurisdiction's input on the commercial, industrial, recreational, or agricultural significance shall be evaluated along with information about the type and volume of traffic using the route. A maximum of 20 points may be assigned.

#### LOCAL VERSUS STATEWIDE USE

High priority is given to highways supporting through traffic between cities and other highways that provide access to population centers that are isolated by geographic conditions. The percentage of through traffic to local traffic is used to assign a point rating. Through traffic percentage is calculated by dividing the lowest average daily traffic (ADT) by the highest ADT. The highest number of points possible for this criterion is 16.

## VEHICLE MILES OF TRAVEL INDEX (VMTI)

The VMTI measures travel between population centers. VMTI measures the relative importance of different length highways (short routes carrying high volumes to long routes of lower volumes). The VMTI can also measure the intercity vehicle miles of travel (VMT), an important factor for identifying routes that are significant for statewide travel.

The VMT value is the product of the ADT count between two population centers, multiplied by the distance between the centers. For stub routes, the distance is measured from the population center or end point to the route's junction with another highway. The distance and lowest ADT is multiplied and the corresponding point rating is selected. The maximum point rating for VMTI is 14.

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#### AVERAGE DAILY TRAFFIC (ADT)

The ADT ranges are from the Roadway Design manual, which determines general highway geometric standards. The highest possible point rating is 13; points are interpolated.

ADT RANGE	RATING
2000 and over	13
750 to 1999	8 - 12
400 to 749	4 - 7
0 to 399	0 - 3

#### DUPLICATE OR PARALLEL SERVICE

Duplicate or Parallel Service considers whether a route parallels a state highway service in a single transportation demand corridor. An appropriate consideration could be whether a major geographical barrier (such as a river) exists within a given corridor, in which case two state highways may be desirable or even indispensable. Otherwise, closely spaced, parallel, rural highways serving the same trip generators should be avoided. The maximum value is 12. A route could receive a negative value (as low as -6) if too close to an existing state highway.

#### IMPORTANCE TO STATE HIGHWAY SYSTEM GRID

The State Highway System provides a network of arterials and major collectors located and spaced to serve the heaviest regional travel demands. Because of diverse geographic and topographic conditions, the development of a more extensive system of arterial and quasi-arterial major collectors occurs in Idaho. The logical considerations are to "de-emphasize" routes that have few characteristics of a state highway to encourage the use of arterial routes with more capacity. A point value of 10 is assigned for routes considered as an essential State Highway System element; a value of five is assigned for routes that serve a geographically remote area; and a zero (0) value is assigned for routes not considered essential for an efficient highway network.

#### SAFETY

If the route has serious safety problems and traffic is of a statewide nature, as many as eight (8) points can be assigned. If safety is not an issue or traffic is mostly local, fewer points would be assigned.

#### MAINTENANCE

If the route has heavy commercial, public transit, or substantial through-traffic use and state maintenance would greatly improve the road, as many as seven (7) points can be assigned.

#### INTERSTATE SYSTEM CONTINUITY

Bi-state intersystems are a requirement in traditional route provisions or because of systems planning. Each case involving such a state-line link shall be discussed with the transportation agency of the adjoining state and the jurisdictions of the affected county, with emphasis on both interstate and intrastate travel demands. A value of 10 is given when a state highway connection is required and is not considered in the total point rating when it is not an issue

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#### APPENDIX B

## CRITERIA FOR URBAN LOOPS AND SPURS RATING CRITERIA TABLE

CRITERIA	POINT RATING SCALE
Average Daily Traffic (ADT)	0 to 20
System Proximity	0 to 20
City Population	0 to 20
Statutory Goals	<u>0 to 40</u>
TOTAL POSSIBLE	100

## AVERAGE DAILY TRAFFIC (ADT)

To weigh the importance of a community to State Highway System users, through-stop traffic needs to be measured. The through-stop trips are obtained from ramp volumes on the Interstate and from intersection turning movements at other junctions. A percentage figure can be developed. Maximum point rating is 20.

#### SYSTEM PROXIMITY

Urban business routes supplement the basic state network and are extensions of that network into urban areas. These connecting facilities provide continuity of the statewide network and serve the cities as required by statute. A business route could be designated when the central business district is within a defined perpendicular distance of the State Highway System route. Maximum point rating is 20.

DISTANCE RANGE	SUGGESTED RATING
0.00 to 0.25 miles	0
0.25 to 2.00 miles	20
2.00 to 5.00 miles	(Interpolate)
Over 5.00 miles	Ô

#### **CITY POPULATION**

Rating values are assigned as follows:

RANGE IN POPULATION	SUGGESTED POINT RATING					
100 to 1,000	6					
1,000 to 5,000	12					
5,000 to 25,000	18					
Over 25,000	20					

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#### STATUTORY GOALS

Section 40-310, Idaho Code, states that, "In determining which highways or section thereof, the public interest requires to be a part of the state highway system, the (Transportation) Board shall consider the relative importance of each highway to cities and villages, existing business, industry, and agriculture and be guided by statistics on existing and projected traffic volumes. The Board shall also consider the safety and convenience of highway users, the common welfare of the people of the state, and of the cities and villages within the state and the financial capacity of the state of Idaho to acquire rights of way and to construct, reconstruct and maintain state highways..."

The criteria to meet the Statutory Goals are subjective and are directed to four general areas of concern.

- The development of government, industry, commerce, and agriculture.
- Safety and convenience of the traveling public.
- Public interest statewide.
- The state's financial capacity to operate the physical highway facility, including longterm maintenance.

Consideration of each concern requires separate evaluation. The results represent a summation of the separate areas. Maximum point rating is 40 points.

## **APPENDIX B**

## Idaho Transportation Board "Official Minute"



#### OFFICIAL MINUTE

Transfer of Real Property to the City of Moscow

WHEREAS, a portion of former US 95 right-of-way within the city of Moscow is no longer essential as a part of the State Highway System with the completion of project NH-4114(062), all as shown in Exhibit "A" attached hereto; and

WHEREAS, the city of Moscow has requested transfer of the former US 95 right-of-way to the city in a letter dated February 14, 2002 and described in the Legal Description Exhibit "B", attached hereto.

THEREFORE BE IT RESOLVED, that the former portion of US 95 right-of-way in the city of Moscow be removed from the State Highway System and relinquished to the city of Moscow effective April 1, 2002. Coincident with said removal, all jurisdiction, control, and interest of the state in and to said section of former US 95, including rights-of-way appurtenant thereto, all as shown on Exhibits "A" and "B" attached hereto, are relinquished to the city of Moscow as its interest may appear.

	IDAHO TRANSPORTATION BOARD
RECOMMEND:	
	Chairman
TPA	*** 1 ·
APPROVED:	Vice-chairman
	Member
State Highway Administrator	Member
APPROVED AS TO FORM:	Member
	Member
Legal Counsel	Member
Date	

## **APPENDIX C**

## **Jurisdictional Transfer Letter of Acceptance**

Boundary County Commissioners Ronald R. Smith, Chairman Dan R. Dinning, Commissioner Walt Kirby, Commissioner



Telephone (208) 267-7723 Fax: (208) 267-7814 commissioners@boundarycountyid.org

BOUNDARY COUNTY P. O. Box 419 Bonners Ferry, ID 83805

December 17, 2007

Idaho Transportation Department District One 600 West Prairie Avenue Coeur d' Alene, ID 83815 Attn: Damon Allen

Dear Mr. Allen,

Under Road Closure and Maintenance Agreement NH-F-5110(132) MP536 to Idaho/Canada Border, Boundary County, Key No. 7748, the State is to transfer a portion of Old US-95 from MP537.22 to MP537.34 to Boundary County. (Section 2, item 1). It is our understanding that a Board Official Minute will be submitted and that the Right of Way will be transferred after the project is complete and the County has accepted it.

This letter will serve as acceptance that the work on these roads was completed to the satisfaction of Boundary County.

Sincerety,

Ronald R. Smith, Chairman

Dan R. Dinning, Commissioner

cc: Don Davis Garry Young

APPENDIX D
System-Wide SAR Tool &Output Scores Visualization Map

Dist	rict 1	В	С	D		F	G	- "		,	K	Ľ	М
	Highway	Segment Name	Start Milepost	End Milepost	Length (MI)	ADT (Low)	ADT (High)	ADT (Average)	PAADT (Average)	CAADT (Average)	Car- Comm %	ADT Ratio	Parallel Distance (m
	SH-1	SH-1 US-95 to Copeland Rd	521.862	523.026	1.164	720	1100	957	837	120	13%	65.45%	17
	SH-1	SH-1 Copeland Rd. to Canada	0	11.115	11.115	720	1100	957	837	120	13%	65.45%	17
	US-2	US-2 Washington through Priest River	0	6.95	6.950	1200	13000	6763	6082	680	10%	9.23%	20
	US-2	US-2 Priest River to Pine Street Loop Rd.	6.95	24.72	17.770	1200	13000	6763	6082	680	10%	9.23%	20
	US-2	US-2 Pine Street Loop Rd to 5th Ave.	24.72	28.515	3.795	1200	13000	6763	6082	680	10%	9.23%	20
	US-2	US-2 US-95 (Three Mile) to Montana	64.35	80.184	15.834	1200	13000	6763	6082	680	10%	9.23%	30
	SH-3	SH-3 District 2 through St. Maries	48.236	86.383	38.147	490	7100	1990	1754	236	12%	6.90%	19
	SH-3	SH-3 St. Maries to I-90	86.383	117.68	31.297	490	7100	1990	1754	236	12%	6.90%	19
	SH-4	SH-4 I-90 through Burke	0	7.38	7.380	150	1300	617	567	50	8%	11.54%	20
	SH-5	SH-5 US-95 to SH-3	0	19.14	19.140	1900	8100	3931	3782	148	4%	23.46%	20
	SH-6	SH-6 District 2 to SH-3	20.286	35.055	14.769	260	3800	1341	1146	194	14%	6.84%	12
	SH-41	SH-41 I-90 through Rathdrum	0	8.92	8.920	2700	22000	9783	9138	645	7%	12.27%	13
	SH-41	SH-41 Rathdrum to US-2	8.920	39.058	30.138	2700	22000	9783	9138	645	7%	12.27%	13
	SH-53	SH-53 Washington through Rathdrum	0.00	10.038	10.038	4800	10000	7973	7370	603	8%	48.00%	8
	SH-53	SH-53 Rathdrum to US-95	10.038	14.255	4.217	4800	10000	7973	7370	603	8%	48.00%	8
	SH-54	SH-54 SH-41 to US-95	0.00	7.891	7.891	1500	3600	2640	2312	328	12%	41.67%	9
	SH-54	SH-54 US-95 to Bayview	7.891	15.440	7.549	1500	3600	2640	2312	328	12%	41.67%	9
	SH-57	SH-57 US-2 through Coolin	0.00	37.230	37.230	990	4600	2135	1929	206	10%	21.52%	9
	SH-58	SH-58 Washington to US-95	0.00	2.943	2.943	2800	4300	3550	3470	80	2%	65.12%	15
	SH-60	SH-60 Washington to US-95	0.00	5.510	5.510	200	280	247	217	30	12%	71.43%	5
/ CALCU		strict 1 District 2 District 3 District 4	District 5	istrict 6 TAN	//S_Data   GI	S_Data   Stat	ewide vs Local	VMT Score	Graph   VMT	Index   Paralle	el R 🕂 : 🖪		



