WORKING

TOGETHER

TO PLAN

FOR THE

FUTURE





**Financial Forecast for the Funding** of Transportation Facilities and Services 2012-2040

Report Number 07-2012

# Financial Forecast for the Funding of Transportation Facilities and Services 2012—2040

# Final Report

Prepared for:

**Community Planning Association of Southwest Idaho** 



October 15, 2012

By:

Honey Creek Resources, Inc. BBC Research & Consulting, Inc.

The completion of this document was financed by U.S. Department of Transportation (DOT) funds through the Idaho Transportation Department and contributions from member agencies within Ada and Canyon Counties.

T:\FY12\600 Projects\661 Communities in Motion\6. Additional Data\_Studies\Financial\financial report final draft.docx

# **Table of Contents**

EXECUTIVE SUMMARY	1
INTRODUCTION	1
Purpose and Background	1
PLANNING HORIZON	2
TRANSPORTATION ENTITIES CONSIDERED IN THE ANALYSIS	2
Roadway Entities	2
Idaho Transportation Department Financial Position	3
Transit Entities	4
Methodology	4
Financial Equation	4
Data Sources	6
Analysis of Transit	8
Meetings with Local Transportation Entities	8
Future Uncertainties	8
REPORT ORGANIZATION	8
CURRENT AND FUTURE REVENUE ESTIMATES FOR ROADWAYS AND TRANSIT	9
Funding Sources and Funding Levels	9
Roadways	9
Transit Funding Sources	10
LOCAL FUNDING SOURCES FOR ROADWAYS	
Property Taxes	
Impact Fees	
Vehicle Registration Fees	
Other Local Revenue Sources	12
Allowable Uses of Local Funas	13
Estimates of Euture Peyenue from Local Sources.	13
Local Funding Sources for Transit	13
EUCAL FUNDING SOURCES FOR TRANSIT	15
Future Estimates of Community Payments	15
Restrictions of Usage of Local Transit Revenues.	
STATE FUNDING SOURCES FOR ROADWAYS	
Allowable Uses of State Funds	
Estimates of Current HDA Funds	17
Estimate of Future Revenues from State Sources	17
FEDERAL FUNDING SOURCES FOR ROADWAYS	20
Federal Funds for Local Projects	21
Current Federal Funding	22
Future Levels of Federal Funding	23
Allowable Uses of Federal Funds	23
FEDERAL FUNDING SOURCES FOR TRANSIT	24
Current and Future Estimate of Federal Transit Funding	25
SHORT AND LONG-TERM COST ESCALATION RATES	26
INFLATION ASSUMPTIONS.	
HISTORIC PRICE INDICES	
ANALYSIS METHODS	
INFLATION KATES – WOST LIKELY ESTIMATES	29
Show term $= 2012 \text{ to } 2010$ .	29 20
Long with 2010 to 2010	····· <i>29</i>

INFLATION RATES – LOW ESTIMATES	29
Short term – 2012 to 2016	29
Long term – 2016 to 2040	29
INFLATION RATES – HIGH ESTIMATES	
Short term – 2012 to 2016	
Long term – 2016 to 2040	30
MAINTENANCE AND OPERATION NEEDS	
SUMMARY OF MEETINGS	
Ada County Highway District	
Canyon Highway District No. 4	
Nampa Highway District No. 1	35
City of Caldwell	35
City of Nampa	
City of Middleton	
CURRENT AND FUTURE ESTIMATES OF ROADWAY MAINTENANCE AND OPERATIONS EXPENDITURES	37
Current Estimates	
Future Estimates	
CURRENT AND FUTURE ESTIMATES OF TRANSIT MAINTENANCE AND OPERATIONS EXPENDITURES	41
Historic and Current Expenditures	42
Future Expenditures	43
AVAILABLE FUNDING FOR TRANSPORTATION SYSTEM EXPANSION	45
AVAILABLE FUNDING LEVELS FOR ROADWAYS: BASELINE SCENARIO	45
IMPACT OF INFLATION ASSUMPTIONS ON TWO-COUNTY RESULTS	49
ALTERNATIVE REVENUE AND INFLATION SCENARIOS ON ROADWAY RESULTS	50
Low Scenario	50
High Scenario	51
Results of Alternative Revenue and Inflation Assumptions	52
AVAILABLE FUNDING LEVELS FOR TRANSIT	53
Valley Regional Transit	53
ACHD Commuteride	54

### FIGURES

Figure 1 – Ada and Canyon County Highway Districts	3
Figure 2 - Major Roadway Revenue and Cost Categories Considered in the Analysis	7
Figure 3 - Average annual funding levels 2000-2010 by entity and funding source	9
Figure 4 - Proportional reliance upon funding sources, by entity, averaged over 2000-2010	. 10
Figure 5 - Valley Regional Transit, sources of revenue	. 11
Figure 6 - Roadway Revenues from Local Revenue Sources	. 15
Figure 7 - Estimated VRT revenues from local sources	. 16
Figure 8 - Gasoline and other fuel usage in Idaho, 1994-2009	. 18
Figure 9 - ITD Estimate of HDA revenues accruing to Ada and Canyon Counties	. 19
Figure 10 - Estimate of State roadway revenues allocated to each entity	. 20
Figure 11 - Historic and committed STP-Urban funds, 2003-2015	. 22
Figure 12 - Estimated federal STP revenues for local roadways	. 24
Figure 13 - Estimated federal revenues for transit, 2012-2040	. 26
Figure 14 – Effect of Inflation on Highway Distribution Account Purchasing Power	. 30
Figure 15 - Operations and Maintenance Expenditures	. 31
Figure 16 - Current expenditures for roadway preservation and equipment	. 38
Figure 17 - Actual and estimated Ada County O&M expenditures	. 39

Figure 18 - Actual and estimated Canyon County O&M expenditures	40
Figure 19 - Distribution of Canyon County roadway expenditures across agencies	40
Figure 20 - Impact of inflation rates on estimated roadway O&M expenditures	41
Figure 21 - Historic VRT expenditures and estimates of future expenditures	43
Figure 22 - Impact of various inflation rates on estimated transit expenditures	44
Figure 23 - Annual revenues, expenditures, and contribution to expansion, Ada County	46
Figure 24 – Annual and cumulative contributions to system expansion, Ada County	46
Figure 25 - Annual revenues, expenditures, and contribution to expansion, Canyon County	47
Figure 26 - Annual and cumulative contributions to system expansion, Canyon County	47
Figure 27 - Annual contributions to system expansion by Canyon County agencies	48
Figure 28 - Annual revenues, expenditures, and contribution to expansion, two-county total	48
Figure 29 - Annual and cumulative contributions to system expansion, two-county total,	49
Figure 30 - Impact of alternative inflation rates on contributions to system expansion	50
Figure 31 - Estimated additional revenues needed to meet estimated expenditures, VRT	54

#### APPENDICES.

- Appendix A Summary of Available Expansion Funds Estimated by Idaho Department of Transportation
- Appendix B Analysis by Transportation Agency (Provided upon request)

# **Executive Summary**

This financial analysis supports *Communities in Motion 2040* (CIM 2040), an update to the current CIM plan, which will plan to the year 2040. The analysis provides estimates of funds available for future capacity and maintenance needs of the transportation systems within the COMPASS region.

While revenues will increase over the next 25 years, costs for operations, preservation and rehabilitation will likely rise faster. This means that only those agencies with funding dedicated to expansion—specifically impact fees—will have long-term capacity to expand. Changes in how existing funds are raised and/or new funding sources will be needed to provide for new transportation capacity and services.

The full Executive Summary is attached as a stand-alone document.

# Introduction

### Purpose and Background

The purpose of this analysis is to support the CIM 2040 update by providing an estimate of funds available for future capacity and maintenance needs of the transportation systems within the COMPASS region. In addition to good planning, there is a practical reason for this analysis: federal rules require that Metropolitan Planning Organizations' plans and programs be financially constrained<sup>1</sup>. Only those projects and services for which reasonably available funds can be shown may be put into the plan or program and shown as funded. Only "funded" projects and services can be used to calculate emission levels for the purpose of air quality conformity demonstrations. The U.S. Department of Transportation does not approve the plans and programs, but it does approve the air quality conformity demonstrations. The effect may be the same, in that failure to approve an air quality conformity demonstration for a plan or program leads to a lapsed plan or program. No new project or service can be undertaken with federal funding until the plan or program is no longer lapsed; that is, the air quality conformity demonstration is approved.

There are limited details in the federal rules concerning the contents of a financial analysis.<sup>2</sup> There are two significant conditions:

- 1. The financial forecasting must be conducted in cooperation with the state department of transportation (the Idaho Transportation Department or ITD) and the transit operator (Valley Regional Transit, VRT).
- 2. The forecast must account for maintenance and operations of current and expanded transportation systems.

<sup>&</sup>lt;sup>1</sup> Federal regulations under 23 CFR 450 can be viewed at <u>http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&rgn=div5&view=text&node=23:1.0.1.5.11&idno=23</u>.

<sup>&</sup>lt;sup>2</sup> Federal guidance on implementing 23 CFR 450 provisions can be viewed at <u>http://www.fhwa.dot.gov/planning/guidfinconstr\_qa.htm</u>. Additional information can be viewed at <u>http://www.fhwa.dot.gov/planning/fcqa62805.htm</u>.

To a degree, this analysis is an update of a financial analysis conducted in 2009 supporting the 2035 CIM study.<sup>3</sup> The procedures and format are similar, but the current analysis is more comprehensive because it considers local roadway entities individually rather than at the county level, as in the previous study. The individual results are then "rolled-up" to examine COMPASS-wide results, while still being relevant to the local agencies.

The benefit of considering the entities individually is greater appreciation of their comparative dependence on various funding sources and the sometimes uneven nature of their levels of system maintenance. In addition, a series of individual meetings between the agencies and COMPASS resulted in valuable back-and-forth discussions about their financial concerns.

# Planning Horizon

The time frame considered in this analysis is 2012 through 2040, corresponding to the planning horizon of the COMPASS CIM update. It is recognized that through 2016, federally-funded and non-federal "regionally significant" capital projects for roadway maintenance and expansion have already been determined, with funding identified for each, through the Transportation Improvement Plan (TIP). As a result, potential funding for the years 2017-40 is of particular interest.

# Transportation Entities Considered in the Analysis

### **Roadway Entities**

The thirteen roadway entities considered in this analysis manage the vast majority of roads in the COMPASS region of Ada and Canyon Counties. They include:

- The Ada County Highway District (ACHD), including all the incorporated cities, as well as Ada County's rural areas.
- The Canyon County highway districts, representing the County's rural roadways. They include:
- 1. Nampa Highway District
- 2. Notus-Parma Highway District
- 3. Golden Gate Highway District
- 4. Canyon Highway District
- The cities of Canyon County, consisting of the larger cities of Nampa and Caldwell, and also the smaller cities of Middleton, Greenleaf, Melba, Notus, Parma, and Wilder.

Figure 1 shows the location of these entities.

<sup>&</sup>lt;sup>3</sup> http://compassidaho.org/documents/prodserv/specialprojects/Funding%20Transportation%20Needs.pdf



Figure 1 – Ada and Canyon County Highway Districts

A financial pro forma and associated summary were developed for each entity, as described under Methodology.

### Idaho Transportation Department Financial Position

Despite its large presence in local and regional roads, it should be noted that the Idaho Transportation Department (ITD) is not considered in this analysis in the same manner as the local agencies. Discussions with ITD and its own analysis indicated that the State's future efforts will focus upon maintaining existing roadways rather than increasing capacity.<sup>4</sup> One of the purposes of this study is estimating the level of funds available for future roadway expansion, and by its own estimate, funds for ITD system expansion in Ada and Canyon Counties would be minimal. This was supplied by a spreadsheet analysis assessing future funding in the COMPASS

<sup>&</sup>lt;sup>4</sup>Meeting with ITD and Charles Trainor, Matt Stoll., February 17, 2012.

region developed by ITD, shown as Appendix A. As a result, it is assumed ITD will focus exclusively upon maintenance and operations during the period of analysis.

### **Transit Entities**

Valley Regional Transit (VRT) is the regional transit agency serving the COMPASS region. In addition to local and regional bus service, VRT oversees a variety of services collectively titled "human services transportation" that include senior vans, volunteer driver programs, demand response services for persons with disabilities, and other services.

ACHD operates the Commuteride program, which provides van pooling services across the region. A vanpool program provides vehicles for groups of people who can share a vehicle to get to work. In operation for the last 30 years, Commuteride provides a variety of services to encourage use of non-single occupancy vehicular travel.<sup>5</sup>

VRT and ACHD Commuteride collaborate in providing the following services:

- Park-and-ride lots throughout the region either owned by ACHD Commuteride or contracted with public and private entities.
- Employer outreach that includes educational materials and incentive programs to reduce commuting costs through use of alternatives.

For this analysis, focus is on VRT. However, additional analysis is provided for the Commuteride vanpool program, shown in the final section of this analysis.

# Methodology

The overall methodology for estimating the level of funds available for new facilities is the use of a simple financial equation and readily available financial data already provided to ITD by each entity.

# **Financial Equation**

For any transportation agency, revenues must cover costs over the long-term. There will be years in which one is greater than the other, but over a long planning horizon it is reasonable to assume that all agencies will act in a financially responsible manner to balance revenues and costs. Building upon this, over the long-term, total costs can be categorized into three components: (1)

<sup>&</sup>lt;sup>5</sup> Commuteride one of the older, perhaps the oldest, continual program in the country. It has increased from seven vanpools in the late 1980s to 97 vanpools in operation as of May 2012. The vanpools operated by ACHD must start, end or have some portion of their travel in Ada County. Services extend into Canyon, Elmore, Gem, Boise and Payette Counties with two vanpools starting in Ontario, Oregon. Vans are purchased and owned by ACHD and provided to groups of at least 11 riders, with one of the riders also operating the vehicle. Recently, a "minivan" program has been introduced allowing a reduction in the required number of riders.

expenditures for operations; (2) capital expenditures to preserve the existing system, and (3) capital expenditures to construct new roadway capacity. This relationship is shown below.



By re-arranging this equation, future estimates of revenues, operational expenditures, and capital expenditures for preserving existing capacity can be used to "solve" for the level of funds available for new roadway capacity.



These simple formulas are applied to each entity considered, for each year of the planning horizon. When summed over the entities and over time, the result is a cumulative estimate of the level of funds available for capacity-increasing roadway and transit projects to be considered in CIM update. The analysis accounts for the operational costs of system expansion over time, but not the capital cost of system expansion.

Complicating this approach is a number of critical sub-components within each category and the range of assumptions needed to estimate their values. These assumptions are developed during the course of the study's identified tasks, below. Figure 2 summarizes the major sub-components considered.

It should be noted that there are several common factors influencing future revenues and cost estimates, including inflation, growth, and action (or inaction) by public agencies overseeing tax and fee levels. Inflation is relatively selfexplanatory because of near-certain escalation in all categories of future roadway and transit costs over time. Inflation is increasingly influenced by world demand, world supplies, and other factors beyond the control of local transportation **Economic Recovery as a Solution** Fuel taxes and registration fees make up half of the local roadway funding. Yet these sources are not closely tied to the state of the economy. For ITD nearly all of its funding comes from these sources. Fuel consumption fell or held constant in Idaho from 1999 on—even with the boom prior to 2008.

The economic recession actually improved the situation by suppressing costs. A booming economy, combined with higher demand for oil, steel and concrete, could increase the financial problems facing transportation.

agencies. This is especially the case with the petroleum-based products necessary for roadway and transit operations and maintenance. The growth factor recognizes that population,

employment, and the number of households in COMPASS communities will continue to grow over time, with roadway operational and preservation costs growing in some proportion.

In addition, federal and State revenues are strongly influenced by the level of the gas tax, overseen by Congress and the Idaho Legislature, respectively. Fuel taxes, the basis for the fuel tax, and over-arching federal transportation legislation have become politicized in the last decade, leaving uncertain prospects for significant increases in future revenue, at least in the near-term. Regardless, future political decisions at both the national, State and local levels will have as strong of influence on revenues as inflation and growth.

### **Data Sources**

Primary data sources for historical financial data are the Annual Road and Street Finance Reports from ITD, based on data submittals made by the local entities themselves.<sup>6</sup> These data are readily available and are categorized in a manner nearly identical to the categories needed for this analysis. Historical data for the years 2000 through 2010 are included in the reports and were considered in estimating current and future levels of each type of revenue or cost variable.

With respect to the accuracy of the data, it should also be noted that not all of the roadway agencies "functionalize" their data to the degree requested by the ITD submittals. For instance, agencies may initially categorize costs as wages and salaries, personnel benefits, purchased materials, purchased services, etc. These data then need to be broken-down, or allocated, to the functions performed by agency, such as re-construction, maintenance, administration, and other categories useful for planning purposes. This functional allocation is not always straightforward to the agencies' existing accounting systems, resulting in some inconsistencies across agencies regarding what is reported in each functional category. One issue with accuracy stems from the breakdown between new capacity and re-construction in major projects. For instance, when reconstructing an existing roadway or intersection, an agency may add additional lanes and/or turning lanes. A result of this should be a portion of the project being allocated to reconstruction and a portion being allocated to growth. This is the case with ACHD, who is very precise about what portion of the cost may be eligible for impact fee funding. However, for smaller agencies, costs may or may not be allocated as precisely. Another accuracy issue is a lack of verification and proofing between what appears in the entities' own accounting records and what gets reported to ITD. A final issue is uncertainty with respect to federal funds -- an agency may not show the federal funds spent on a project since these are reimbursable costs, so the federal funds may show up in a later year, if at all. Despite concerns that federal revenues may be underreported, the agencies' ITD submittals appear to be the best data available.

Data sources used to develop future revenue and cost assumptions are identified in the specific sections using this data.

<sup>&</sup>lt;sup>6</sup> <u>http://www.itd.idaho.gov/econ/LocalRoads/Annual%20Road%20and%20Street%20Instructions%202010.pdf.</u>

Idaho Code 40-708 requires the certification of road fund disbursements by the 30th of September for the preceding fiscal year.

	35 =
	Local funding, inc.
	Property taxes
	Impact fees
	Local option registration fees
	All other local receipts
+	State funding
	Highway User Revenue
	All other State receipts
+	Federal funds
	Surface Transportation Program (STP) - Urban
	STP-Rural
	All other federal receipts
=	Total revenues
Expendi	tures, operations =
	Maintenance
	Chip/seal or seal coat
	Patching
	Railway crossings
	Other activities
+	Equipment
+	Administration
+	Other expenses
=	Subtotal operational expenditures
	expenditures to preserve existing roadways -
Capital o	
Capital o	Roadway reconstruction
Capital (	Roadway reconstruction Roads
Capital o	Roads Bridges and culverts
Capital (	Roadway reconstruction Roads Bridges and culverts Railway crossings
Capital (	Roadway reconstruction Roads Bridges and culverts Railway crossings Other
Capital o	Roadway reconstruction         Roads         Bridges and culverts         Railway crossings         Other    Subtotal capital expenditures for existing roadwa
Capital o	Roadway reconstruction Roads Bridges and culverts Railway crossings Other Subtotal capital expenditures for existing roadwa
Capital o Capital o +	Roadway reconstruction Roads Bridges and culverts Railway crossings Other Subtotal capital expenditures for existing roadwa expenditures for new roadway capacity = Portion financed by impact fees
Capital o Capital o + +	Roadway reconstruction Roads Bridges and culverts Railway crossings Other Subtotal capital expenditures for existing roadwa expenditures for new roadway capacity = Portion financed by impact fees Remaining capital expenditures

Figure 2 - Major Roadway Revenue and Cost Categories Considered in the Analysis

### **Analysis of Transit**

Due to different funding mechanisms, transit funding is considered separate from roadway funding. Although there are some common sources of funding, such as federal STP-Urban funds, there is relatively little overlap.

The transit analysis will be initially conducted assuming the transit system stays mostly "as is" through the analysis period. Bus ridership, for instance, increases as the communities grow, but the level of service remains about the same. Also, funding sources and relative levels of commitment by the communities also stay about the same. No new sources of funding are developed.

### **Meetings with Local Transportation Entities**

Charles Trainor, from COMPASS, and consultant George Oamek met with each major transportation entity twice during the course of this analysis. The initial meetings took place during the last week of February 2012, and were informational in nature. Revenue sources and maintenance needs were the primary agenda items. The second meetings with each entity were conducted during the first week of April 2012, and discussed preliminary financial modeling results, assumptions, and maintenance needs. In addition, Mr. Trainor met with ITD and the City of Middleton. Information was also provided via email to the Golden Gate Highway District and the Notus Parma Highway District. Mr. Trainor contacted staff from both agencies and offered to meet with them to discuss the results. All agencies, including the smaller communities within Canyon County, were analyzed on a consistent, equal basis.

### **Future Uncertainties**

The financial analysis was developed using the best data reasonably available and resulted in estimates that the analysts define as "most likely" estimates of future variables. However, any long-term estimate is random in nature and has an associated "confidence interval" indicating the range that the estimated value may reasonably lie within. A practical substitute to using mathematical statistics to define this interval is to define low and high bounds for critical assumptions and observe the range of outcomes resulting from their use. These bounds could equivalently be termed "worst case" and "best case" scenarios for the analysis. In response, this analysis develops low range and high range scenarios for major revenue sources and critical cost escalation rates to observe their impact on the results. This sensitivity analysis is conducted in the final chapter of this report.

### **Report Organization**

The remaining major sections of this report develop:

- Current and future revenue estimates for roadway and transit entities
- Short-term and long-term cost escalation rates for estimating future costs and, in some cases, revenues
- Long-term preservation costs of existing and future roadways
- An estimate of funds available for future expansion of the regional roadway and transit system, using the methodology described above.

# Current and Future Revenue Estimates for Roadways and Transit

This chapter identifies major sources of funding for roadway and transit activities, summarizes their current levels, and develops estimates of their future levels for the period 2012-2040. In addition, any restrictions on the use of the revenue sources will be reported, examples being that impact fees can only be used for new capacity and federal funds require a local matching percentage.

Detailed estimates of current and future revenues for each agency are included in Appendix B. This chapter develops the assumptions used to make the estimates and summarizes their results.

## Funding Sources and Funding Levels

### Roadways

Funding for roadway maintenance and construction projects primarily originates from one or more of three sources: local, State Highway Distribution (HDA) funds allocated to local agencies, and federal. Figure 3 shows annual funding by source for each of the entities considered in the analysis, averaged over the years 2000-2010. It is apparent that ACHD is the largest entity, with no close second. It is also apparent that federal funds play a relatively small role in roadway funding for the local entities.<sup>7</sup>



Figure 3 - Average annual funding levels 2000-2010 by entity and funding source

<sup>&</sup>lt;sup>7</sup> For smaller entities receiving federal funding, project management and budgeting of federal funds may occur under the Local Highway Technical Advisory Council (LHTAC) and not be reported in their annual financial summaries to ITD. As a result, Figure 3 may understate federal revenues on average year basis.

Figure 4 shows the entities' relative reliance on each revenue source in percentage terms. It shows that local funds make-up over 65 percent of total revenues for ACHD and over 50 percent of the total for Canyon Highway District and Nampa Highway District. Reliance on local funding has been increasing over time as gas tax-based funding sources, comprising the bulk of State and federal funding, have leveled-off. As a result, those entities relying relatively more on local funds may be financially better prepared for the future than those relying on static State Highway Distribution Account (HDA) revenues.<sup>8</sup>



Figure 4 - Proportional reliance upon funding sources, by entity, averaged over 2000-2010

### Transit Funding Sources

Transit funding includes user fees (fare box revenues), local contributions from Ada and Canyon cities benefiting from VRT transit service, and federal revenues. There are currently no sources of State funding for transit. Figure 5 shows the level of funding from each source. It is evident that fare box revenues account for a relatively small portion of total revenues, with local funding and federal funding providing the rest in about equal proportions over the long-term. The 2011 "blip" in federal funding was for funds earmarked specifically to the Boise multi-modal center, representing a one-time, not a continual source future funding. Note that VRT's fare box recovery ratio is not unusual for a system of its size. Nationally, the recovery rate is about 32%, but smaller systems average 18-20%.

<sup>&</sup>lt;sup>8</sup> Figure 4's purpose is to illustrate the relative dependence on different revenue sources, using readily available data. In reality, the federal funds portion of the revenues may be somewhat under-reported due to the procedures used to spend and receive reimbursement for these funds. This is discussed later in a subsequent section.



Figure 5 - Valley Regional Transit, sources of revenue

# Local Funding Sources for Roadways

### **Property Taxes**

Local funding is primarily through direct assessment of property taxes. A highway district estimates its budget for the next year, calculates other revenues from HDA, fees, etc. and submits its desired property tax revenue target to the County. The County then computes a mill rate to generate that amount of revenue from the total assessed value of property within the highway district boundaries. There is a cap on the maximum mill levy of .00284 under Idaho Code 40-801. For the cities, the respective city government allocates some portion of General Fund revenues, primarily property taxes, to the transportation function with the Public Works Department. Increasing property tax revenues for a highway district board would require their Board of Directors' approval. Increasing property tax revenues for a city's transportation activities would require either a re-allocation of General Fund revenues while leaving taxes unchanged, a property tax increase, or an increase in some other local revenue source.

In addition to receiving property tax revenues through allocation of the General Fund, cities in Canyon County also receive a partial reimbursement of the property taxes paid by its residents to the overlying highway district(s). (Idaho Code 40-801) The formula for distributing the cities' portion of highway district property tax revenues was not evaluated for this analysis. This revenue transfer does not apply to Ada County since the cities in Ada County have no public roadway responsibilities.

Property tax revenues are cost-based because the taxing entity has to base its desired revenue on its anticipated costs. In addition, in Idaho, as in several other states, the annual percentage increase in property tax revenues cannot exceed the percentage increase in local growth plus three percent. In addition, the annual inflation rate is assumed to be the actual inflation rate, as measured by the Consumer Price Index, or three percent, whichever is lower. As a result of these

characteristics, it is likely that estimated growth in overall property tax revenues would be relatively steady through the planning horizon.

### **Impact Fees**

Impact fees for roadways are collected on new development and are intended to partially recover the costs of providing new arterial roadway capacity and otherwise helping "growth pay for growth." It should be noted that, under Idaho law<sup>9</sup>, impact fees can only recover "proportionate" costs associated with improving capacity. As an example, in ACHD's Capital Improvement Plan, of \$520.5 million total costs for roadway improvements, only \$277.2 million was found eligible for impact fees. (Table A-1. p. 3. ACHD Capital Improvement Plan.) As established by ACHD, impact fees cannot be used for collector streets, sidewalks, or bike lanes.

Historically, the fees varied by the specific region within ACHD being considered -- the Service Area, and the fees could only be used for capacity-expanding projects within that region. ACHD has recently combined their four Service Areas into one, but still restricts impact fee usage to capacity expansion for roadways. Similar to property tax revenues, impact fee revenues can be adjusted for inflation using a five-year rolling average of CPI for Western urban regions. Impact fees are paid at the time the new construction is permitted, which can vary from year to year depending on the state of the local economy.<sup>10</sup>

The City of Nampa currently uses transportation impact fees exclusively for bridges and intersections, but has recently commissioned a study to evaluate impact fees for roadways.

### **Vehicle Registration Fees**

ACHD vehicle registration fees range from \$24 to \$40 per year, depending on the vehicle, and are in addition to the State's vehicle registration fee. This level reflects a 2009 renewal of the fee and a subsequent increase in its level. However, it is not adjusted over time with the level of inflation, so any growth over time is due to growth in the number of vehicles registered.

### **Other Local Revenue Sources**

Other sources include bond proceeds, developer exactions, and interest earnings on unspent cash balances. The City of Nampa has historically used proceeds from periodically-issued General Obligation (G.O.) bonds to fund transportation-related capital projects. They are currently considering additional bond funding in the 2020 through 2030 time frame and anticipate approximately \$20 million in proceeds (in 2012 dollars) for transportation projects. For purposes of this analysis, bond funds are assumed to be available in 2027 and spent in a uniform manner over the period 2027 through 2040.

<sup>&</sup>lt;sup>9</sup> Idaho Code 67-82 authorizes impact fees for certain government agencies. A capital improvement program is required, and projects in that CIP must be specifically identified as to the share of that project driven by new growth. Meeting existing needs or upgrading projects to meet existing needs or new standards is not impact fee eligible. (re IC 67-8203 (29). In meeting Idaho law, ACHD's CIP notes the following exclusions from project costs "The costs of reconstructing the existing roadway, bike lanes, sidewalks, irrigation facilities, utility adjustments, and landscaping are assumed ineligible for impact fee funding."

<sup>&</sup>lt;sup>10</sup> More information on ACHD's impact fees, including information on its Capital Improvement Plan, can be found at <u>http://www.achdidaho.org/Departments/rowds/ImpactFees.aspx</u>

Developer exactions are contributions intended to mitigate transportation system impacts caused by new developments. In addition to funding the transportation infrastructure associated with the new development itself, the developer may also be required to help fund upgrades or expansion of roadways and intersections in proximity to the new construction. Several of the Canyon County roadway entities have used this funding source and will likely continue to use it in the future, depending on the specific characteristics of the new developments. ACHD does not charge developer exactions because they already charge impact fees, unless the development is outside the planned developments embodied in the impact fee calculations. There is no readily available data to document the level of "funding" provided by developer exactions for those agencies using exactions.

### Allowable Uses of Local Funds

Most local funds can be used in a flexible manner for either operations and maintenance, or capital improvements. Exceptions are impact fees which are reserved for capital projects that increase roadway or facility capacity. For ACHD these funds have been historically restricted for roadway uses in the specific Service Area containing the development and/or otherwise provide direct benefit to it. As a result, there were different impact fees depending on which Service Area the new development was within. Recently, ACHD has combined their four Service Areas into one and has adopted a single agency-wide impact fee. Impact fees are also limited to paying only for project components that increase vehicle capacity – not for sidewalks, bike lanes, drainage, landscaping, or replacing of the original lanes. For Nampa, current impact fees can only be used to increase capacity at specific intersections and/or increase bridge or culvert capacity, although future impact fees may have more flexibility in their use.

### **Estimates of Current Revenue from Local Sources**

Local revenues are estimated for each transportation entity over the period 2012-2040, using 2011 as a starting value.

For the analysis, it was important that 2011 baseline revenue levels be accurate and also representative of any trends. That is, assumed 2011 levels should not be "outliers" with respect to more typical years. Since the entities had not yet submitted 2011 financial data to ITD, this analysis developed the 2011 baseline levels. Baseline 2011 property tax levels were estimated assuming that recent growth trends in property tax revenues continued into 2011. Baseline levels for minor revenue sources were estimated using either short-term or long-term averages, along with the analysts' judgment.

ACHD provided baseline 2011 levels of all revenue sources within their boundaries, including anticipated property tax revenues, impact fee, and vehicle registration fee levels. They were incorporated into the analysis without change.

### **Estimates of Future Revenue from Local Sources**

Although several econometric relationships relating historical property tax revenues to local economic activity were considered, it was concluded that straightforward, consistent, and likely most accurate estimates of local revenues could be obtained by a less complicated approach. This involves the application of anticipated demographic trends, as estimated by COMPASS, and the anticipated impacts of inflation.

• For property taxes, it was assumed that revenues increase at a rate equal to the rate of increase in the number of households, as estimated by COMPASS<sup>11</sup>, and the rate of inflation, or three percent, whichever is less. The COMPASS growth rates were developed for the 2035 CIM effort and will likely be updated in the near future. Values for 2040 were assumed, based on the trends from 2030-35. The estimates are specific to regions within the county and were applied to the corresponding roadway entity. For local revenues, the inflation rate is assumed to be based on the CPI, as discussed in the following chapter of this report.

Using the number of households as a proxy for growth appears reasonable because a large portion of property taxes are paid at the household level. In addition, given the trend of declining persons per household, it appeared to be a more suitable proxy than population growth.

- Impact fee revenues for ACHD were escalated over time based on the anticipated growth rate in the number of households.
- Vehicle registration revenues for ACHD were escalated over time at the rate of employment growth, on the basis that there is an intuitive correspondence between jobs and vehicles. This relationship may diminish over time as more workers carpool, use transit, or use other means for commuting to their jobs. Inflation was not considered in the future revenue estimate because the fee level is assumed fixed over time. Although it is reasonable to assume that the rate would be eventually adjusted, as it was in 2009, the level of adjustment and its timing would be speculative.
- Other relatively minor sources of local revenue were assumed to increase with growth, as measured either by growth in employment or number of households, depending on the source considered, and inflation.

Table 1 summarizes the baseline levels of local revenues assumed for each entity, along with their anticipated growth rates, discussed below. Figure 6 depicts the revenue growth applicable to each entity over the planning horizon resulting from the assumptions above.

	Assumed 2011 values (million)									Effective annual growth rates, 2012-2040					
	Vehicle												Vehicle Other		
	Ρ	roperty	In	npact	reg	gistration	ο	ther local	То	tal local	Property	Impact	registration	local	Total local
		taxes	1	fees		fees	r	revenues	re	venues	taxes	fees	fees	revenues	revenues
Ada County Hwy District	\$	31.70	\$	6.10	\$	8.60	\$	6 4.20	\$	50.60	5.13%	5.10%	2.14%	5.17%	4.48%
Canyon Hwy District		3.20		-		-		0.11		3.31	6.66%	-	-	5.55%	6.62%
Nampa Hwy District		3.60		-		-		0.37		3.97	6.66%	-	-	6.32%	6.62%
Notus-Parma Hwy District		0.64		-		-		0.03		0.67	7.49%	-	-	6.32%	7.45%
Golden Gate Hwy District		0.85		-		-		0.06		0.91	6.67%	-	-	5.98%	6.65%
Nampa		2.37		0.50		-		0.04		2.91	4.92%	4.92%	-	16.53%	5.71%
Caldwell		1.20		-		-		0.52		1.72	5.54%	-	-	5.54%	5.54%
Middleton		0.25		-		-		0.06		0.31	6.95%	-	-	6.95%	0.00%
Greenleaf		0.02		-		-		-		0.02	6.86%	-	-	0.00%	6.86%
Melba		-		-		-		0.01		0.01	0.00%	-	-	6.93%	6.93%
Notus		-		-		-		0.01		0.01	0.00%	-	-	7.22%	7.22%
Parma		0.07		-		-		0.05		0.11	7.90%	-	-	7.90%	7.90%
Wilder		0.01		-		-		0.03		0.03	7.40%	-	-	8.14%	8.03%

 Table 1. Assumed 2011 baseline values for local revenue sources

<sup>11</sup> These estimates can be obtained at: http://www.compassidaho.org/prodserv/demo-forecasts.htm.



Figure 6 - Roadway Revenues from Local Revenue Sources

# Local Funding Sources for Transit

As indicated above, local sources for transit funding include fare box revenues and payments from benefiting cities.

### **Future Estimates of Fare Box Revenues**

These revenues are assumed to include fares and passes purchased by users, and minor sources of revenue such as advertising on buses. In most recent years, these sources have generated approximately \$1.0 million per year. Over time, and with an unchanged level of service, it is expected these revenues will increase with increasing ridership and likely adjustments for inflation, as measured by the CPI.

### **Future Estimates of Community Payments**

Cities provided service by VRT make annual payments to its operations, maintenance, and capital improvements. These payments are not formula-based and are subject to continuing approval of the respective city councils, making them challenging to predict with any certainty. Most recently, the total contribution level has been in the range of \$6.0 to \$7.0 million, with \$6.4 million anticipated in 2012.

To some degree, the level of payments are cost-based because they make-up the difference between VRT's total costs, fare box revenues, and federal funds. However, for purposes of this portion of the analysis, it appears reasonable to assume the local payments continue over time at approximately the rate of inflation. In addition, it should be recognized that the cities will likely want their payments to primarily benefit their citizens and local businesses.



Figure 7 summarizes estimate of VRT local revenues resulting from the above assumptions.

Figure 7 - Estimated VRT revenues from local sources

### **Restrictions of Usage of Local Transit Revenues**

There are no restrictions on the use of local revenues, although it is reasonable to assume that the contributing communities would prefer expenditures that benefit them. They can be used for operational, maintenance, or capital expenditures.

# State Funding Sources for Roadways

The state Highway Distribution Account (HDA) is the primary statewide source for roadway funding. About one-half of HDA revenues come from the state gasoline tax, fixed at \$0.25 per gallon since 1996; one-fourth come from the state diesel tax with the remainder coming from vehicle registration fees (29.3 percent) and other miscellaneous fees (3 percent). HDA funds are distributed among cities, counties and ITD according to formulas specified in the Idaho Code.

In addition to the HDA, there are other sources of state funding, such as sales tax sharing with cities and counties and inventory replacement tax revenues that may make their way to local roadway systems.

#### **Allowable Uses of State Funds**

State funds, specifically HDA funds, can be used for roadway operations, maintenance, or capital improvements. The Idaho Constitution, Article VII, Section 17, states that taxes on motor vehicle fuels and taxes/fees for vehicle registration "…shall be used exclusively for the construction, repair, maintenance and traffic supervision of the public highways of this state …and no part of such revenues shall, by transfer of funds or otherwise, be diverted to any other purposes whatsoever." This is commonly believed to preclude the use of HDA funds for transit.

### **Estimates of Current HDA Funds**

Current levels of annual HDA revenues allocated to local roadway agencies are shown in Table 2. Table 2 also shows the proportion of local HDA revenues assumed to be allocated to each entity over the planning horizon. This proportion is based on 1999-2011 trends.

#### **Table 2. State Highway Distribution Account Allocation**

	20 <sup>-</sup> rev	11 HDA venues	Proportion of 2-County total
Ada County Hwy District	\$	19.84	65.63%
Canyon Hwy District		1.77	5.85%
Nampa Hwy District		2.56	8.46%
Notus-Parma Hwy District		0.71	2.35%
Golden Gate Hwy District		0.77	2.55%
Nampa		2.74	9.07%
Caldwell		1.46	4.83%
Middleton		0.20	0.65%
Greenleaf		0.03	0.11%
Melba		0.02	0.06%
Notus		0.02	0.07%
Parma		0.06	0.21%
Wilder		0.05	0.17%
	\$	30.23	100.00%

#### Millions - 2011

### Estimate of Future Revenues from State Sources

Future revenues from the state will primarily depend on the level of HDA revenues, which in turn are largely dependent upon fuel taxes. Considering the well-known trends of the flattening of fuel usage and a historic reluctance to change fuel tax rates, there is little reason to believe HDA revenues will increase significantly over the planning horizon.<sup>12</sup> Idaho's fuel sales are representative of those across the U.S. and are shown in Figure 8.

<sup>&</sup>lt;sup>12</sup> U.S. Federal Highway Administration at http://www.fhwa.dot.gov/policyinformation/statistics.cfm. Highway Statistics Annual Reports (1994-2009) Table MF-21.



Figure 8 - Gasoline and other fuel usage in Idaho, 1994-2009

During 2011, ITD prepared an analysis of possible future levels of HDA funds allocable to Ada and Canyon County agencies. It is useful to quote their forecast notes, shown below in italics:

This forecast is simply a forecast and may not be an accurate prediction of the future economy. As with any long-term forecast, the probability of error is extremely high. Accordingly, the Department states that the following disclaimers apply to the information released in this report. The released information:

- 1. Is derived from October 2011 econometric models created by HIS Global Insight
- 2. *Reflects the current state of the Idaho and national economy and does not necessarily reflect the future economy*
- 3. Incorporates the recent history of the Ada and Canyon revenue from the HDA
- 4. Uses the existing distribution formula from Idaho Code 40-709, which may be amended or changed by future legislators
- 5. There is no guarantee of revenue from this forecast
- 6. Use of these estimates does not obligate ITD in any way
- 7. Uses of these forecasts are the responsibility of the users and if the users intend to rely on these forecasts they do so at their own risk and liability

Despite these warnings, this analysis has concluded the ITD estimates are acceptable in light of the high degree of uncertainty associated with any estimate of this nature and due to ITD's previous attention to this issue. Alternatively stated, it was unlikely this analysis could produce better estimates, so the ITD analysis is considered the most likely baseline.

As indicated by the qualifications to the ITD estimates, ITD assumed that Ada and Canyon Counties would receive a constant share of statewide HDA revenues through the future. Although complicated, the HDA distribution formula considers population and the relative share of local population to total State population. Since Ada and Canyon Counties are anticipated to account for an increasing share of population in the future, it is reasonable to assume their share of HDA revenues will also increase.

Figure 9 shows long-term HDA revenue estimates derived by ITD, assuming: (1) constant proportions of total State HDA revenues, and (2) estimates assuming an increasing proportion of HDA revenues. It is apparent they are close in magnitude. For purposes of this analysis, estimates assuming an increasing proportion will be used in this analysis, on the basis that Ada and Canyon Counties will comprise an increasing share of future Idaho population.



Figure 9 - ITD Estimate of HDA revenues accruing to Ada and Canyon Counties

Other sources of state revenues were assumed to increase at the rate of inflation and the rate of growth in the number of households.

Based on the above assumptions, Figure 10 summarizes historic and estimated future state revenues for local roadway entities. The erratic nature of the historic revenues reflects reported reductions in HDA revenues to nearly all agencies during the period 2008-10. In total, State revenue for local roadways is anticipated to increase at an annual rate of approximately 1.7 percent under a baseline scenario assuming an increasing proportion of State HDA revenues.



Figure 10 - Estimate of State roadway revenues allocated to each entity

# Federal Funding Sources for Roadways

Federal financial support for roadway-related spending comes from the Highway Trust Fund (HTF), which receives roughly 90 percent of its revenues from motor fuel taxes (60 percent from a gasoline tax of \$0.184 per gallon and most of the remainder from a diesel tax of \$0.244 per gallon). Most funding for Idaho is provided on a formula basis. For equity, all states are guaranteed a minimum amount of the revenue collection within their state (currently 92 percent) with additional funding allocated according to population, miles of roadway, percentage of federally-owned land and other factors. Over the period 2005-09, Idaho received 70 percent more funds in apportionments and allocations than were collected in the state through HTF-related taxes.<sup>13</sup>

<sup>&</sup>lt;sup>13</sup> U.S. Government Accountability Office GAO-11-918. "All States Received More Funding Than They Contributed in Highway Taxes from 2005 to 2009." September 2011. It is of interest to note that if all states receive more than they put in, the funding source is unsustainable in its current form. In effect, the HTF is not totaling funded by user charges.

Distribution of the HTF has been guided by the version of the Transportation Efficiency Act (TEA) in effect, the most recent being the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). For the period 2005-09, Idaho received an average of \$276 million per year through this program. As of the end of FY 2008, the HTF was out of funds, requiring a series of one-year fixes that continue to the current period. Since the HTF is dependent upon gallons of fuel usage times a fixed tax per gallon, invariant to the fuel prices and inflation, revenues accruing to the HTF are currently in a flat pattern similar to fuel consumption. Based solely on the current situation, continued federal support for roadway and transit projects cannot be expected to increase above minimum levels.

Federal revenues for Ada County and Canyon County roadway projects are primarily seen through major projects managed by the Idaho Department of Transportation (ITD) separate from the local agencies identified above. As a result, federal funds play a more important role in the regional roadway system, primarily state and interstate highways, than for local roads. Examples of this were the recent I-84 projects expansion projects in the Boise-Nampa corridor. However, as indicated above, no additional expansion is anticipated and ITD will focus upon maintaining the existing state system.

### **Federal Funds for Local Projects**

Federal funds for local projects are considered on a regional basis because federal funding allocation is administered across the two-county area through the regional planning agency, COMPASS, and ITD. As a result, the level of federal funding in the region may be constant or slowly increasing over time, but the levels of funding for any single agency may fluctuate significantly from year to year depending on priorities for the region.

The Federal Highway Administration's STP-Urban and STP-Rural programs are two of several Surface Transportation Programs (STP) providing funds for projects not on the Interstate System or the National Highway System (NHS). These funding sources are the focus of this analysis.<sup>14</sup> The funds are intended to benefit arterial and collector roads in urban areas. Funds can be used for a wide range of projects including roadway widening, roadway reconstruction, and transit projects. Urban areas within Boise Traffic Management Area (TMA) and within the Nampa Urbanized Area (including the cities of Nampa, Caldwell, and Middleton) are eligible for STP-Urban funds.

It should also be noted that TMA funding specifically for construction is paid by ITD and does not appear in local agencies financial reporting. As a result, there is significant concern that overreliance on local agencies' historic data may understate actual federal spending on local projects. This concern is noted. In response, future estimates of federal spending on local roadways are made at the county level considering the total federal allocation for the region. As a result, historic data may understate federal spending, but future estimates should not.

STP-Rural funding is reserved for areas with population under 5,000. This would include Parma, Melba, Notus, Wilder, Greenleaf and unincorporated areas not within a defined Urbanized or

<sup>&</sup>lt;sup>14</sup> There are other federal programs, including Congestion Management for Air Quality (STP-CMAQ) and programs for safety enhancements and aesthetics (STP-E), but these programs comprise a relatively small portion of total federal funding in the region.

Urban area. Statewide, these funds amount to approximately \$10 million per year. They are not allocated to each rural area but are handled on a discretionary basis by the Local Highway Technical Assistance Council (LHTAC). Each rural county, highway district or city applies for specific projects.

# **Current Federal Funding**

Figure 11 summarizes the level of STP-Urban funds allocated to the COMPASS region, which include the Boise TMA and the Nampa Urbanized Area. The 2003-10 data are actual, while the 2011-15 data reflect committed expenditures, assuming federal allocations are approximately the same through 2015.



Figure 11 - Historic and committed STP-Urban funds, 2003-2015

Between 2012 and 2016, three projects in Canyon County are identified as using STP-Rural funding, one totaling \$2.4 million during the 2012-15 period and two totaling \$6.2 million as planned beyond 2015. Together these projects account for approximately 11 percent of the total programmed state-wide STP-Rural funds. According to the 2010 Census, Ada and Canyon Counties account for about 12-13 percent of Idaho's total rural population. Therefore, if STP-Rural allocations are approximately \$10 million per year<sup>15</sup>, an 11 percent share, or \$1.1 million per year, appears reasonable for moving forward

<sup>&</sup>lt;sup>15</sup> <u>http://itd.idaho.gov/itip/images/itip\_by\_program\_hwys.pdf</u> )

### **Future Levels of Federal Funding**

It is assumed that the level of STP funds will increase at a rate of 1.0 percent per year, based on the following assumptions:

- Idaho gasoline sales grow 0.4 percent annually; diesel sales increase 2.6 percent annually. These figures represent the median growth rate of gasoline and diesel sales from 2000 to 2010.<sup>16</sup>
- There are no expectations that Congress will increase the federal fuel tax rate in the current economic and political climate. No increase in this tax rate is assumed in this scenario.
- HTF revenues allocated to Idaho will grow in proportion to HTF revenues most recently collected in the state. The return to Idaho from 2005-2009 was approximately \$1.70 per dollar collected.
- The COMPASS region continues to receive at least the same historic share of statewide HTF allocations, or possibly higher shares due to an increasing proportion of total state population.
- Current appropriations remain unchanged and other highway account revenues increase in proportion to revenues from motor fuels. It is assumed that no legislation will redirect HTF toward other funds such as deficit reduction or that no law will redirect other funds into HTF other than to ensure solvency of the HTF.

Based on a one percent per year escalation rate, Figure 12 shows estimated STP revenues for local roadways the period 2012-2040.

### Allowable Uses of Federal Funds

While the national match requirement is 20 percent, in Idaho federal funds for roadways require a 7.34 percent local match due to the percentage of federally owned land in the state. In addition, STP-Urban funds are restricted to communities of 5,000 or greater and rural funds are for communities of 5,000 or less. STP-Urban funds can be used for certain types of transit purposes as well as for roadways designated as eligible for federal funds. Routine operations and maintenance are not eligible for federal STP funding, but preventative maintenance is. For purposes of eligibility for STP funds, preventative maintenance is a rather broad category that may include portions of pavement surfacing, signals, lighting, bridge maintenance, striping, and other eligible activities.<sup>17</sup>

<sup>&</sup>lt;sup>16</sup> USDOT Federal Highway Administration Highway Statistics 2010. Table MF-21. August 2010.

<sup>&</sup>lt;sup>17</sup> A list of eligible uses can be found at USDOT Federal Highway Administration Highway web site at http://www.fhwa.dot.gov/preservation/memos/011126.cfm



Figure 12 - Estimated federal STP revenues for local roadways

# Federal Funding Sources for Transit

About 80 percent of federal transit funding comes from the HTF's dedicated Mass Transit Account. Federal funding accounts for nearly 40 percent of VRT's annual budget and is used for operations, preventative maintenance, capital expenditures, and other activities. Two programs within SAFETEA-LU provided the majority of local funds:

- Section 5307 (68 U.S.C 5307), which provides grants for public transportation capital investments, and allows metropolitan areas under 200,000 in population to use these funds for operations. These funds are distributed by formula. For areas of 50,000 to 199,999 in population, the formula is based on population and population density. For areas with populations of 200,000 and more, the formula is based on a combination of bus revenue vehicle miles, bus passenger miles, fixed guide way revenue vehicle miles, and fixed guide way route miles as well as population and population density.
- Section 5309 funds, which were totally competitive in nature. These required the applicant to either go through a technical merits competition with FTA, or file for an earmark request and be subject to political competition. The new transportation act, Moving Ahead for Progress in the 21st Century (MAP-21), has consolidated much of the bus and bus facility portion of 5309 into the formula based 5307 program.

Federal funds for most transit capital purposes require a 20 percent local match and VRT has leveraged their local funds in a manner to maximize federal grant funds. There are some exceptions to the local match requirement, including wheelchair ramps and paving at bus stops. Federal funds for operational expenses are matched at 50 percent after deducting fare box revenue. (If the total eligible operational expenses were \$2 million and farebox revenues amounted to \$400,000, the maximum amount reimbursable by 5307 would be \$800,000.)

Over recent years, as the Nampa/Caldwell urbanized area population approached 200,000 there was a concern that VRT would lose the ability to use Section 5307 funds for operations of the Nampa/Caldwell component, plus the distribution formula will be altered. However, these funds could still be used for preventative maintenance and capital improvements provided local matching revenue can be obtained.<sup>18</sup> With many communities, including the Boise/Meridian area, receiving waivers of the 199,999 population threshold, there has been no change in VRT's uses of federal funding. It appears likely this population waiver will remain and/or the population threshold may be changed. Continued eligibility of operations expenses for federal reimbursement is a key assumption in this analysis.

### **Current and Future Estimate of Federal Transit Funding**

Recent VRT budgeting estimates for federal 5307 funds to be used for operating assistance have been \$4.0 million and \$3.6 million, for 2011 and 2012, respectively. An average of \$3.8 million per year appears a reasonable baseline level for moving forward. The level of 5307 capital funds can vary over time.

A recent 5309-funded project is the Boise Multi-Modal Center, which resulted in a one-time spike in capital revenues of approximately \$9 million. Over a long period, however, the level of federal capital funds appears to average less than \$1 million per year. For this analysis, a baseline level of \$800,000 per year is used.

Future federal revenues accruing to VRT are assumed to increase at a rate of 1.0 percent, under the same rationale as for federal revenues for roadways. This is a reasonable assumption because the same federal revenue sources fund both transit and roadways, although they are administered through different agencies. However, this analysis assumes a continued presence for transit, albeit at declining value over time considering the impact of inflation.

Based on the above assumptions, Figure 13 summarizes future estimates of federal revenues. Given the state of the federal deficits and the current political debate, it is readily apparent that federal revenues are expected to grow at modest rate over the planning horizon.

<sup>&</sup>lt;sup>18</sup> FTA considers preventative maintenance a capital expenditure rather than an operational expenditure, even though most local agencies would otherwise classify this as an annual operating cost if not for the 80 percent federal cost-share for capital expenditures.



Figure 13 - Estimated federal revenues for transit, 2012-2040

# Short and Long-Term Cost Escalation Rates

# Inflation Assumptions

Revenues and costs are unlikely to remain constant in the future because price inflation across the U.S. economy will likely increase costs and revenue requirements over time. In order to generate reasonable estimates of future construction, maintenance and operational financing, the study team generated estimates of inflation rates for revenues and costs and over short-term and long-term periods.

This section examines historical inflation rates for transportation construction and materials within the context of economic trends. The study team used the following inflation estimates:

- The most likely short-term inflation rate is 4 percent (2012-2016).
- The likely long-term inflation rate for costs is also 4 percent (2016-2040).

It should be noted here that each transportation agency or entity is free to make their own assumptions about future inflation, considering their geographic area, future expectations about cost trends, and relevant regulatory guidelines. This analysis simply attempts to make reasonable assumptions about inflation given the benchmarks discussed below. The sensitivity of the results to alternative inflation assumptions is considered in the final section of this analysis.

The inflation rate estimates presented here were generated from an analysis of historical price indices and project material costs. Certain material costs were considered in addition to broader

price indices. Recent economic conditions suggest that short-term and long-term analysis periods are appropriate, and are discussed below:

- 1. Recent downward pressure on road-building material costs such as cement and steel has contributed to lower expectations of price inflation for the short term. Factors that contributed to downward pricing pressure include decreased residential, commercial, and infrastructure construction in the United States and globally due to the slow recovery of public and private sector financing. State and local road projects continue to be postponed or placed indefinitely on hold.
- 2. In the long term, however, data suggest that demand for highway, bridge and street maintenance, if not expansion, may rebound toward long-term averages in the United States. This trend, as well as growing international demand for construction materials and rising crude oil prices, may drive material costs higher.

Inflation estimates for the short term (2012-2016) include a time period of modest expectations for highway, bridge and street maintenance and continued soft demand for construction materials in the United States. The long-term inflation rates reflect a return to long-term average inflation rates for price indices and materials costs that reflect relatively low domestic demand for construction materials.

Inflation rate estimates are presented in three categories; most likely, low, and high inflation rate estimates.

# **Historic Price Indices**

Historical inflation rates were analyzed using the following price indices:

- 1. Washington Department of Transportation Bid Prices, 1990-2011 (WSDOT Bid Prices). WSDOT has a long, reliable database of bid prices for transportation construction contracting and is a reasonable regional comparison for Idaho.
- 2. **Bureau of Labor Statistics Producer Price Indices for specific materials, 1965-2011** (**BLS PPI**). The PPI indices for asphalt, cement, aggregate, structural steel and other materials represent changes in material costs over time.
- 3. Federal Reserve Economic Data Gross Domestic Product Implicit Price Deflator, 1990-2011 (GDP Deflator). The GDP Deflator presents price changes over time for a wide range of consumer, business, and government spending.
- 4. **Bureau of Labor Statistics Consumer Price Index, 1990-2011 (CPI).** The CPI is the most common measure of inflation in the United States. It tracks prices of a specific basket of consumer goods over time.

Inflation rates vary among the indices because each index offers different measures. Bid prices incorporate labor as well as materials while costs of specific materials are tracked within producer price indices. Consumer prices are useful to gauge the economic condition of the

United States and measures of gross domestic product include government and business spending.

From a local perspective, ITD records bid prices received for a wide range of construction materials and construction activities.<sup>19</sup> There is not a comprehensive index of bid prices or costs, but observation of selected materials over their recorded history, 2003 through 2011, provided verification of assumptions used here.

# Analysis Methods

Data on asphalt, cement, aggregate, and structural steel pricing were collected from WSDOT Bid Prices and the BLS PPI. These commodities represent the largest supply purchases expected to be used in transportation construction and major maintenance projects. In addition, CPI and GDP Deflator data were retrieved in order to provide context for economy-wide inflation.

Table 3 presents a comparison of the indices over time. WSDOT Bid Price inflation rates tended to be higher than inflation rates from other indices. Given that WSDOT reports bid prices from the State of Washington, while other indicators are national indices, the higher inflation rates are likely results of local influences on bid prices. The BLS PPI prices are largely driven by recent price increases in asphalt (a petroleum product). The GDP Deflator and CPI exhibit lower inflation rates, owing to the wide range of goods and services included in the metric.

	Average	Maximum	Median	Minimum
5-Year				
WSDOT Bid Prices Average	5.02 %	14.71 %	4.35 %	-2.48 %
BLS PPI - Specific Materials Average	3.08 %	9.49 %	2.47 %	0.56 %
GDP Deflator Average	2.20 %	2.90 %	2.12 %	1.67 %
CPI Average	2.65 %	3.64 %	2.56 %	2.20 %
10-Year				
WSDOT Bid Prices Average	4.75 %	10.06 %	4.11 %	2.37 %
BLS PPI - Specific Materials Average	2.92 %	5.38 %	2.45 %	1.04 %
GDP Deflator Average	2.14 %	2.41 %	2.19 %	1.86 %
CPI Average	2.60 %	3.01 %	2.55 %	2.38 %
15-Year				
WSDOT Bid Prices Average	4.80 %	6.66 %	5.23 %	3.18 %
BLS PPI - Specific Materials Average	2.89 %	4.70 %	2.51 %	1.74 %
GDP Deflator Average	2.16 %	2.23 %	2.18 %	2.07 %
CPI Average	2.62 %	2.86 %	2.65 %	2.42 %

<sup>&</sup>lt;sup>19</sup> http://itd.idaho.gov/business/docs/Average%20Unit%20Price%20Report%202011.pdf

The inflation rates used for this project reflect average values of the respective indices over time. Materials and labor costs will likely continue to be slow growing in the short-term. Long-term inflation estimates are based on data with relatively long histories.

# Inflation Rates – Most Likely Estimates

### Short-term – 2012 to 2016

- In the short term, inflation rates for materials costs are anticipated to be four percent, roughly the midpoint of WSDOT Bid Prices and the BLS PPI for specific materials over the 5-, 10-, and 15-year averages.
- Transit operations and maintenance cost inflation is estimated at three percent due to lower compressed natural gas (CNG) fuel pricing relative to diesel.
- Historical inflation rates, especially the relatively high rates exhibited by WSDOT Bid Prices, may not be indicative of future inflation given the current economic conditions. Economic recovery in the United States remains to progress at a slow pace and relatively low inflation will likely persist in the short-term.

### Long-term – 2016 to 2040

- Likely inflation rates for costs are estimated at four percent for this time period. This higher rate is more consistent with median WSDOT Bid Prices over 5-, 10-, and 15-year averages. Petroleum-based products may, however, experience higher inflation over the long-term due to increasing global demand.
- Transit O&M costs will likely experience similar inflation as in the short-term (three percent). CNG prices may exhibit lower inflation relative to diesel fuel.

### Inflation Rates – Low Estimates

### Short-term – 2012 to 2016

- A low estimate for short-term cost inflation is projected to be 0.5 percent. Historical minimum short-term inflation rates of WSDOT Bid Prices ranged from -2.5 percent to 3.2 percent. The slow recovery and decreased expectation of funding for maintenance and investment in transportation construction will continue to mitigate inflation of materials cost.
- For revenues, minimum inflation rates over various time periods for both the CPI and the GDP Deflator fall near 2 percent. The study team uses two percent as the low revenue estimate over the short term.

### Long-term – 2016 to 2040

- Low estimates for cost inflation over the long-term will be 2.5 percent, based on historical minimum WSDOT Bid Price inflation rates.
- A low estimate for revenue inflation over the long-term is two percent. The mean 15year average rate of the GDP Deflator is roughly two percent.

## Inflation Rates – High Estimates

### Short-term – 2012 to 2016

- A high estimate for short-term cost inflation is projected to be six percent, reflecting volatile petroleum prices, higher materials pricing, and increased investment in transportation construction. Historical maximum inflation rates for WSDOT Bid Prices and BLS PPI for selected materials support this estimate.
- The high estimate for revenue inflation reflects the maximum of five-year averages for the CPI, about four percent.

### Long-term - 2016 to 2040

- A high estimated inflation rate over the long term is projected at five percent for costs, based on the maximum 15-year average rate for WSDOT Bid Prices. In addition to higher petroleum prices, sustained increased funding for transportation construction projects in the United States (and possibly internationally) would drive materials and labor prices higher.
- An estimate for long-term revenue inflation settles at three percent, consistent with the long-term CPI averages. Because long-term CPI averages has remained roughly three percent, this estimate for the high scenario is the same as the most likely scenario.

When considering the various rates, keep in mind the effect of inflation on the buying power of a fuel tax last raised in Idaho in 1996 to 25 cents per gallon. Based on construction costs since 1996, the dollars raised in 2010 would have provided another \$197 million in construction if the tax rate had been adjusted for inflation to 1996 purchasing power.<sup>20</sup> This is shown in Figure 14.



Figure 14 – Effect of Inflation on Highway Distribution Account Purchasing Power

<sup>&</sup>lt;sup>20</sup> Construction cost index taken from a Washington Department of Transportation report. More information can be viewed at <u>http://compassidaho.org/documents/prodserv/reports/TFR2010.pdf</u>. In 2010, average construction costs were 62% higher than in 1996. By comparison the 2010 consumer price index was 43% higher than in 1996.

# **Maintenance and Operation Needs**

Maintenance and operation needs represent the expenditures needed to keep the existing system running. Costs for operating and maintaining expanded facilities and services must also be considered. For roadway agencies, these expenditures are categorized in a manner similar to the financial data submitted by the agencies to ITD. Figure 15 partially duplicates Figure 2 by highlighting the accounting of maintenance and operations adapted for this analysis:



Figure 15 - Operations and Maintenance Expenditures

Under ideal conditions, future O&M expenditures could be reliably estimated using inflation and system growth to escalate current expenditures. However, this requires the assumption that the current level of spending on O&M, including reconstruction, is sufficient. This assumption is tenuous, because:

- According to a recent COMPASS survey of local transportation officials, only about onehalf of the respondents thought their systems were adequately funding maintenance, with the remainder either disagreeing or strongly disagreeing. Over 80 percent thought their systems were not adequately funding rehabilitation and reconstruction of major structures, such as bridges. These views are consistent with discussions during the course of this study between the roadway agencies and the project team.
- There does not yet appear to be an adequate method for measuring the "success" of maintenance across the region, leaving uncertainty with respect to the beginning condition. The Pavement Management Index (PMI) is an often-cited metric that evaluates

the condition of hard-surfaced roadways, providing a measure of road quality. Though promising for the future, many local roadway agencies are still developing the database needed to accurately evaluate their entire systems. In addition, the PMI is not necessarily consistent across agencies. That is, two different agencies may give the same stretch of pavement different rankings. Further, GASB 34 accounting standards may eventually lead to asset management systems whose purpose will be to gauge the change in condition (and value) of major assets, whether they be roads or bridges, or equipment and maintenance facilities.<sup>21</sup>

As a result, use of historical data to estimate agencies' future costs ensures continuation of historical trends, but using the trend may not assure a future state of good repair in the absence of data on how well past expenditures have maintained agency assets. In response, the analysis considered additional methods of gaining insight to future O&M expenditures.

- As indicated in the Introduction, system O&M expenditures were agenda items in the meetings held with local transportation agencies. These discussions yielded insight regarding the current state of the systems and the extent of deferred maintenance, if any. Although sometimes the information was anecdotal in nature, individual agencies know their systems best and were the most relied upon source. Some of the major points made during these discussions are summarized below.
- Using the National Bridge Inventory (NBI), bridge structures were inventoried for each roadway entity, with particular interest in the ages of the bridges, whether they were structurally deficient, and whether they were functionally obsolete. This information was used for determining whether the agency may experience major bridge rehabilitation or reconstruction expenditures in the future, whether in the near-term or in spikes over time. The results of the inventory were presented to the agencies individually to gauge their reaction. Their responses are summarized below.
- Assuming good management practices with respect to chip sealing (7-9 year cycle) and asphalt overlays (25 years)<sup>22</sup>, annual maintenance costs for these specific activities were estimated for each of the local roadway agencies. These costs were then compared to their actual expenditures on chip sealing and overlays.

<sup>&</sup>lt;sup>21</sup> Government Accounting Standards Board (GASB) establishes Generally Accepted Accounting Practices (GAAP) for state and local governments. GASB 34 involves the accounting, condition, and valuation of assets. GASB 34 is not a legal requirement, but a recommended accounting standard.

<sup>&</sup>lt;sup>22</sup> These cycles are not uniform across agencies and are dependent on traffic volume, truck mix, weather, ground conditions and other factors. The Local Highway Technical Advisory Council estimated an average cost of \$25,000 per mile for chip sealing. ACHD estimated a per mile cost of overlays at \$265,000. These will vary depending on a variety of conditions, including pavement width.

### Summary of Meetings

### Ada County Highway District

- ACHD develops their own financial analyses for purposes of determining levels of funds available for capital improvements. These were shared with the consultants conducting this analysis. In the near term, estimates of revenues and expenditures developed by ACHD were very close to those developed in this analysis. Over time, however, the estimates diverged due to differences in revenue and cost escalation, or inflation, rates. ACHD analysis assumed a two percent rate of escalation for most revenues and costs. This analysis assumes that escalation rates vary by type of revenue and costs, but, with exceptions, are generally related to the combined impact of anticipated inflation and system growth, resulting in annual escalation rates in the range of five percent to six percent.
- Impact fee revenues dropped off dramatically in 2009 and 2010 from levels experienced in prior years, due to the economic slow-down. The impact fee reserve fund is currently in debt to ACHD's General Fund as a result.
- Roadway maintenance is a continuous concern and ACHD is currently re-evaluating their maintenance and reconstruction activities. They may not be holding to their preferred nine-year cycle for chip sealing, <sup>23</sup> but this issue may be more applicable to local roads rather than arterials and collectors. Results of ACHD's current assessment of maintenance expenditures will be included in this report as they become available.
- With respect to major structures, ACHD feels their maintenance is adequately budgeted for the about the next 15 years. They are uncertain beyond that.
- ACHD emphasized that their maintenance expenditures also include storm water drainage, multi-modal expenditures such as bike lanes and sidewalks, landscaping, and other components not always considered in more rural areas. As a result, direct comparisons of maintenance costs across agencies on a cost per mile of roadway basis may not be useful. In addition, ACHD's capital expenditures for roadways likely contain additional items not included in more rural areas, such as curbs and gutters, sidewalks, bike lanes, and landscaping.
- ACHD's activities also include large non-roadway programs and community programs that less populated urban agencies may not experience. Examples are the Bicycle-Pedestrian Transition Plan (BPTP) and the Roadways to Bikeways Bicycle Master Plan. The cost of implementing the full BPTP was estimated in 2005 to be near \$300 million, in 2004 dollars. Its implementation does not have a specific deadline, but for planning purposes, ACHD has previously assumed that possibly half the Plan could be

<sup>&</sup>lt;sup>23</sup> <u>http://www.achdidaho.org/Departments/MO/Chipseal.aspx</u>)

implemented by 2030.<sup>24</sup> The Livable Streets for Tomorrow Program (also called the Transportation and Land Use Integration Plan) is a cooperative effort with Ada County whose goal is "a roadway network that balances the needs of all users - motorists, pedestrians, cyclists, transit and people with disabilities - with streets that complement the built environment." A Disadvantaged Business Enterprise Plan ensures that DBE's have equal access to ACHD contracting opportunities.

### **Canyon Highway District No. 4**

The following information was contributed by CHD4 during meetings and subsequent e-mail exchanges:

- For the past five years, CHD has averaged about 10.5 miles per year surfacing, overlays, and pavement replacement, of about 330 center line miles.
- The CHD Pavement Management Index<sup>25</sup> (PMI) has increased over the last five to six years, going from 85 to about 86.5
- To maintain their current PMI, CHD estimates that they would need to chip seal <sup>26</sup> about 40 miles per year, overlay about seven to eight miles per year, and reconstruct two to three miles per year. Due to incorporating recycled asphalt base stabilization (RABS), they will move forward with slightly fewer overlays but with more RABS and pavement replacement.
- Depending on the life of the bridge, CHD has estimated an annual cost of \$443,000 (70 year life) to \$620,000 (50-year life) to fully fund replacements.
- CHD initially estimated that \$50,000 per year should fund replacements of drainage pipes and culverts, but revised this to approximately \$180,000 per year in light of more recent expenditures.
- The Plymouth St. railroad bridge is a structure of concern. It appears to be in poor condition.
- Future storm water costs are a concern to CHD.

<sup>26</sup> A chip seal is a very thin coat of asphalt applied to the road surface to improve impermeability. It includes an application of rock chips on top of the asphalt layer, which are then rolled into the pavement.

<sup>&</sup>lt;sup>24</sup> "Financial Analysis for Local Roadway Needs in Ada County," for the Ada County Highway District. HDR Engineering, Inc., October 1, 2008.

<sup>&</sup>lt;sup>25</sup> Flexible pavement management indices may include the amount of cracking, surface roughness, skid resistance, and other factors related to pavement condition. Higher scores are better. Extremely low scores can indicate a need to completely reconstruct the road—removing all pavement and replacing the underlying gravel base. Reconstruction can cost 5-10 times more per mile than an overlay, which is applying 2+ inches of asphalt on top of the surface of the road.

In comparing the above information with the historic financial data, it appears their expenditures on roadway maintenance have been sufficient to fully maintain the roadways. It is not certain whether replacement costs for major structures are being adequately funded, but there is no evidence to suggest that future costs for major structures will exceed historical trends. As a result, extrapolating recent cost trends into the future with growth and inflation would imply a maintained roadway system.

### Nampa Highway District No. 1

The following information was contributed by NHD during meetings and subsequent e-mail exchanges:

- Nearly all their efforts focus upon preserving the existing system; periodic federal aid has primarily financed their past expansion projects.
- NHD chip seals approximately 45 miles per year of the District's 367 centerline miles.
- About 2.5 miles of roadway receiving major overlays or reconstruction each year.
- NHD feels their system is in good shape they can maintain what they have but have few funds for expansion. Their PMI system is still evolving, but they are relatively certain that roadway quality has been improving.
- There are quite a few structures classified as bridges, however, fewer are major structures, implying replacement or rehabilitation costs would not be extraordinary. One, the Middleton Road bridge, is listed as deficient.

Similar to CHD4, it appears the NHD roadway system is adequately maintained but there is some uncertainty with respect to major structures. However, also similar to CHD4, there is no evidence to suggest expenditures for major structures would exceed their historical trends. As a result, extrapolating recent cost trends into the future with growth and inflation would imply a maintained roadway system.

### City of Caldwell

The following information summarizes two meetings with the City regarding roadway expenditures:

- Caldwell chip seals approximately 22-28 centerline miles per year; their current system is approximately 200 centerline miles. Their target is a seven-year rotation. Overlay cycles are not articulated but are likely in the 20-year range.
- Structures of concern include the 10<sup>th</sup> Avenue Overpass (UP Railroad) Bridge.
- There are a number of bridges of short length that are not "on the radar" with respect to any special maintenance needs.

Although it appears the City's roadways are being adequately maintained with respect to chip sealing and possibly overlays, there is concern that future costs for rehabilitation and reconstruction of major structures may not be adequately reflected by extending recent trends. As a result, extrapolation of recent trends may understate actual future expenditures and/or possibly result in some deterioration of the existing system,

# City of Nampa

The following information summarizes two meetings with the City regarding roadway expenditures:

- Nampa currently chip seals approximately 15 miles of roadway per year, from a system of approximately 370 miles. They would prefer to seal coat approximately 50 miles per year, or 3.5 times their current expenditures on this portion of maintenance. The City has recently increased their budget for chip sealing by approximately \$500,000 per year to address this concern.
- In response to concerns about deferred maintenance, deferred capital expenditures for intersections, and deferred capacity-related expenditures, the City generously shared considerable data and staff time identifying the level of each. Current roadway expenditures of approximately \$5.5 million could be increased by a factor of almost 3.0 to meet identified maintenance, intersection, and capacity needs. Continuing expenditures along their current trends, plus the current backlog of needed projects, will likely result unmet roadway needs of approximately \$200 million by 2021. Approximately \$72 million of this total would be deferred maintenance.
- In partial contrast to the above, a recent review of pavement conditions contained in their recent Transportation Master Plan indicated the current pavement conditions are generally adequate for the sections that have been inspected.
- The Transportation Master Plan identifies a range of needed improvements, primarily projects to expand roadway and intersection capacity. As a result, there are concerns about the ability to implement the improvements while simultaneously adequately maintaining the existing system. The City is currently in the process of evaluating these issues and has preliminary cost estimates of their maintenance and capital project backlog. However, these estimates are currently too preliminary to incorporate into this analysis.
- Similar to Caldwell and other cities, the Nampa transportation enterprise has less control over their finances, particularly property tax revenues, than County Highway Districts. This is because they are at the discretion of their City Council, who has a wide range of other issues to deal with besides transportation, in contrast to a Highway District Board, who is dedicated to roadway needs. The Highway District Board can vote to increase their assessments; the City transportation enterprise has to make their case to a City Council, who may have several different departments competing for funds.

- Related to the above, the City noted that their largest source of property tax revenues are transfers, or rebates, from Nampa Highway District (NHD) for City land lying within the NHD. The City has no control over the levy assessed by NHD and the amount they rebate to the City. As a result, the City's transportation enterprise has little control over local funding sources.
- Also similar to other cities and ACHD, it is unlikely that all system expansion projects would be deferred to maintenance as funds grow tighter. Although maintenance is very important, future capacity is also important, so some future balance would likely have to be achieved.

Although it appears the City's roadways are currently in generally good condition, it appears they are slowly losing ground in the area of roadway and structure maintenance. As a result, extrapolation of recent trends will likely understate actual future expenditures and likely result in some deterioration of the existing system over time.

### **City of Middleton**

The following information summarizes two meetings with the City regarding roadway expenditure:

- The City is chip sealing approximately 3.5 miles of roadway per year out of about 41 miles of roadway. This equates to about to a frequency of about one year in 11.
- There are no major issues with structures. There are only three major structures in the system, with all three having a collective replacement cost in the range of \$500,000 to \$1,000,000. On an annual replacement cost basis, this cost is relatively minor.
- The City is currently conducting a street needs analysis, whose results will not be known until early summer. {*Revisions of this document will incorporate its results.*}
- The combination of their street needs analysis and significant increases in the street maintenance and reconstruction expenditures over recent years demonstrates commitment to improving the local roadway system. The current condition of the system appears adequate.

Based on the adequate condition of the existing system and recent financial trends, it is reasonable to assume that extrapolation of these recent trends into the future with growth and inflation represents a well-maintained system.

# *Current and Future Estimates of Roadway Maintenance and Operations Expenditures*

As a point of interest, Figure 16 compares selected maintenance and operations expenditures across roadway agencies, primarily for roadway preservation. Considering the many differences

between the agencies, these may not be apples-to-apples comparisons, but they tend to meet *a priori* expectations about the relative levels of expenditures by agency.

- ACHD spends more per center line mile than the others due to having additional activities to fulfill, including maintaining adjacent sidewalks, bike lanes, and landscaping.
- The other larger urban agencies, Nampa, Caldwell, and Middleton have very similar expenditure levels.
- The two larger Canyon County highway districts have very similar expenditure levels.
- The smaller Canyon County highway districts have similar expenditure levels.



Figure 16 - Current expenditures for roadway preservation (maintenance and reconstruction) and equipment

### **Current Estimates**

For the 2011 baseline year, estimated levels of O&M were based on either: five or 10 year averages of historical data or the analysts' judgment of future long-term trends.

### **Future Estimates**

Despite the concern that extrapolating trends into the future may imply a slowly deteriorating regional roadway system, it was concluded that this method provided the most reasonable estimates. The rationale behind this conclusion is as follows:

• At least half of the agencies contacted appear to be adequately maintaining their systems, so the use of extrapolations would likely translate to a maintained system.

• For the agencies potentially losing ground, attempts to estimate a more desirable level of maintenance and reconstruction expenditures would be risky because the agencies themselves are still studying the issue. As a result, it appears that extrapolating recent historical trends, along with the above qualitative discussion of the agencies' own assessment, is the most defendable method available.

The factors used for these extrapolations are the anticipated rate of cost escalation, summarized in the previous chapter, and the rate of growth in local employment, as measured by the COMPASS demographic forecasts. The use of employment growth as a growth proxy appears reasonable under the assumption that driving to and from work generates a significant level of the local traffic. In addition, employment areas attract shopping, service, and other types of trips.

The exception to the assumption is administrative expenditures, which are assumed to grow with inflation and half the growth rate. This is intended to account for economies of scale in administrative activities.

Figure 17 shows actual and estimated O&M expenditures, 2000-40 for Ada County (ACHD), incorporating these assumptions.



Figure 17 - Actual and estimated Ada County O&M expenditures, assuming 4 percent inflation and COMPASS employment growth estimates (2-3 percent range)

Figure 18 illustrates the results for Canyon County, when summed across roadway agencies. Figure 19 breaks out the Canyon County totals by agency.



Figure 18 - Actual and estimated Canyon County O&M expenditures, assuming 4% inflation and COMPASS employment growth estimates



Figure 19 - Distribution of Canyon County roadway expenditures across agencies

The role of cost escalation, or inflation, in estimates of total costs across both counties is shown in Figure 20, for a range of sample inflation rates. The baseline inflation assumption for O&M in this analysis is four percent, for both the short-term and long-term. It should be noted that even with assumed inflation at 0 percent, costs increase over time due to system growth.



Figure 20 - Impact of various cost escalation, or inflation, rates on estimated roadway O&M expenditures

### *Current and Future Estimates of Transit Maintenance and Operations Expenditures*

VRT oversees the public transit system that provides bus service in Boise/Garden City and Nampa/Caldwell, contracting with a private firm to manage its operations. VRT also contracts for other transit services in and between Ada County and Canyon County. All of these bus services are operated under the name ValleyRide. A major portion of the existing system's cost is in operations and maintenance, and a major portion of the assets is in the form of rolling stock, primarily buses, and physical facilities such as fueling stations and maintenance garages. The next sections show that annual O&M are the largest portions of VRT's total cost and their recent annual financial statements indicate that vehicles account for 55 percent of the value of their assets, with buildings and facilities accounting for most of the remainder. This balance may change as the Boise Multimodal Center is completed and ValleyConnect facilities are possibly developed, with facilities becoming a higher percentage of the total assets.

For purposes of this analysis, VRT has indicated that approximately one bus per year will be replaced, at a cost of near \$450,000. This estimate may be more applicable to the near-term than the long-term. Buses have a life-cycle in the range of 12-15 years. VRT currently has about 50

buses, implying that at some point, bus replacements may total 2-3 per year, at a total cost of near \$1.5 million per year (in 2012 dollars). However, in reality, capital costs tend to come in "lumps" over time, of which buses are an example. Although there is not a long history to draw upon, VRT buses tend to be periodically purchased in groups of several. Fleet fuel costs are minimized through the use of compressed natural gas (CNG) that is processed in VRT's own facility. Natural gas prices have fallen dramatically due to a national oversupply.

Overall, there is no evidence to suggest VRT's day-to-day maintenance is deficient or that the system is run down. Vehicle maintenance expenditures increased over the period 2000-10 at an annual rate between 6.5 percent and 7.0 percent, about matching the combination of inflation and regional growth. However, there is a need to replace current buses as they reach the end of their useful life.<sup>27</sup> Based on the slow pace of bus replacements, it would appear inevitable that maintenance levels would have to rise above historic trends to either buy additional buses or to cover increases in maintenance costs for an aging fleet. Therefore, it is concluded that the transit system is currently adequately maintained, but extrapolation of recent cost trends over the next few years will reflect an aging fleet, at current service levels.

### **Historic and Current Expenditures**

Although VRT is the designated recipient of federal funds for both the Boise TMA and Nampa UZA, expenditures for these different areas are accounted for separately. However, for purposes of this analysis, all VRT cost centers, the Boise TMA, the Nampa UZA, and the Meridian Regional Authority, are considered collectively.

Operation and maintenance expenditures for VRT are categorized in the manner annually reported to FTA<sup>28</sup>:

- Operating expense, including (but not limited to) the direct costs for operating the transit fleet, the cost of contracted transit services, and the cost of operating other VRT programs
- Maintenance expense to maintain the fleet and facilities
- Administrative expense

The source of historic data, 2000-10, is the FTA National Transit Database. Data for 2011 and 2012 are VRT's budgeted levels, proportionately allocated to the FTA categories assuming 2000-10 average proportions.

Capital expenditures reported to FTA include expenditures for rolling stock, facilities, and "other." The historical data illustrates the "lumpy" nature of many capital expenditures made by VRT. For instance, the Boise multimodal center is a \$10+ million facility investment primarily financed by federal funds, with a 20 local cost share. It is apparent in the federal revenue data and is also apparent in the cost data.

<sup>&</sup>lt;sup>27</sup> Federal Transit Administration rules set a useful life of 12 years for a heavy duty coach and seven years for a medium duty coach. Based on current peak fleet size of 50 vehicles, VRT should be replacing three vehicles per year on the average but its budget only allows an average of one per year.
<sup>28</sup> Recipients of Section 5307 funding administered by the Federal Transit Administration must file reports with the

<sup>&</sup>lt;sup>28</sup> Recipients of Section 5307 funding administered by the Federal Transit Administration must file reports with the National Transit Database. Reports can be found at <u>www.ntdprogram.gov</u>.

### **Future Expenditures**

Assuming a continuation of the current levels of transit service, future transit expenditures are trended upward over time with the rate of inflation and the rate of regional employment growth.

- Two cost escalation rates are considered for transit, each on a short-term basis and a longterm basis: inflation in operation expenditures, assumed to be driven by increases in petroleum-based products; and inflation in all other costs, assumed to more generally follow overall consumer price trends. These rates are identified in the Inflation chapter of this report.
- Similar to roadways, the use of employment growth as a growth proxy appears reasonable under the assumption that using transit for commuting to and from work generates a substantial proportion of the total usage.
- Also similar to roadways, it is assumed that expenditures for Administration increase at a rate half that of employment growth.

Figure 21 shows historic O&M and capital expenditures, as well as estimated current and future expenditures incorporating the above assumptions.



Figure 21 - Historic VRT expenditures and estimates of future expenditures, assuming 3% inflation and COMPASS growth estimates



The impact of inflation on the long-term estimates is shown in Figure 22.

Figure 22 - Impact of various inflation rates on estimated transit expenditures

# **Available Funding for Transportation System Expansion**

Available funding for transportation system expansion is defined as estimated future revenues minus estimated future expenditures. Future expenditures consist of future operations and maintenance costs for the existing and expanded system; plus capital costs of preserving the existing system. Available funding for expansion, theoretically, is the remaining balance.

As pointed out earlier by one of the roadway agencies, this is a "purist" approach that is acceptable for purposes of this study, but not necessarily reflecting reality. They emphasized that governing boards for each agency make their own policies about how to allocate its funds across additional capacity and maintenance, using a variety of valid criteria. For possible reasons of striking a balances between capacity and maintenance, or because impact fees are restricted to fund new capacity, or because there are other non-roadway programs to fund, agencies will not totally stop funding capacity even under poor economic conditions.

The results are presented at a county level for two reasons: the analysis focuses upon the regional transportation system and federal roadway funds are allocated at a level that coincides with county boundaries. Canyon County results are the roll-up of the agencies within the County while Ada County consists of ACHD as the only agency with authority over public roads not on the state system.

Results for each entity, or agency, are shown in Appendix B. County totals and grand totals are included for the baseline condition in Appendix C.

### Available Funding Levels for Roadways: Baseline Scenario

For Ada County, Figure 23 summarizes total annual revenues from all sources, O&M expenditures, and remaining funds available for system expansion. Figure 24 summarizes estimates the annual funds available for system expansion and its cumulative total.

Figure 25 and Figure 26 summarize this information for Canyon County. Figure 27 shows how annual contributions to system expansion are allocated across roadway agencies.

Figure 28 and Figure 29 summarize this information for the two counties combined. Their totals are shown below:

	Total funds available for roadway expansion 2012-40
	(million)
Ada County	\$520
Canyon County	\$45
Total	\$565



Figure 23 - Annual revenues, O&M expenditures, and contribution to system expansion, Ada County, assuming 4% inflation and COMPASS growth estimates



Figure 24 – Annual and cumulative contributions to system expansion, Ada County, assuming 4% inflation and COMPASS growth estimates

Figure 24 shows that even though O&M expenditures may eventually exceed revenues, funds for system capacity improvements keep coming in, due to ACHD's transportation impact fee. However, these funds are currently limited to capacity-enhancing improvements.



Figure 25 - Annual revenues, O&M expenditures, and contribution to system expansion, Canyon County assuming 4% inflation and COMPASS growth estimates



Figure 26 - Annual and cumulative contributions to system expansion, Canyon County assuming 4% inflation and COMPASS growth estimates



Figure 27 - Annual contributions to system expansion by Canyon County agencies



Figure 28 - Annual revenues, O&M expenditures, and contribution to system expansion, two-county total assuming four percent inflation and COMPASS growth estimates



Figure 29 - Annual and cumulative contributions to system expansion, two-county total, assuming four percent inflation and COMPASS growth estimates

## Impact of Inflation Assumptions on Two-County Results

A comparison of the impacts of inflation exclusively on contribution to system expansion is shown below in Table 4 and highlighted in Figure 30.

	2%	3%	4%	5%
Ada County	\$719	\$652	\$520	\$485
Canyon County	\$188	\$53	\$45	\$42
Total	\$907	\$705	\$565	\$527

# Table 4. Impact of alternative inflation rates on cumulative roadway funding. Cumulative funds available for expansion at alternative inflation rates-2012-2040. (Millions)

#### The Power of Compounding

While a 4% annual growth in costs may not seem to be much more than a 1.5% annual growth in revenue, the difference grows over time. Assuming costs initially match revenues, after 30 years, this difference in rate of increase would result in costs doubling revenues. The long-term inflation rate assumed for system operation, maintenance, and reconstruction significantly influences the results. These costs' primary components are road-based materials, such as gravel, asphalt, oil, and other petroleum based products, and the diesel fuel. For Canyon Highway District, for example, these costs account for slightly over \$2.0 million of a \$5.0 to \$6.0 million annual budget, approximately 33 percent to 40 percent of the total budget. Personnel expenditures, including wages, salaries, and benefits, account for about another 40

percent, with all other expenditures accounting for the rest.



Figure 30 - Impact of alternative inflation rates on cumulative contributions to system expansion

# Alternative Revenue and Inflation Scenarios on Roadway Results

So far, the analysis has been developed using the analyst's opinion of the most likely future values of critical variables. However, actual future values may vary significantly from estimated values depending on a multitude of known and unknown factors. Rather than trying to "bank" on any single future value, it is useful to bracket future estimates with reasonable low and high bounds. This is accomplished by defining low and high scenarios that describe plausible, alternative paths that critical variables may take over time compared to the estimates developed over this analysis.

For analysis purposes, two alternative assumptions serve to present the impact of inflation:

- One alternative is low inflation, on the basis that the current economic recovery is temporary and a lower level of economic activity becomes chronic. The slow-down is widespread and overall demands for commodities, including petroleum, are low. In this case, it is assumed that inflation is 2.0 percent in the short-term (2012-2015) and 2.5 percent in the long-term (2016-40).
- A second alternative is high inflation, on the basis that the economy of Idaho and the Pacific Northwest remains relatively slow, but picks up in other regions of the U.S. and the world, driving-up price levels. As a result, the short-term inflation rate is assumed to be six percent (2012-15) and the long-term rate is assumed to be five percent (2016-40).

### Low Scenario

The low scenario assumes a period of slow economic activity and associated growth, in the United States and across the world.

- Local property tax revenues, impact fee revenues (ACHD), and vehicle registration fees (ACHD) increase at a rate equal to the lowest five-year rate of estimated growth, as estimated by COMPASS, over the period 2012-2035, or two percent, whichever is less. For illustration, this rate is applied uniformly to the grow rates in population, the number of households, and the number of jobs. Property tax revenues are also assumed to increase at the rate of inflation, or three percent, whichever is less.
- Federal revenues and State HDA revenues are assumed to remain flat over the 2012-2040 at their 2011 levels. This assumes no substantive federal transportation legislation is implemented and future federal funding comes through the equivalent of a series of Congressional continuing resolutions, much as it has since 2008. In addition, it is assumed there are no increases in the federal or state fuel taxes. State roadway funding from other sources is assumed to increase at an annual rate of two percent. These assumptions are based on the following rationale:
  - Idaho and U.S. gasoline sales decline 0.5 percent annually; diesel sales increase 2.3 percent annually. These figures represent sales growth equal to EIA national summer 2012 fuel consumption projections. These projections account for decreased gasoline sales due to higher fuel prices, demographic shifts away from driving of personal automobiles, and continued strength in manufacturing.<sup>29</sup>
  - State per capita vehicle registrations decline at one percent per annum, reflecting the relative growth of urban populations in Idaho and the lower number of passenger vehicles per person in these areas. This also reflects national trends toward urban growth.
  - Per capita sales tax revenues increase at a rate of 3.3 per year reflecting a similar increase in employment combined with an increase in the personal savings rate from two percent in 2008 to 11 percent in 2035, reversing the national trend for the period 1982-2008.

A summary of the low scenario alternatives is shown in Table 5 below.

### High Scenario

In contrast to the low scenario, the high scenario assumes a period of increased economic activity and associated growth.

• Local property tax revenues, impact fee revenues (ACHD), and vehicle registration fees (ACHD) increase at a rate equal to the highest five-year rate of estimated growth, as estimated by COMPASS, over the period 2012-2035, or three percent, whichever is greater. For illustration, this rate is applied uniformly to the growth rates in population, the number of households, and the number of jobs. Property tax revenues are also assumed to increase at a rate three percent, whichever is less.

<sup>&</sup>lt;sup>29</sup> U.S. Energy Information Administration. "Short-Term Energy and Summer Fuels Outlook." April 2012.

- Federal revenues and State HDA revenues are assumed to increase at a rate of five percent annually over the period 2012-2040. This results from:
  - Idaho and U.S. gasoline sales increase at 3.2 percent annually, matching median U.S. growth rates from 2005-10. This period represents a time of relative economic strength in the U.S.
  - The federal government and the State of Idaho begin to adjust gas tax rates over time. The federal gas tax is assumed to increase at a rate of three percent per year; the Idaho gas tax is increased at a rate of 2.1 percent per year.
- State revenues other than HDA revenues increase at a rate of seven percent per year.
  - State per capita vehicle registrations decline at one percent per annum, reflecting the relative growth of urban populations in Idaho and the lower number of passenger vehicles per person in these areas. This also reflects national trends toward urban growth.
  - Per capita sales tax revenues increase at a rate of 3.3 per year reflecting a similar increase in employment combined with an increase in the personal savings rate from two percent in 2008 to 11 percent in 2035, reversing the national trend for the period 1982-2008.
- The same two inflation alternatives used in the low scenario are also used under this high scenario.

### **Results of Alternative Revenue and Inflation Assumptions**

Table 5 summarizes the results of low and high scenarios, and the alternative inflation rates. The baseline, most likely estimates are highlighted in light grey. An additional scenario was examined in which the baseline assumption of four percent inflation was dropped to three percent.

				A		
			As per	As per		
			COMPASS	COMPASS		
Regional growth	Low	Low	estimates	estimates	High	High
Long-term inflation	5.0%	2.5%	4.0%	3.0%	5.0%	2.5%
			Increase 1%	Increase 1%		
			(federal) and	(federal) and		
Federal and State	Maintained at	Maintained at	1.75% per	1.75% per	Increase 5%	Increase 5%
revenues	2011 levels	2011 levels	year (State)	year (State)	per year	per year
Year that annual						
maintenance and						Revenues
operation costs						always
exceed revenues	2019	2032	2025	2036	2021	exceed costs
Cumulative						
contributions to						
system expansion						
2012-40 (million)	\$ 527.00	\$ 847.00	\$ 565.00	\$ 705.00	\$ 570.00	\$ 1,610.00
· · ·			•			. ,

Table 5 Sensitivity	v of the	Results to	Alternative A	ssumptions
Table 5. Schshlvit	or the	<b>Nesults</b> to	Alter hauve A	issumptions

With the exception of the high scenario with low inflation, all scenarios eventually result in system O&M expenditures exceeding revenues. This was expected because costs are escalating at higher rate than revenues, so without some adjustments to the revenues that are not tied to inflation – federal revenues, State HDA revenues, local vehicle license fees and (to a lesser degree) impact fees, long-term revenues will always lag long-term costs.

# Available Funding Levels for Transit

### Valley Regional Transit

VRT focuses upon maintaining current service levels, covering operation and maintenance expenditures and maintaining their fleet and facilities. In any given year there may be carryover funds, but these funds will already be spoken for, either for meeting existing obligations or held as needed operating capital, so annual revenues equal annual costs with little leftover. There is no demonstrated source of additional funding that might accelerate major expansion of the system.

**Federal Funding Futures** Federal transit revenues are assumed to grow at one percent per year – they could stay the same or be eliminated with nearly equal probability. The analysis assumes local cities maintain their current levels of payments over time with annual adjustments for inflation. Regardless, costs are assumed to increase at a more rapid rate than these revenues, with the resulting deficit projections shown in Figure 31. Qualitatively, this result is similar to many roadway agencies, although the deficit is experienced earlier and

with greater severity in relative terms. There are no funds anticipated to be left over for increasing the level of transit service. A relatively small deficit increases over time to an estimated annual level of \$4.7 million in 2020 and \$13.1 million in 2030. If federal, state or local funds do not increase, these gaps increase to \$5.0 million and \$13.0 million for 2020 and 2030, respectively.

If the estimated gap is filled by increasing contributions from local communities, their total nearterm contribution would need to increase by about \$440,000 per year immediately, plus the rate of annual increase would likely have to exceed 7.4 percent per year, which is greater than the rate of inflation plus regional growth, rather than just inflation.



Figure 31 - Estimated additional revenues needed to meet estimated expenditures, VRT

### ACHD Commuteride

Riders, except for a volunteer driver, pay a monthly fare that depends in part on the length of the commute. Analysis of the revenues and expenses for the ACHD vanpool program indicate that approximately 78 percent of the attributed costs of the vanpool program are covered by these user fares.<sup>30</sup> These costs include vehicle replacement via a depreciation factor. Each van can be expected to run for six years (100-110,000 miles). For the budget covering 2009-2013, fare and other income was estimated at \$6.2 million. Attributed costs amounted to \$7.7 million. ACHD provided \$1.1 million out of its revenue to support Commuteride, leaving a gap of \$325,000 to be covered. Federal dollars amounted to \$1.675 million, most of which provided funding for new and replacement vehicles. In most "normal" years, the gap between user fees and program costs could be met by the \$200,000 provided by ACHD. This is shown in Appendix D.

Between the user fees and ACHD support, maintenance of the current vanpool program could be accomplished. User fees are adjusted annually to reflect fuel and other costs. Program expansion would require new funding, however, from local, state or federal sources. Federal funding has been the source of funds to expand the program and cover costs for marketing and education. Some percentage of marketing would be needed for maintenance of the vanpool program to attract new riders as existing riders drop out of the program.

<sup>&</sup>lt;sup>30</sup> Kirk Montgomery, ACHD Commuteride program, provided factors to derive the attributable costs.

# APPENDICES

# Appendix A Summary of Available Expansion Funds Estimated by Idaho Department of Transportation

The following table was prepared by Idaho Transportation Department, Headquarters, in early 2012. ITD staff prepared this information in fulfilling ITD's role under 23 CFR 450, which states that:

"For purposes of transportation system operations and maintenance, the financial plan shall contain system-level estimates of costs and revenue sources that are reasonably expected to be available to adequately operate and maintain Federal-aid highways ...

(ii) For the purpose of developing the metropolitan transportation plan, the MPO, public transportation operator(s), and State shall cooperatively develop estimates of funds that will be available to support metropolitan transportation plan implementation, as required under Sec. 450.314(a). All necessary financial resources from public and private sources that are reasonably expected to be made available to carry out the transportation plan shall be identified." <sup>31</sup>

In fulfilling the needed information, ITD staff specifically included GARVEE (Grant Anticipation Revenue Vehicle) bond repayments as a "front-loaded" capital investment in the Ada County and Canyon County area. Of the \$855 million in the GARVEE bond program authorized by the Idaho Legislature, approximately \$506 million has been spent or programmed for three projects in Ada and Canyon Counties:

- SH 16, I-84 to South Emmett Corridor (\$139.9M)
- I-84, Caldwell to Meridian Corridor (\$252.1M)
- I-84, Orchard to Isaacs Canyon Corridor (\$113.5M)<sup>32</sup>

Costs for operations and preservation/restoration were extrapolated from current expenditure levels for ITD's system in Ada and Canyon Counties and do not reflect specific analysis of future maintenance needs related to pavement and major structural issues. More than 60% of ITD District 3's 296 major structures (20 feet or longer) are more than 40 years old. A design life of a structure is



typically 50 years, meaning that significant investment in maintenance and replacement is likely. Comparing future expenses to revenues targeted to District 3 resulted in a net deficit through

Financial Forecast: Approved October 15, 2012

 <sup>&</sup>lt;sup>31</sup> Federal Register. February 14, 2007. Found at <u>http://www.gpo.gov/fdsys/pkg/FR-2007-02-14/html/07-493.htm</u>
 <sup>32</sup> GARVEE Annual Legislative Report – September 2011. Found at

http://itd.idaho.gov/NewsandInfo/Docs/2011\_GARVEE\_Report.pdf

2030. Final payments on GARVEE resulted in a temporary balance for 2031-2035, but rising costs for operations, preservation and restoration returned the deficit for 2036-2040.

			Revenues				
							Average
							Annual
	2011-15	2016-20	2021-25	2026-30	2031-35	2036-40	Change
ITD District 3							
Federal	\$126.7	\$133.2	\$140.0	\$147.1	\$154.6	\$162.5	1.0%
State Match	\$9.6	\$10.0	\$10.6	\$11.1	\$11.7	\$12.3	1.0%
State Revenue (H.D.A.)	\$50.7	\$54.8	\$58.0	\$61.5	\$64.8	\$68.2	1.2%
District 3 Revenues	\$187.0	\$198.0	\$208.6	\$219.7	\$231.1	\$243.0	1.1%
Local Roads							
Federal	\$81.6	\$85.8	\$90.2	\$94.8	\$99.6	\$104.7	1.0%
Local Match	\$7.3	\$7.6	\$8.0	\$8.4	\$8.9	\$9.3	1.0%
State Revenue (H.D.A.)	\$156.8	\$177.7	\$190.0	\$203.1	\$215.0	\$226.4	1.5%
Subtotal	\$245.7	\$271.1	\$288.2	\$306.3	\$323.5	\$340.4	1.3%
Grand Total	\$432.7	\$469.1	\$496.8	\$526.0	\$554.6	\$583.4	1.2%
			Expenses				
							Average
	2011 15	2016 20	2021 25	2026.20	2021.25	2026 40	Annual
ITD Dictrict 2	2011-15	2016-20	2021-25	2026-30	2031-35	2036-40	Change
Operations	¢10 1	\$21.6	¢72 1	¢24.8	\$76.7	\$27.6	1 5%
Operation / Postoration	\$19.1 \$117.6	\$21.0 ¢125.2	\$25.1 \$155.6	\$24.0 \$170.1	\$20.2	\$27.0	2.0%
Preservation/ Restoration	\$117.6	\$135.2	\$155.6	\$179.1	\$206.3	\$237.8	2.9%
GARVEE Debt Services	\$102.1	\$102.1	\$102.1	\$40.8	\$0.0	\$0.0	
Subtotal	\$238.8	\$258.9	\$280.8	\$244.7	\$232.5	\$265.4	
Revenues Less Expenses	-\$51.8	-\$60.9	-\$72.2	-\$25.0	-\$1.4	-\$22.4	
Available for Expansion	\$0.0	\$0.0	\$0.0	\$0.0	Ş0.0	Ş0.0	
		of fo do vol oved	Ctoto voucour	ahayya farinfa			
Local expenses not calculat	eu. Local share	or rederar and	State revenue	shown for mito	ormation only.		
Forecast of H.D.A. Revenue							
1 Forecast is derived from	October 2011 e	conometric mo	dals created b	v HIS Global Ing	right		
2. Forecast reflects the curr	ont state of Ida	bo and nation		doos not nos	orgini.	ha futura acan	omy
2. Forecast reflects the curr	ent state of fua	an of the Ada	and Convon roy	utiles not nece	Lighwov Distr	ine future econ	+
3. Incorporated the recent history proportion of the Ada and Canyon revenue from the Highway Distribution Account.							
4. Uses the existing distribut		om Idano Code	e 40-709 which	may be amend	ed or changed	by future legisl	atures.
5. There is no guarantee of	revenue from t	nis forecast.					
6. Use of these estimates d	oes not obligate	e IID in any wa	ly.		walu an thasa f		
7. Uses of these forecasts are the responsibility of the users, and if the users intend to rely on these forecasts they do so at their							
own risk and liability.							
Accumptions							
1 The current distribution f	formulas for H [		llocation roma	in throughout t	the forecast pe	riod	
1. The current distribution formulas for H.D.A. Revenue anocation remain throughout the forecast period,							
2. Assumes safeting Doord D	Deligy through a	unougnout.					
3. Assumes existing Board Policy throughout.							
4. Assumes 1% annual growth in tederal and state revenue from FY2U11 actual.							
5. Assumes 3% annual Inflation to Steady State needs.							
b. Assumes bakvet Debt Service Levels with final maturity in 2020.							
7. Assumes authority to obligate 100% of rederal apportionments.							
8. There is no guarantee of revenue from these estimates.							
9. Use of these estimates d	oes not obligate	e I FD nor FHW	A in any way.				
T:\FY12\600 Projects\661 Communities in Motion\6. Additional Data_Studies\Financial\[ITD Estimates.xlsx]Sheet1							

# Appendix B Analyses by Transportation Agency

Detailed tables used in the analysis were prepared for each of the agencies listed below. These were done in **Microsoft Excel. Adobe Acrobat** PDF files were created and can be requested by agency or at county or two county summary levels.

When using the Excel file, please be aware that the spreadsheet file has multiple worksheets that are linked together by formulas. Editing or deleting information on one worksheet can affect the results on other worksheets and result in errors.

Agency	File			
Ada County Highway District	achd.pdf			
Canyon Highway District	cdh4.pdf			
Golden Gate Highway District	gghd.pdf			
Nampa Highway District	nhd1.pdf			
Notus Parma Highway District	nphd.pdf			
Caldwell	caldwell.pdf			
Greenleaf	greenleaf.pdf			
Melba	melba.pdf			
Middleton	middleton.pdf			
Nampa	nampa.pdf			
Notus	notus.pdf			
Parma	parma.pdf			
Wilder	wilder.pdf			
Valley Regional Transit	vrt.pdf			
ACHD Commuteride	commuteride.pdf			
Canyon County Road Total	canyon county.pdf			
Two County Road Total	2-county total.pdf			
All Agencies in Excel file	compass financial analysis v5.xls			

All files are under the following directory:

T:\FY13\600 Projects\661 Communities in Motion\6. Additional Data and Studies\Financial Forecast

Request for this data should be sent to: info@compassidaho.org or call (208) 855-2558.