

# Idaho Falls Arterial Loop: Economic Assessment

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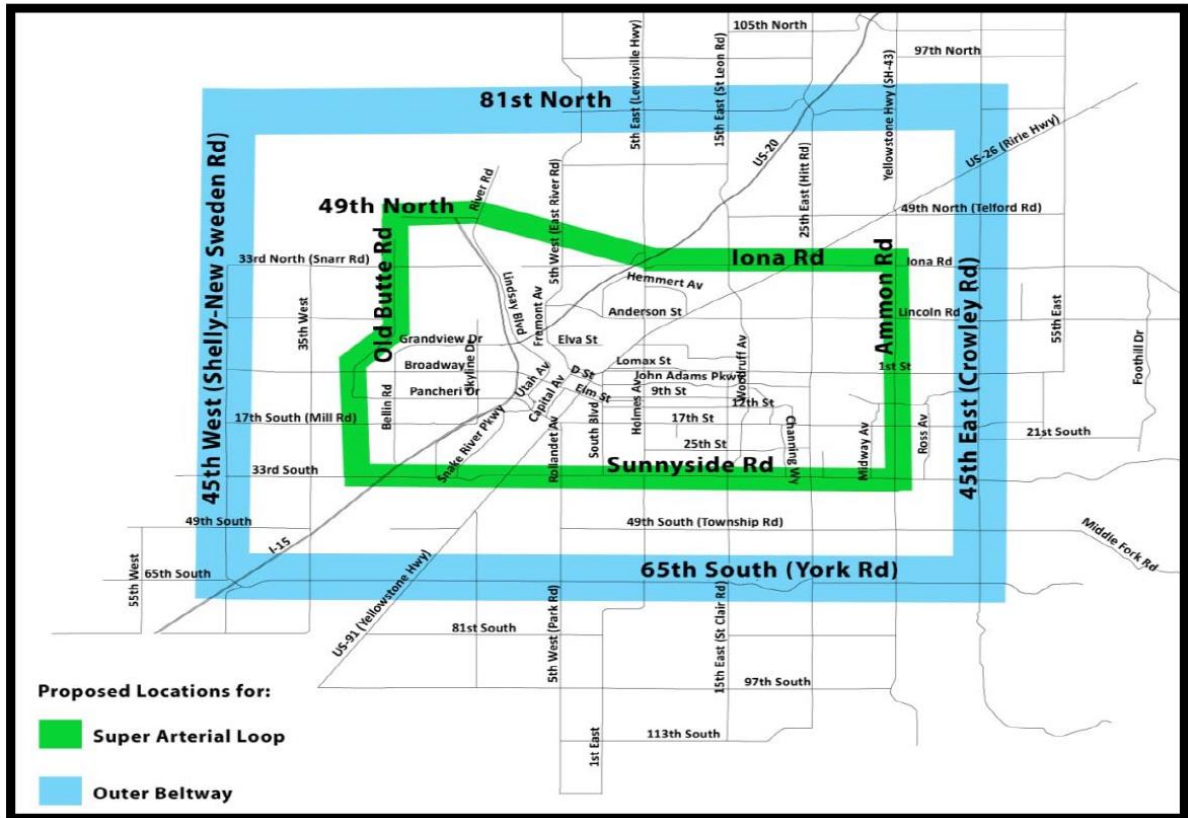
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The Arterial Loop Project (shown in green in Figure 2) includes construction and widening of major corridors around Idaho Falls to 5-lane arterial conditions. Generally, the corridor boundaries are defined as: Iona Road (North); Sunnyside Road (South); Ammon Road (East); and Old Butte Road (West). The overall corridor as identified in the TSA is seen in Figure 2 below, indicated in the interior green loop.

**Figure 2. Proposed Improvements**



Source: Bonneville County MPO, TSA Study 2011.

Note: The Project Corridor for this analysis is the interior “Super Arterial Loop” noted in green.

This report assesses impacts of the Arterial Loop on the region’s long-term employment, personal income and business output to the year 2040, under growth and future traffic assumptions, ranging from modest to aggressive. In addition to the regional impacts from employment attributable to the enhanced transportation system, the employment analysis also assesses the specific land use impacts of the Project’s contingent development (new business attraction potential) in the Idaho Falls regional economy.

The “contingent development” (or business attraction and land use) impact in the Idaho Falls region represents the direct, induced and indirect employment in the region, as a whole, that is expected

to be derived from the specific location of the Project in relation to developable land in the area, and the existing and potential future development affected by the Project.

## 2

## POTENTIAL ECONOMIC BENEFITS AND IMPACTS

### 2.1 Economic Benefits and Impacts Overview

In addition to quantifying the benefits of the Project to the Idaho Falls regional economy (in dollar terms), a regional economic model demonstrates how the Idaho Falls economy is expected to respond to the stimulus arising from transportation savings resulting from improved future performance. Applying a regional economic impact model provides a high-level quantitative understanding of the effects that the Arterial Loop Project is expected to have on earnings, output and employment in the overall regional economy. The analysis of benefits and impacts is based on changes in future (2040) transportation performance, anticipated using a travel demand model from the Bonneville Metropolitan Planning Organization (BMPO). The current study utilizes the BMPO travel demand model results as applied in the 2011 TSA report completed by DKS Associates. The analysis further relies on the synthesis of these elements using the Transportation Economic Development Impact System (TREDIS®), which uses transportation cost factors from USDOT to monetize transportation performance improvements, and an input-output framework from the Minnesota IMPLAN Group (MIG) to derive direct, indirect and induced economic impacts.<sup>2</sup> Full documentation of the TREDIS methodology is available from [www.tredis.com](http://www.tredis.com).

The analysis compares cumulative mileage- and time-based transportation costs accruing to the region's households and businesses in a future without the Arterial Loop to a future in which the loop is constructed. Benefits are reported in present value terms (of cost savings), using a three percent discount rate—indicating the comparable value of transportation capital outlays that could be readily justified to acquire the benefits of the project.

Because there is uncertainty about future development potential, and future traffic growth—the analysis of benefits and impacts considers a range of possible growth scenarios for the region. These include a “modest”, “likely” and “aggressive” growth forecast. The “aggressive forecast” assumes the most robust rate of underlying economic growth for the region and the lowest possible existing roadway capacity to absorb the associated traffic; whereas, the “modest forecast” assumes the lowest likely rate of economic growth for the region and the highest possible capacity of existing roadways to absorb the additional traffic. Given these assumptions—the more aggressive the growth forecast, the greater the potential benefits of the Arterial Loop. Appendix I, of this report, further describes how these scenarios are developed.

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<sup>2</sup> IMPLAN® (IMpact analysis for PLANning) is an economic impact modeling system used to create complete, extremely detailed Social Accounting Matrices and Multiplier Models of local economies. See [www.implan.com](http://www.implan.com) for more information.

By the year 2040, the Project is expected to generate between \$156.2 million and \$769.4 million in economic benefit to the Idaho Falls Region (Bonneville County) and a total of between \$185 million and \$871.3 million for the state of Idaho in the same period. Table 1 demonstrates the magnitude of economic benefits likely to accrue to the region under different growth assumptions if the Arterial Loop is implemented.

It is expected that Bonneville County and State of Idaho economies will utilize these benefits to create additional jobs, wage income and business sales (output) that would not otherwise occur.

Overall, from 2018 to 2040, the Project is expected to generate between 1,097 and 1,289 jobs, between \$604 and \$692 Million in wage income and between \$2.8 Billion and \$3.1 Billion in overall business output.

## 2.2 Key Drivers of Economic Benefit

Benefits are derived from three main categories: savings in travel time and reliability, changes in safety and environmental performance, changes in vehicle operating costs, and other sources. This section reports user benefits in present values 2014 dollars, cumulatively for the entire analysis.

Because the Arterial Loop would significantly increase the size of the Idaho Falls transportation system, it is likely that people and businesses would incur some additional costs (such as the costs of fuel and auto mileage as well as some increased exposure to the possibility of crashes) simply as a function of having more roadways available and traveling more. For this reason, some benefit categories indicate a negative value. This can be thought of a “dis-benefit” or added user cost that results from increased vehicle use. These “dis-benefits” must be reported, as they somewhat offset the benefits in travel time and reliability associated with the Project. Dis-benefits of this type are shown in parenthesis to indicate negative values.

**Table 1: Cumulative Transportation Benefits Accruing to Idaho (In Millions)**

Performance Area	Modest Growth	Likely Growth	Aggressive Growth
Travel Time and Reliability	\$243.1	\$597.7	\$863.6
Safety and Environmental	(\$18.5)	(\$25.2)	(\$32.9)
Vehicle Operating Costs	(\$44.9)	(\$21.3)	\$14.2
Other Benefits	\$14.3	\$19.7	\$26.4
<b>Total Benefits</b>	<b>\$185</b>	<b>\$570.9</b>	<b>\$871.3</b>

Source: EDR Group, 2014.

## **Travel Time & Reliability**

The largest share (96.8 percent) of the likely benefits of the Project will be the result of time and reliability savings associated with the project. Currently, there are reports of localized congestion on the common section of I-15 and US 20 and on Hit Road near the Grand Teton Mall. By 2040, it is estimated that between 23.2 and 46.6 percent of traffic in Idaho Falls could be occurring under congested conditions without the Project. The Arterial Loop reduces these figures to between 19.6 and 36.5 percent.

The Arterial Loop is also estimated to save businesses and households between 2,869 and 5,115 vehicle hours of travel on a daily basis by 2040. Furthermore, as facilities become more congested, it is likely that additional capacity can significantly enhance reliability, reducing the “buffer time” windows that people and businesses need to build into their planned travel times to account for congestion that may be induced by inclement weather, crashes or other incidents. Depending on how aggressively the region grows, and how much capacity the existing roadways have to absorb this growth—the travel time and reliability benefits of the Project could be worth between \$243.1 million and \$836.6 million, cumulatively from 2018 to 2040. Shipper logistics and productivity benefits (part of “other”) could be between \$18.4 million and \$32.8 million over the same period.

## **Safety and Environment**

Because the Project will offer significantly more capacity on the system in 2040 than would otherwise exist – the benefits of the Project will be somewhat offset by the costs of the additional travel induced by the larger system. The Arterial Loop is expected to increase vehicle miles of travel in Idaho Falls in 2040 by between 32,200 and 57,400 more daily vehicle miles than would otherwise occur. For this reason, more drivers will be susceptible to crashes and there will be some additional environmental costs (due simply to mileage).

These costs could range from \$18.5 million to \$32.9 million, cumulatively from 2018 to 2040, depending on how aggressively the region grows, and will offset the travel time and reliability benefits somewhat, while still leaving a significant net positive effect on the regional economy.

## **Vehicle Operating Costs**

As with safety and environmental effects, because the Project will offer significantly more capacity on the system in 2040 than would otherwise exist, there is a chance that the benefits of the Project will be somewhat offset by the additional per-mile operating costs of more vehicles using the system. The Arterial Loop is expected to increase vehicle miles of travel in Idaho Falls in 2040 by between 32,200 and 57,400 more daily vehicle miles than would otherwise occur. For this reason, there is a good chance that more drivers will be incurring the costs of fuel, vehicle maintenance and vehicle depreciation more than they would if the system were smaller. These costs could be as high as from \$44.9 million, cumulatively from 2018 to 2040, depending on how aggressively the region grows, and may offset the travel time and reliability benefits somewhat, while still leaving a significant net positive effect on the regional economy.



However, it should be noted that, in the “aggressive growth” scenario, the Project actually *reduces* vehicle operating costs, despite the increase in VMT. This is because under a ‘worst-case’ scenario of aggressive traffic growth and minimal ability of the existing facilities to absorb this growth—the effects of idling and stop-and-go traffic without the Project would impose per-mile vehicle operating costs high enough that the savings of operating in less congested conditions would actually be more than any costs associated with driving additional miles on an expanded system. Consequently, it is found that the Project’s potential to create benefits in terms of lower vehicle operating costs is largely dependent on how aggressively the region grows. In addition, how well the current infrastructure might absorb that growth (with more aggressive growth and limited capacity of today’s system creating the possibility of a future benefit from reduced per-mile operating costs by 2040) is also dependent on how aggressively this growth occurs. Appendix I shows the assumptions consistent with the “aggressive growth” scenario where this benefit accrues.

### **Other Benefits**

Other benefits include shipper logistics and productivity gains, and reductions in social and environmental costs. As businesses become more productive, their supply chains become more efficient and thus experience savings. The shipper logistics and productivity benefits (part of “other”) could be between \$18.4 million and \$32.8 million cumulatively from 2018 to 2040.

There are societal costs related to the increase in VMT such as additional greenhouse gas and other pollutant emissions. These “dis-benefits” could be between -\$4.14 and -\$6.46, cumulatively over the same period.

## **2.3 Key Drivers of Regional Impact**

The regional impact can be understood as a demonstration of how the regional economy uses the benefit to create jobs, wage income and business sales. Jobs and impacts cannot be added together, but rather impacts are expressions of how the benefits are experienced in the economy.

For example, suppose a factory saves \$100,000 over 10 years due to improved reliability in delivery times from a highway project. The factory then invests the \$100,000 of saved money into a new machine. This machine enables the firm to make and sell \$200,000 worth of additional output, hiring 2 additional workers at \$50,000 each (for a total wage income impact of \$100,000). In this example, the \$100,000 would be the benefit (a travel time/reliability benefit similar to the one described above), whereas the \$200,000 in additional sales, 2 jobs created and \$100,000 in wage income would be considered the impact (as described in the following analysis).

The regional economic impacts of the Arterial Loop Project are driven by two factors:

- 1) Transportation Efficiency/Operations
- 2) Land Use

## **Transportation Efficiency/Operations**

Transportation Efficiency/Operations Impact is the increased productivity and reduced costs that businesses and households enjoy due to shorter travel times or reduced travel costs from less congested roads, as well as the lower costs and reliability risk associated with operating vehicles under congested conditions. In the case of the Arterial Loop Project, the transportation efficiency/operations impact is derived from the change in the overall regional vehicle miles and vehicle hours of travel (and the share of traffic occurring under congested conditions) based on the travel demand modeling from the 2011 TSA study. The impact includes increased output of firms and households benefitting from transportation efficiency savings, and the jobs and income created by these savings as well as the induced and indirect effects that occur when transportation savings are spent in the regional economy.

## **Land Use**

Land Use Impact is the impact of strategic development in the area that occurs because of how *specific* land uses or development processes near the Project are affected by the nature of the Project. Unlike the other drivers of impact, the Land Use Impact can be understood as impact that is not caused directly by the performance of the transportation infrastructure, but rather by the degree to which the area in which the Project is implemented is sensitive to a particular connection, resource or amenity provided by the Project. In the case of the Arterial Loop Project, the direct land use development impact (or “contingent development”, because it is dependent on the Project) associated with the Project is based on the site visit to Idaho Falls in May 2014.

Based on the site visit and the observations further reported in Chapter 3, the Project can be expected to directly result in an estimated 400 regional jobs by 2040.

This estimate is based on the size of developable land that will be made accessible by the Project, the industries expected to occupy that land and the average jobs per square foot for development of this type in the industries anticipated to be attracted. These jobs are the “direct” jobs that are expected to be attracted to the study area.

As a result of these 400 “direct” jobs, by 2040 an additional 394 jobs will result from the increase in population and the increased consumption of local goods and services associated with the establishments and people that these 400 “direct” jobs bring to the region. Table 2, below, shows the total number of average annual jobs (744 by full build out) that will result from this initial attraction of 400 by the Project itself. (Note that the scope of this study only assesses the contingent impact in the Idaho Falls region).

The majority of the contingent development impacts in the Idaho Falls region is expected to be located along the Iona Road corridor where there is ample developable land (up to 500 to 700 acres) suitable for industrial or technology uses. Other jobs will be a result of the Idaho Falls Event Center, as the Project allows for maximizing the potential of the event center by decreasing congestion. The details of these estimates are further discussed in Chapter 3.

## 2.4 Magnitude and Timing of Impact

This study assumes, for analysis purposes, that the Project will be completed by 2018, and assesses impacts through 2040. Over the 23-year analysis period of the economic model (2018-2040), the operating and contingent development impacts occur gradually as the Project is fully completed and becomes fully operational. Table 2, Table 3 and Table 4 show the magnitude of the economic impact for the cumulative period, as well as an annual average. For employment, a total by 2040 is provided because employment figures are not cumulative. (Unlike wage income or business sales – one job continues to be one job no matter how many years the person is employed, whereas wages accumulate year after year). This is why jobs are reported at a 2040 level and as an annual average, and other impact measures are reported cumulatively.

**Table 2: Employment Impact by Category (Jobs)**

Employment	Baseline		Low Growth		High Growth	
	Total by 2040	Annual Avg.	Total by 2040	Annual Avg.	Total by 2040	Annual Avg.
Transportation Efficiency/Operations	303	243	100	80	465	374
Impact of Land Use	794	501	794	501	794	501
<b>Total Economic Impact</b>	<b>1,097</b>	<b>744</b>	<b>894</b>	<b>581</b>	<b>1,259</b>	<b>874</b>

Source: EDR Group, 2014.

**Table 3: Personal Income Impact by Category (\$ Millions)**

Personal Income	Baseline		Low Growth		High Growth	
	Cumulative 2018-2040	Annual Avg.	Cumulative 2018-2040	Annual Avg.	Cumulative 2018-2040	Annual Avg.
Transportation Efficiency/Operations	\$181.0	\$7.87	\$60.2	\$2.6	\$269.3	\$11.7
Impact of Land Use	\$432.6	\$18.4	\$432.6	\$18.4	\$432.6	\$18.4
<b>Total Economic Impact</b>	<b>\$604.6</b>	<b>\$26.3</b>	<b>\$483.8</b>	<b>\$21.0</b>	<b>\$692.9</b>	<b>\$30.1</b>

Source: EDR Group, 2014.

**Table 4: Business Output Impact by Category (\$ Millions)**

Business Output	Baseline		Low Growth		High Growth	
	Cumulative 2018-2040	Annual Avg.	Cumulative 2018-2040	Annual Avg.	Cumulative 2018-2040	Annual Avg.
Transportation Efficiency/Operations	\$458.1	\$19.9	\$156.8	\$6.8	\$799.2	\$34.7
Impact of Land Use	\$2,332.1	\$101.0	\$2,332.1	\$101.0	\$2,332.1	\$101.0
<b>Total Economic Impact</b>	<b>\$2,780.2</b>	<b>\$120.9</b>	<b>\$2,478.9</b>	<b>\$107.8</b>	<b>\$3,121.3</b>	<b>\$135.7</b>

Source: EDR Group, 2014.

The above described impacts reflect a quantification of the regional economic impact of the Project on the Idaho Falls region. The transportation efficiency impacts are directly associated with the transportation performance characteristics of the Project that have also been modeled and studied for engineering purposes.

However, the manner in which these regional impacts is expected to affect existing and future potential development, specifically in the Idaho Falls region, and how the Project is expected to create the jobs associated with the land use impact requires further analysis, as provided in the following chapter.

# 3

## LAND USE AND CONTINGENT DEVELOPMENT

### 3.1 Contingent Development Overview

The Idaho Falls Arterial Loop will create 5-lane conditions on a corridor generally in Iona Road to the North; Sunnyside Road to the South; Old Butte Road to the West; and Ammon Road to the East. While the Project is anticipated to have impacts directly related to the transportation network, there are impacts that go beyond that. As businesses experience improved transportation conditions, development can be induced into the region that otherwise may not have occurred. This development that is contingent on the project, or “contingent development,” is above and beyond any transportation user and societal benefits seen from direct transportation enhancements.

A thorough strategic analysis of the Bonneville County and Idaho Falls business environment supports a case that there is project-contingent development. “Contingent Development” is defined as new business activity occurring in the area due to the project that has been attracted to the area because of the project and would not have occurred otherwise. Contingent development does not include economic activity resulting from the improved transportation performance, but only economic activity which is associated with a specific business choice to locate, expand or incorporate in the region because of the strategic amenity offered by the project or its accessible sites. While the modeling analysis in Chapter 2 entails a large, regional “systems” view of the Project, the contingent development analysis entails a more micro-level, qualitative and strategic analysis of how Idaho Falls’ existing development and future commercial and industrial development patterns are likely to respond to the changed business environment resulting from the Project.

The Project is primarily within the jurisdiction of Idaho Falls; however, some of the arterial corridor abuts portions of other towns in Bonneville County. Collectively, this region is positioned to realize positive economic impacts from the Project. This chapter provides a narrative description of the contingent development impacts to the region that go above and beyond the quantified transportation enhancements.

The analysis of the economic impacts of the Arterial Loop in Idaho Falls relies on several sources. The research team conducted on-the-ground site reconnaissance to gain an understanding of the current economic base of the region—where businesses are located in relationship to the Project, the access changes that will occur as a result of the Project, and the characteristics of development sites within the region.

As part of the site reconnaissance, the team conducted seven field interviews with various stakeholders representing diverse businesses, real estate, the Chamber of Commerce, major employers, and local representatives. Each interview focused on potential economic impacts of the project.

The interviewees for the Project were chosen to provide a range of geographic and industry perspectives of the potential impacts of the Project on the Idaho Falls economy. Through assistance from Grow Idaho Falls, the Idaho Falls Chamber of Commerce, and identification of major employers, the consultant team identified key stakeholders who could provide a broad perspective on project impacts and could suggest additional people to interview.

Telephone and email contacts were made with these groups to set up interviews. Each person was asked to recommend additional individuals to interview and to bring additional people to the scheduled interview to help facilitate additional contacts. The consultants also asked for additional contacts for follow-up questions during the interview process.

The team also reviewed recent trends (2001-2009) in employment by industry from IMPLAN, projected growth by industry from Moody's Analytics (Economy.com), and data on retail sales and employment for select subareas within the counties from ESRI Business Analyst Online.

## **3.2 Economic Impact Zones**

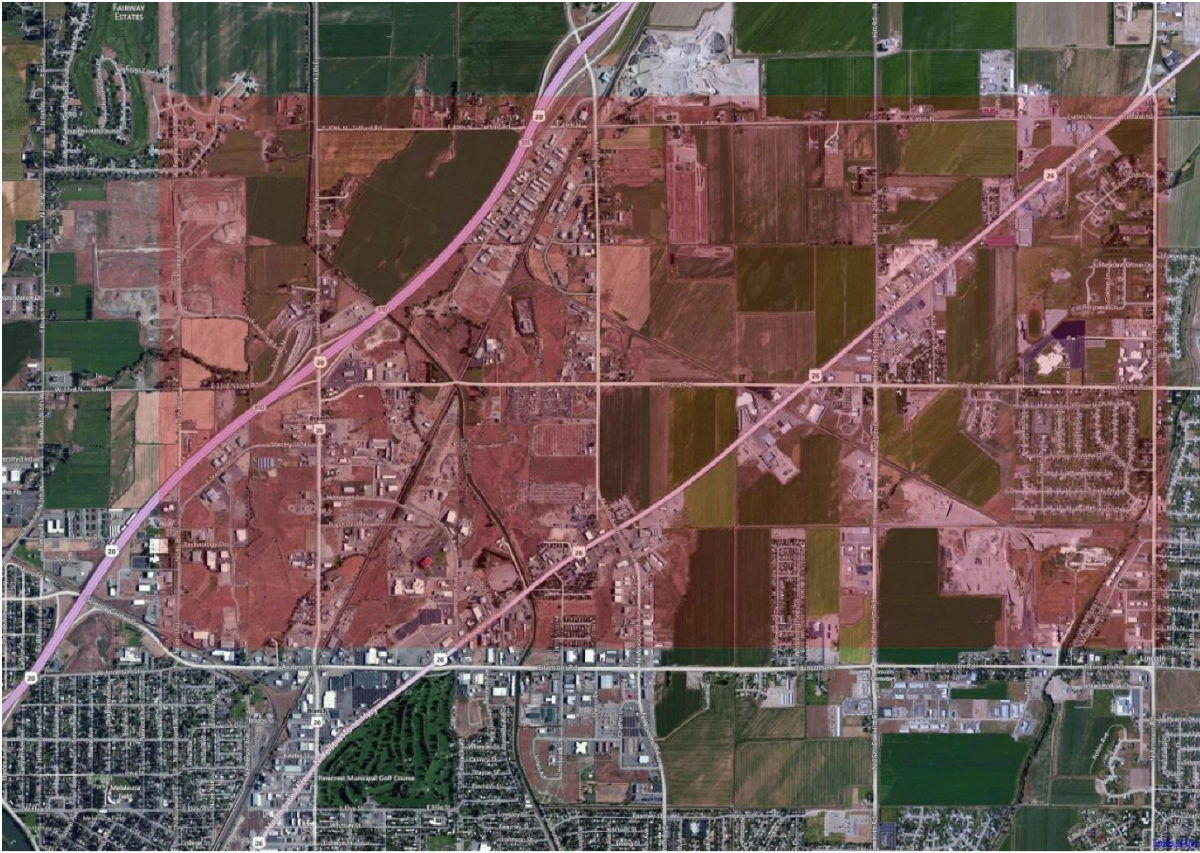
Through interviews, it was evident that the Arterial Loop Project would have the greatest contingent development economic impact in three zones:

- 1) The Iona Road Corridor,
- 2) The Idaho Falls Event Center, and
- 3) Southern Industrial Zone.

## **3.3 Iona Road Corridor**

Conditions on the existing Iona Road consist of primarily two-lane highways. Much of the corridor is zoned for, and suitable for, industrial uses. While much of the land is developable, and some still remains in agricultural use, interviewees indicated that the two-lane conditions in this region can pose a potential constraint on future growth. Therefore, improving Iona Road to 5-lane conditions would increase capacity along this corridor and allow growth, especially along a key segment on Iona Road from US-20 to Ammon Road.

**Figure 3. Iona Road Corridor, Key Segment**



Source OpenStreetMaps: EDR Group, 2014.

**Figure 4. Iona Road Facing N 25<sup>th</sup> E, Eastbound**



Source: Google; EDR Group, 2014.

While some of Iona Road, especially the proposed Northwest extension from Holmes Ave towards 49<sup>th</sup> North, is zoned by the City of Idaho Falls, most of it remains out of City jurisdiction. The most common land uses along the overall corridor are industrial, with some agricultural uses. There are few residential uses along this corridor, and, where there are, they tend to be low density and rural.

### **Existing Businesses**

This corridor has no major regional employers, and consists primarily of light to heavy industrial uses. The Eagle Rock Sanitation Department is located here, along with auto-service oriented businesses, such as generator repair, auto body shops, and auto scrap yards. Other uses include: steel wholesalers, and dairy processing.

### **New Development**

The Iona Road corridor has significant capacity for future growth in terms of available land and existing zoning. However, existing two-lane conditions could limit that growth. Grow Idaho Falls indicated that there are up to 500 acres of developable land in the key corridor from US-20 to Ammon Road. This area is prepared with utility connections, with some parcels having appropriate fiber connections for technology companies to be attracted to the area.



Of these 500 acres, there is a capacity constraint due to the two-lane conditions where only approximately 200 acres could be developed before unacceptable congestion and roadway conditions will exist. Thus, the remaining 300 acre potential of this area is contingent on improvements to the Iona Road corridor as indicated by Grow Idaho Falls, and also validated by other interviewees.

Assuming that industrial use is the prevailing development land use, this analysis assumes an average employment of 34 employees per acre, consistent with other national land-use and employment studies.<sup>3</sup>

The full 500 acre site, therefore, has a capacity of 17,000 employees. Whether or not all that capacity is developed depends on demand, and a further analysis of manufacturing, transportation, warehousing, and other industrial growth is needed to identify the demand for industrial development. To identify what development can be realized in this area, this analysis identified three economic areas to compare: 1) Bonneville County, Idaho; 2) Ada County, Idaho; and 3) Salt Lake County, Utah. These counties were chosen because they are competitor markets (if Idaho Falls continues to grow, some of its growth may be from those other counties where Boise, Idaho and Salt Lake City, Utah are located).

To identify likely industries to use the “industrial use” zone in this corridor, a specific “industrial use” meta-industry was defined, consisting of:

- Mining; quarrying; and oil and gas extraction
- Utilities
- Construction
- Wholesale Trade
- Manufacturing
- Natural resources
- Transportation and warehousing

The following table summarizes employment levels for the three counties.

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<sup>3</sup> Plfum; Yee and Bradford, Natelson Company Inc, Rhode Island Statewide Planning Program; Maxfield Research. See HYPERLINK "http://communityinnovation.berkeley.edu/presentations/industrial/MN-Minn-finalplan.pdf" <http://communityinnovation.berkeley.edu/presentations/industrial/MN-Minn-finalplan.pdf> p. 53.

**Table 5. Employment and Forecast for Bonneville County and Other Regions**

	2014 Employment (thousands)	2040 Employment (thousands)	Difference (thousands)	Compound Annual Growth (annual rate)
<b>Bonneville County, Idaho (Idaho Falls)</b>				
<b>Non-Farm Employment</b>	45.4	56.1	10.7	0.81%
<b>Industrial-zone Employment</b>	10.1	9.5	-0.57	-0.22%
<b>Information Sector Employment</b>	0.94	1.63	0.69	2.14%
<b>Ada County, Idaho (Boise)</b>				
<b>Non-Farm Employment</b>	215.9	304.7	88.8	1.33%
<b>Industrial-zone Employment</b>	44.4	63.2	18.8	1.37%
<b>Information Sector Employment</b>	3.89	4.32	0.4	0.40%
<b>Salt Lake County, Utah (Salt Lake City)</b>				
<b>Non-Farm Employment</b>	634.5	788.8	154.2	0.84%
<b>Industrial-zone Employment</b>	158.5	174.5	16.0	0.37%
<b>Information Sector Employment</b>	18.71	33.54	14.8	2.27%

Source: Moody’s; EDR Group.

By 2040, Bonneville County non-farm employment is only expected to grow by 10.7 thousand employees, at an annual growth of 0.81 percent from 2014 to 2040. However, Moody’s predicts that industrial sectors will actually contract by 570 employees, or an annual rate of -0.22 over the same period.

The Moody’s forecast is a baseline forecast based on existing conditions. This is a macroeconomic forecast that does not consider changes to infrastructure such as the Arterial Loop. Therefore, employment forecasts might differ if there is a sort of infrastructure investment that causes contingent development.

Based on field interviews with local businesses, the Chamber of Commerce, and Grow Idaho Falls, there is strong support for development along the Iona Road corridor. Furthermore, some businesses may be deterred from establishing on this corridor based on the two-lane conditions of Iona road. Any growth at this site, to the extent that it is marketed for industrial uses, would come from a competitive position relative to geographically competitive markets in Ada County, ID and Salt Lake County, UT.

However, Moody’s forecasts a contraction in Bonneville County industrial-zone sectors by 570 jobs as a baseline. With aggressive marketing and newer five-lane conditions on Iona Road, this analysis assumes that this contraction can be slowed in half. Thus, 285 jobs are assumed to be contingent on the Project improvements in industrial-zone sectors, and that these jobs will be sited in this corridor.

Information sector jobs are also suitable for the Iona Road corridor. Moody’s indicates a baseline forecast of 690 more jobs in the Bonneville County information sector by 2040, or an annual growth of 2.14 percent. With aggressive marketing and newer road conditions, it is possible that this sector can grow at an annual growth rate to match a competitor region of Salt Lake County, which has a growth rate in this sector of 2.27 percent. Matching this growth rate would yield a total of 745 jobs by 2040. This is a difference of 55 jobs in the information sector that are contingent on the Project.

In total, this analysis estimates an additional 340 jobs in the Iona Road corridor that are contingent on the Project: 285 in industrial-zone industries, and 55 in the information industry.

**Table 6. Contingent Development Employment Forecast for Bonneville County from Iona Road Corridor**

	2040 Employment – Moody’s Baseline (thousands)	2040 Employment – Contingent Development Forecast (thousands)	Difference (thousands)
<b>Non-Farm Employment</b>	56.1	56.1	—
<b>Industrial-zone Employment</b>	9.50	9.79	0.29
<b>Information Sector Employment</b>	0.94	1.00	0.06
<b>Total</b>	66.5	66.9	0.34

Source: EDR Group.

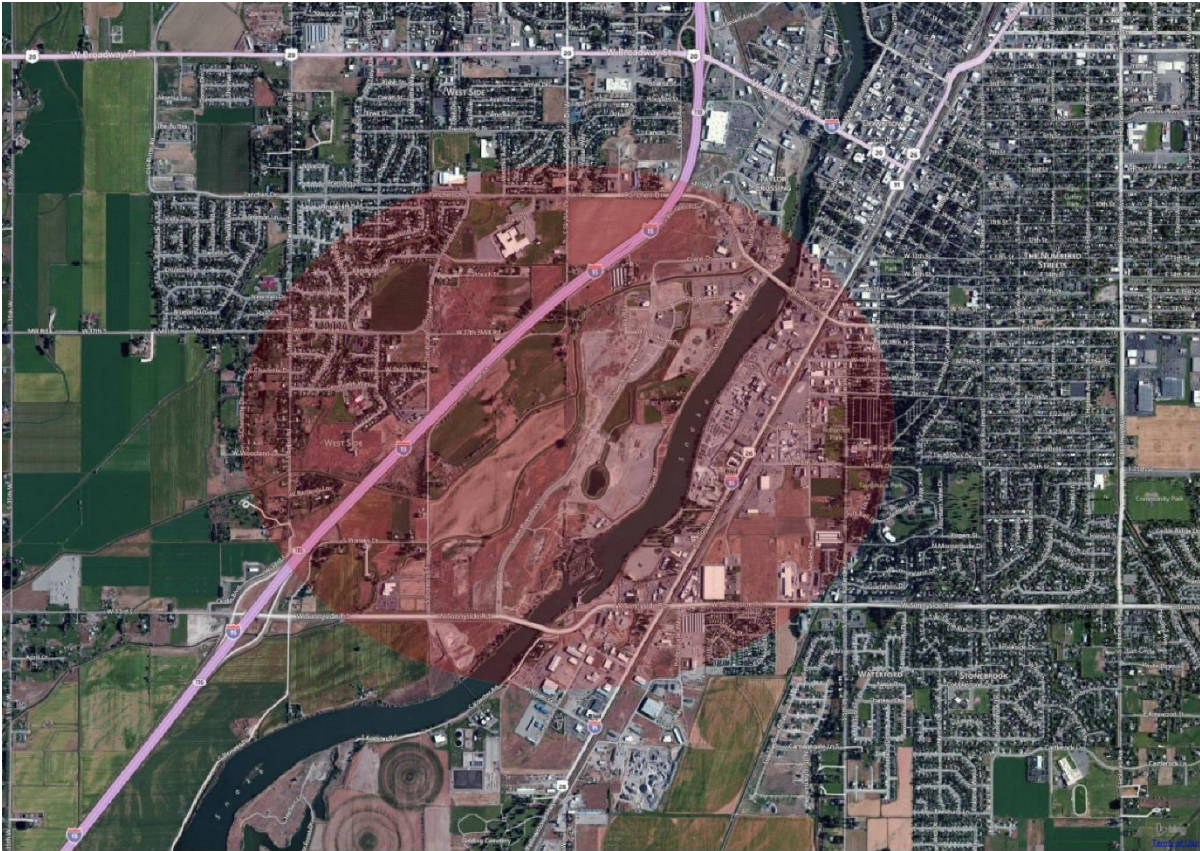
Note: Totals differ due to rounding.

Note that these are jobs above and beyond the initial Moody’s forecast, and it does not mean they would be the only jobs moving into the corridor. It is likely that other regional employers may be attracted to the corridor and move from one part of the region to the Iona Road corridor. However, because these jobs are movements within the region from one area to another, they are not “net new” jobs created and do not constitute “contingent development” jobs, as defined in this study.

### **3.4 Idaho Falls Event Center**

There is potential for contingent economic activity based on the Idaho Falls Event Center. The Center is expected to be located along the Snake River Parkway, East of I-15 between the Sunnyside Interchange and the Pancheri Overpass. In addition to a new, regional event center capable of hosting sporting events with a capacity of 5,000 seats, there is general redevelopment in the area with mixed-use residential and retail activity.

**Figure 5. Snake River Parkway and Idaho Falls Event Center Area**



Source: OpenStreetMaps; EDR Group, 2014.

## **New Development**

While the Event Center is planned for development and slated for construction, interviews indicated that increased regional congestion could make the Event Center less of a draw and hurt bookings and attendance. According to a 2010 economic impact study of the Event Center, the baseline operations of the Event Center are expected to draw \$12,406,530 annually into the regional economy through expenditures made by locals and visitors.

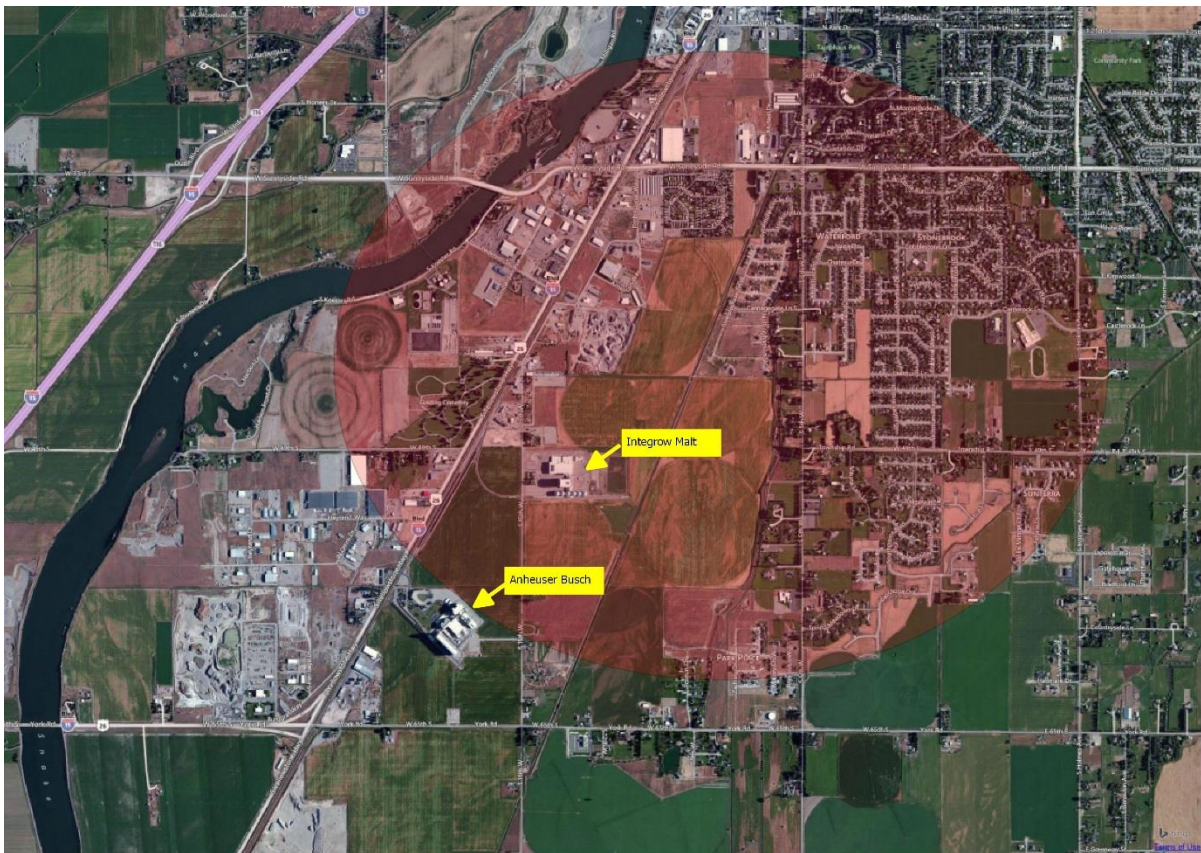
The impact of congestion on attendance and success of the Event Center is not precisely known, but this analysis assumes that the economic activity of the Event Center could be diminished by as much as two percent of overall annual sales due to congestion on I-15 and US 20. This translates to lost output of \$248,131 that is contingent on the Project keeping congestion levels suitable for continued success of the Event Center. Based on TREDIS® modeling, this translates to an additional five jobs supported by the additional contingent expenditures by 2040.

### 3.5 Southern Industrial Zone

The Southern Industrial Zone is an area of Idaho Falls that includes two large beverage processors: Integrow Malt and Anheuser Busch. The Integrow Malt facility receives barley shipments by trucks, produces malts, and exports the malt product to Mexico, via rail, for final brewing.

Through interviews, increasing congestion in the region could potentially impact the price of barley received from producers, or potentially curb production to farms located in Canada. However, the extent to which the Arterial Loop Project and this production cycle are linked is unknown. This analysis acknowledges that there may be some impacts on production and jobs in this facility; but, that impact may be negligible and therefore is not estimated.

Figure 6. Southern Industrial Zone Area



Source: OpenStreetMaps; EDR Group, 2014.

# 4

## CONCLUSION

Overall, the Idaho Falls Arterial Loop Project is expected to have a positive impact on the overall Idaho Falls study region--allowing the regional economy to generate more jobs, personal income and business output than could occur without the Project. The overall land use impacts on development near the Project will be positive and are expected to lead to a gain of over 400 new direct jobs in the region over the life of the Project—in addition to the induced and indirect (multiplier effects) of this new employment on the local economy.

Other changes in the regional business environment include changes in the access to the northern Iona Road corridor. Marketing and other economic development initiatives will be key success factors for enabling Idaho Falls to adjust to these changes and attract more businesses to the region.

The timing and magnitude of economic benefits and impacts will depend largely on the rate of growth in the regional economy and the observed congested speeds and engineering measures of congestion on I-15, US 20, Iona Road and Hit Road. The research presented in this report suggests that to maximize the opportunities associated with potential project-contingent business attraction, the Iona Road improvements may have a more immediate effect on development capacity than the east or west sides of the Arterial Loop. Also, it is likely that the return on investment and benefit-cost ratios of implementing specific phases and projects of the Arterial Loop (in relative priority to other investments, such as traffic control near the Event Center) will depend primarily on how actual future economic and traffic growth trajectories occur in relation to the scenarios covered in Appendix I.

# APPENDIX I – SENSITIVITY RESULTS

The three sensitivity growth scenarios were conducted in order to assess the potential impacts at various levels of traffic growth, as well as various levels of congestion. The baseline DKS Associates figures from 2011 were used and then further modified to create three distinct scenarios.

The DKS Associates figures indicate that baseline VMT in the no-build scenario would grow by 2.76 percent, per year, from 2008 to 2035. This analysis uses this growth rate as the “High Growth” scenario for two reasons. First, the DKS Associates study was conducted using an older travel demand model from the Bonneville MPO that is presently undergoing update and review at the time of this writing. The older model does not reflect economic restructuring since the older model was developed. Secondly, Moody’s data on employment growth indicate a much more modest picture for Bonneville County, a 0.64 percent annual growth in total non-farm employment for the comparable 2008 to 2035 period. It is unlikely that VMT would grow so much more than the overall economy. Thus, the Moody’s estimate of 0.64 percent is used as a “Low Growth” estimate, and the average of the two, 1.65 percent, is used as the “Baseline Growth” estimate.

Other factors that were considered in the three scenarios were thresholds for congestion. The DKS Associates study identified a “percent congested” with three different thresholds of volume-to-capacity ratios (V/C): at 0.8, at 0.9 and at 1.0. The higher the threshold, the more conservative the benefits and economic impacts are because TREDIS® observes less of the traffic as congested.

Land use, or contingent development impacts, were also calculated. However, there was no sensitivity applied to the impacts from land use. As a result, they remained constant across all sensitivity scenarios.

The following table indicates which growth rates and V/C ratios were used for each scenario.

**Table 7. Sensitivity Scenario Parameters**

Scenario	VMT Growth (% annual)	V/C Congestion Threshold
Baseline	1.65%	0.9
Low Growth	0.64%	1.0
High Growth	2.76%	0.8

Source: EDR Group, 2014.