

Analysis of the Macroeconomic Impacts of the Proposed Zephyr Transmission Project

prepared by London Economics International LLC



using the Regional Economic Models, Inc. ("REMI") PI+ Model



May 20th, 2013

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1 Executive Summary

The Zephyr Power Transmission Project¹ (“Zephyr” or “the Project”) is a 500-kilovolt high-voltage direct current transmission line that will deliver up to 3,000 MW of energy from eastern Wyoming to the Eldorado Valley in Nevada. As of April 2013, the proposed 835-mile Zephyr Project will traverse four states and 18 counties and will be constructed between 2017 and 2020. The \$3.5 billion Zephyr Project will start its first full year of commercial operations in 2021.²

London Economics International LLC (“LEI”) performed an analysis of the macroeconomic impacts of the proposed Zephyr Project for counties along the Project’s route. LEI specifically analyzed the economic impact of this initial investment as well as ongoing Operations and Maintenance (“O&M”) spending (for the first five years of operation) on employment, economic activity (as measured by Gross Domestic Product (“GDP”)), and tax revenues³ (more specifically income tax and sales and use tax) for the proposed Zephyr route.

LEI utilized the dynamic input-output (“I/O”) economic model developed by Regional Economic Models, Inc. (“REMI”) to measure the economic benefits stemming from the construction and operation of the Zephyr Project. The economic impacts of the Project were estimated for the four states namely Colorado (“CO”), Nevada (“NV”), Utah (“UT”), and Wyoming (“WY”) and the county-level for those counties that will be traversed. The REMI PI+ model is a sophisticated policy and forecasting model, widely used in both the public and private sectors to simulate the dynamic and interactive effects over time and across industries resulting from significant local spending associated with investment in infrastructure Projects such as Zephyr.

In summary, over the 2013 to 2020 period, the LEI analysis indicates that the Project will create more than 11,750 total jobs, invest more than \$1.1 billion in local economies, yield nearly \$1 billion of GDP benefits and contribute approximately \$97 million in tax revenues across the four-state region. LEI reports the following results during the development and construction period (2013-2020) and the first five years of operations (2021-2025) of the Zephyr Project.

Development and Construction period impact

- During the development and construction phase (2013 to 2020), the annual spending within the four states of UT, WY, NV, and CO is expected to total approximately \$1.1 billion and average more than \$140 million (and peak at as much as \$389 million in 2017). In-state

¹ Zephyr Power Transmission, LLC (“Zephyr”) owns the Project. Zephyr Power Transmission, LLC is a wholly-owned subsidiary of Duke-American Transmission Company LLC. For more information on the Zephyr Project, please visit: <http://www.ZephyrTransmissionProject.com>.

² The total cost of Zephyr Transmission Project is estimated to be \$3.5 billion in 2020 (\$2.6 billion in 2012 dollars), as provided by Zephyr.

³ All results in terms of GDP impact and tax revenues included in the following report are in nominal terms.

spending is expected to primarily consist of permitting costs and professional services in relation to environmental and siting matters.

- Over the 2013-2020 period, in-state spending related to the Project is expected to bring more than 11,750 total jobs which consist of approximately 4,695 direct jobs, 1,347 indirect jobs, and 5,710 induced jobs. On average, this is equivalent to nearly 1,470 total jobs per year which consist of roughly 587 direct jobs and 882 indirect and induced jobs per year to the four states.
- In addition, LEI's analysis shows that the economic activity generated by the development and construction period will increase the four states' GDPs by a total of more than \$1 billion or an average of close to \$133 million per year.⁴
- Income tax and sales tax revenues generated in the four states are also expected to increase by a total of approximately \$97 million or an average of \$12 million per year.⁵

Direct jobs - include those needed for the construction or commercial operations of the project

Indirect jobs - those created by businesses providing goods and services essential to the construction or operations of the project

Induced jobs - those created as a result of spending of the wages and salaries of the direct and indirect employees

Total jobs - the sum of the number of direct jobs, indirect jobs, and induced jobs

Commercial operations period impact

- During the first five years of Zephyr's commercial operation (2021-2025), the Project is expected to involve a direct in-state spending of approximately \$220 million, or an average of around \$44 million per year for O&M services. Most of this in-state spending will go to the payment of property taxes, followed by maintenance-related control and communication expenses and O&M (labor). Property taxes to be paid to local communities along the route are estimated to be an additional \$18 million per year.
- Zephyr will also benefit the economies of the four states by increasing their GDP by an estimated total of more than \$630 million or an average of almost \$127 million per year from 2021 to 2025.

⁴ To put this into context, the total combined GDP in the four states of CO, NV, UT, and WY in 2011 was \$557 billion. (Source: Bureau of Economic Analysis ("BEA") data retrieved on March 14, 2013).

⁵ Additional tax revenue generation reflects amounts to be collected through state-level personal and corporate income tax, and state-level as well as county-level sales tax across the four states crossed by Zephyr's proposed route. Tax revenues from other in-state counties that are not crossed by the proposed project are not included in the county-level sales tax revenues. It should also be noted that the states of NV and WY do not levy income or corporate income taxes.

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- The Zephyr Project will support a number of direct jobs to perform operations and maintenance of the two converter stations and the transmission line.
- Income tax and sales tax revenues generated across all the counties in the four states in which the new line is sited will increase by a total of nearly \$55 million or an average of \$11 million per year due to the Project's O&M spending.

It is assumed that O&M spending will continue at similar-inflation-adjusted levels⁶ throughout the asset's operational life, and therefore these economic benefits will also continue beyond the modeling timeframe.

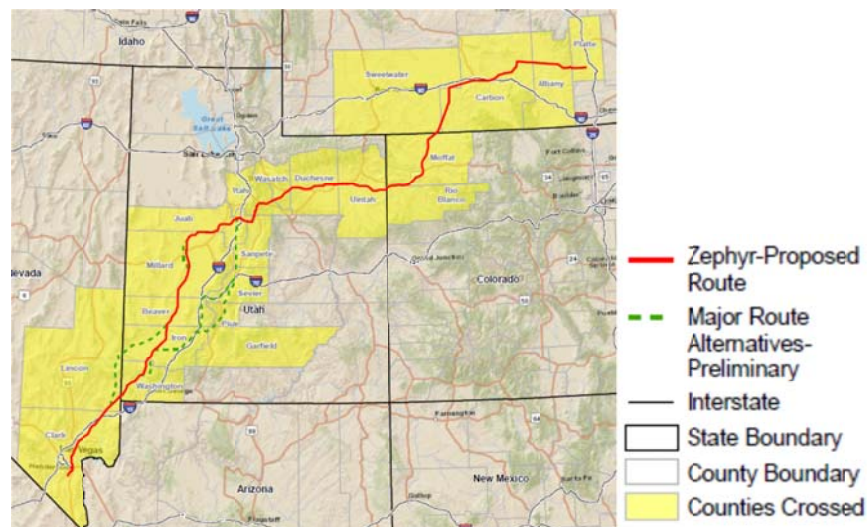
⁶ Inflation of O&M spending is assumed at 3% per annum, as provided by Zephyr to LEI.

2 Overview

LEI performed an analysis of the macroeconomic impacts of the proposed Zephyr Project for the four states namely CO, NV, UT, and WY and those counties that will be traversed by the Project. The Project would involve substantial investment and spending in the 18 counties in CO, NV, UT, and WY during the construction and installation of the transmission line and converter stations.⁷ Other counties in the four states will also see macroeconomic benefits from the Project as a result of the investment through indirect and induced effects. Once operational, Zephyr will also create macroeconomic benefits through direct employment and local spending for operations and maintenance of the transmission line.

As proposed in April 2013, the Zephyr Project will originate near Chugwater, WY and terminate south of Las Vegas, NV in the Eldorado Valley with an interconnection to the California Independent System Operator (“CAISO”). The Zephyr Project, which is a 500-kilovolt high-voltage direct current line with a capacity of 3,000 MW,⁸ will connect the Pathfinder Renewable Wind Project in eastern WY with communities in the southwestern US that have a demand for clean, reliable, and affordable energy. The proponent’s proposed route will cross federal, state, and private lands, as highlighted in the map below.

Figure 1. Counties that will be crossed by the proposed Zephyr transmission Project



Source: Zephyr Power Transmission, LLC (April 2013)

⁷ Appendix A (Section 5) lists a summary of the total economic benefits that are projected to accrue to the counties that will be crossed by the Zephyr Project.

⁸ The Zephyr Project has a total capacity of 3,000 MW, of which 2,000 MW of capacity is subscribed to Pathfinder Renewable Wind Energy, LLC. Any remaining capacity will be filled through an open solicitation process that will comply with Federal Energy Regulatory Commission policies and regulations.

2.1 Modeling methodology

LEI utilized the dynamic forecasting and policy analysis PI+ model developed by REMI to measure the economic benefits of the Zephyr Project to the counties that will be traversed by the Project in CO, NV, UT and WY as well as the other counties within these four states.⁹ The REMI PI+ model incorporates several modeling approaches, including input-output (“I/O”), computable general equilibrium theory, econometric equations, and new economic geography theory to create a comprehensive model that understands detailed interrelated changes in a regional (or state) economy. Using detailed cost estimates provided by Zephyr for the Project, the REMI model generated year-by-year estimates of the total regional effects of local spending as a result of the large investment. The REMI model used for this analysis was a 23-sector, 28-region model.¹⁰

The macroeconomic benefits were measured based on the increases in jobs, economic activity (or GDP), and tax revenues collected in the four states. The number of jobs and economic activity generated by the Project were taken directly from the REMI model. REMI’s definition of jobs or employment numbers is the same as the US Bureau of Economic Analysis (“BEA”), which includes full-time, part-time and seasonal employment. Total jobs are the sum of the number of direct jobs, indirect jobs and induced jobs. Direct jobs include those needed for the construction or commercial operations of the Project. Indirect jobs are those created by businesses providing goods and services essential to the construction or operations of the Project. Induced jobs are those created as a result of spending of the wages and salaries paid to direct and indirect employees.

LEI specifically modeled each year of the development and construction phase and the first five years of commercial operations, totaling 13 years. Although LEI has only looked at the first five years of Zephyr’s commercial operations,¹¹ the benefits from the recurring O&M spending of the Project will be accrued in years beyond this timeframe as well.

The Bureau of Economic Analysis (“BEA”) employment series for states and local areas includes estimates of the number of jobs, full-time plus part-time, by place of work. Full-time and part-time jobs are counted at equal weight.

Employment can be measured either as a count of workers or as a count of jobs. An employed worker is counted only once in the former while all jobs held by the worker are counted in the latter. BEA’s state and county employment estimates are a count of the number of jobs, so that, as with the earnings estimates, a worker’s activity in each industry and location of employment is reflected in the measure.

Source: BEA

<http://www.bea.gov/regional/pdf/spi2006/11%20Employment.pdf>

⁹ As mentioned earlier, other counties in the four states will also realize macroeconomic benefits from the Project as a result of the investment through indirect and induced effects.

¹⁰ Appendix C shows the list of the 23 major industries used in the REMI PI+ model.

¹¹ The operating life of the project is expected to go out forty years.

For the tax revenues, LEI used several of the outputs from the REMI model - namely personal income, output and consumption - to calculate taxable income and sales. State and county tax rates used to calculate the tax revenues generated in each of the counties crossed by the Zephyr Project can be found in Appendix B (Section 6). LEI focused on the three largest components of tax revenues: personal income tax, corporate income tax, and sales and use tax. Property tax and other types of tax collected by each county were not included in the calculation of the tax revenues generated by the Zephyr Project.¹²

2.2 Modeling inputs

The Zephyr Project is currently forecast to cost approximately \$2.6 billion¹³ during the development and construction phase. Of that total investment amount, nearly half of the budget is anticipated to be spent locally or within the states and counties through which the line will pass, as well as the counties where the two converter stations are planned to be sited (we refer to this portion of the total investment amount as “in-state spending”). Once operational, the Zephyr Project will continue with in-state spending through direct local employment and local spending for O&M services, and therefore continue to create macroeconomic benefits. It is anticipated that a total of approximately \$375 million will be disbursed over the first five years of operation for labor and O&M services, approximately 59% of which will be in-state spending.¹⁴

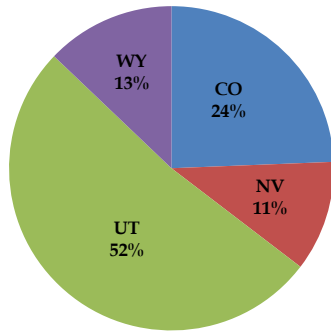
In-state expenditure is disaggregated among several categories or industries. Certain items are allocated to each county in proportion with the Zephyr Project’s mileage for that county. Figure 2 shows the breakdown of the Zephyr’s mileage for each state while Appendix B (Section 6) lists the mileage for each county. In addition, some budget items, such as external labor for Project Management and Legal, are first allocated at the state level and subsequently to each county within those states in proportion to each county’s labor force relative to the total state labor pool. Finally, budget items related to substations, such as converters, are only allocated to counties in which these substations will be located, namely in Clark, NV, and Platte, WY.

¹² Property taxes payable by the Project are incorporated as an input to the model and not as an output. Property tax estimates were provided to LEI by Zephyr.

¹³ See footnote 2.

¹⁴ In-state spending projections were provided by Zephyr.

Figure 2. Breakdown of Zephyr mileage by state, based on 835-mile proposed route



State	Miles Crossed
CO	203
NV	92
UT	432
WY	107
Total	835

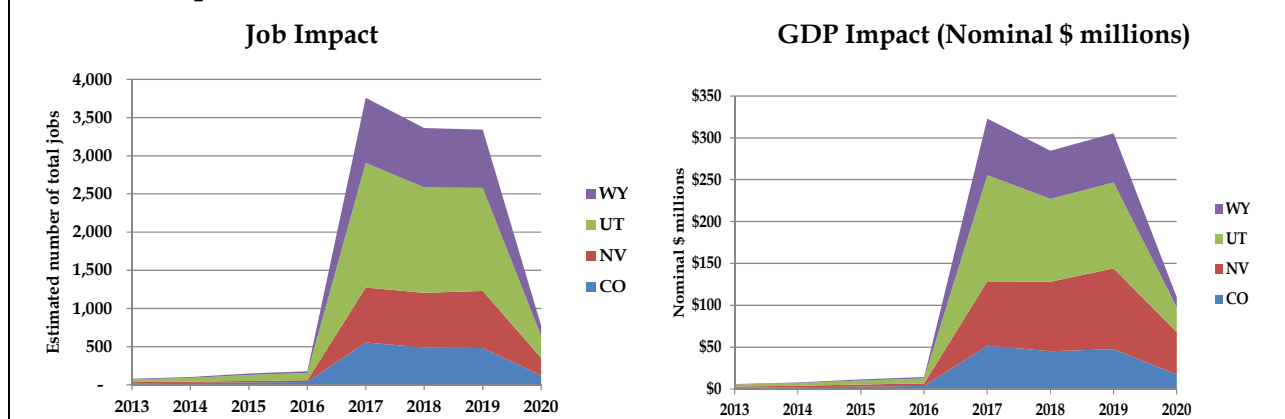
Source: Zephyr Power Transmission, LLC

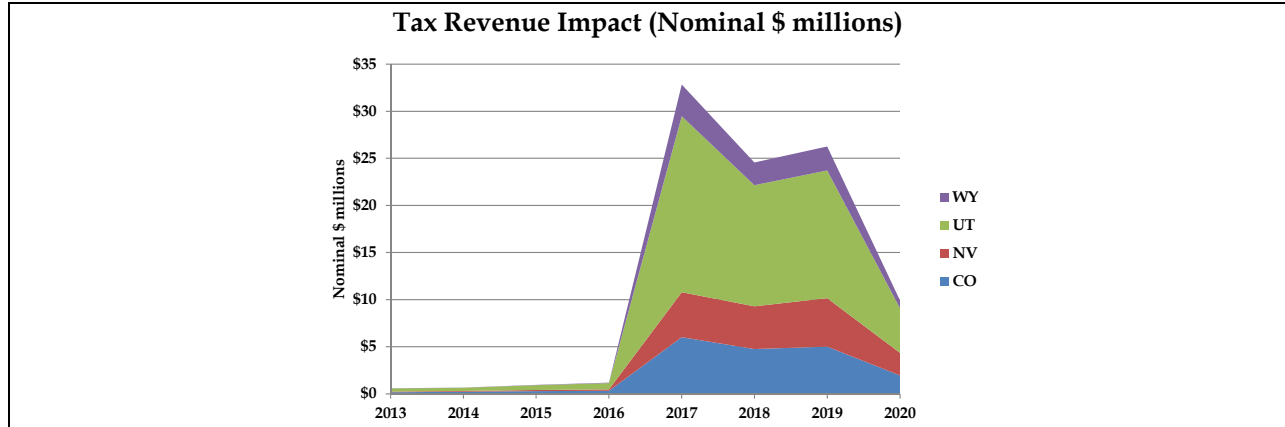
2.3 Modeling results

Development and construction phase impact (2013-2020)

During the development and construction phase, the proposed Zephyr Project is forecast to bring a total of more than 11,750 jobs or an average of close to 1,470 total jobs per year. This consists of a total of close to 4,700 direct jobs or an annual average of more than 580 direct jobs per year to the four states, with a peak of nearly 1,500 direct jobs in 2018 (in the midst of construction). In addition, the Zephyr Project is expected to spend more than \$140 million on average per year during the 2013-2020 period in the four states for the development of the Project. This direct spending will positively impact the four states' economies, creating on average of 882 additional indirect and induced jobs per year and increasing the four states' GDP by approximately \$133 million per year. Figure 3 illustrates these impacts. Tax revenues generated by all the counties in the four states are also expected to increase by an average of \$12 million per year.

Figure 3. Estimated impacts of the proposed Zephyr Project during the development and construction phase

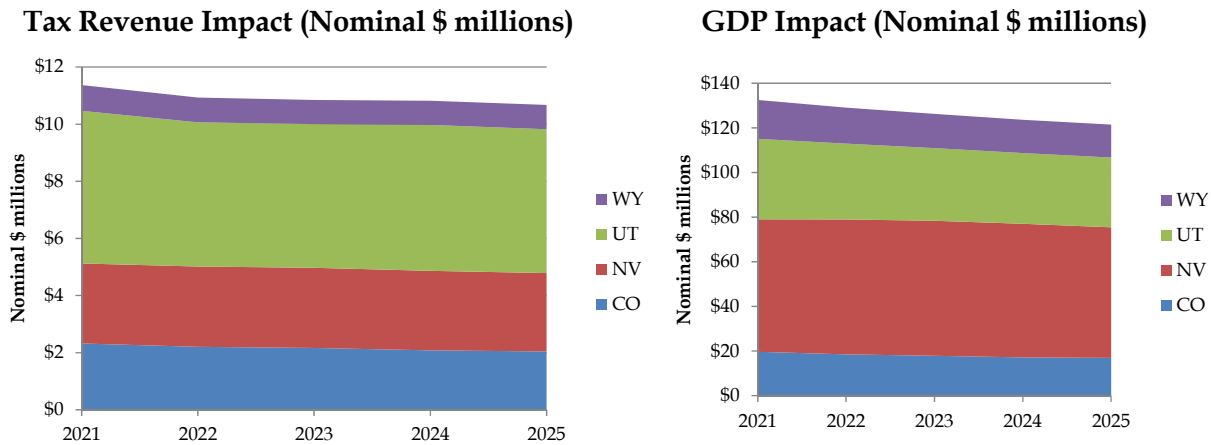




Commercial operations phase impact (first five years only, 2021-2025)

LEI’s analysis projects the economic impacts of the Zephyr Project for the first five years of operations. The Project anticipates in-state spending of approximately \$ 220 million for the first five years of operations or around \$44 million on average per year. This spending is for O&M services for the Zephyr Project. The direct spending will positively impact the four states’ economies, supporting a number of direct jobs to perform operations and maintenance of the converter stations and increasing the four states’ GDP almost \$127 million per annum. Moreover, tax revenues generated in the four states will increase by an average of \$11 million per year. Figure 4 presents the estimated impact during the first five years of commercial operations.

Figure 4. Estimated impacts of the proposed Zephyr Project during the first five years of commercial operations



Note: Tax revenues include income (corporate and individual) tax and sales and county tax. Property taxes are not included.

3 Macroeconomic impact: development and construction phase of Zephyr

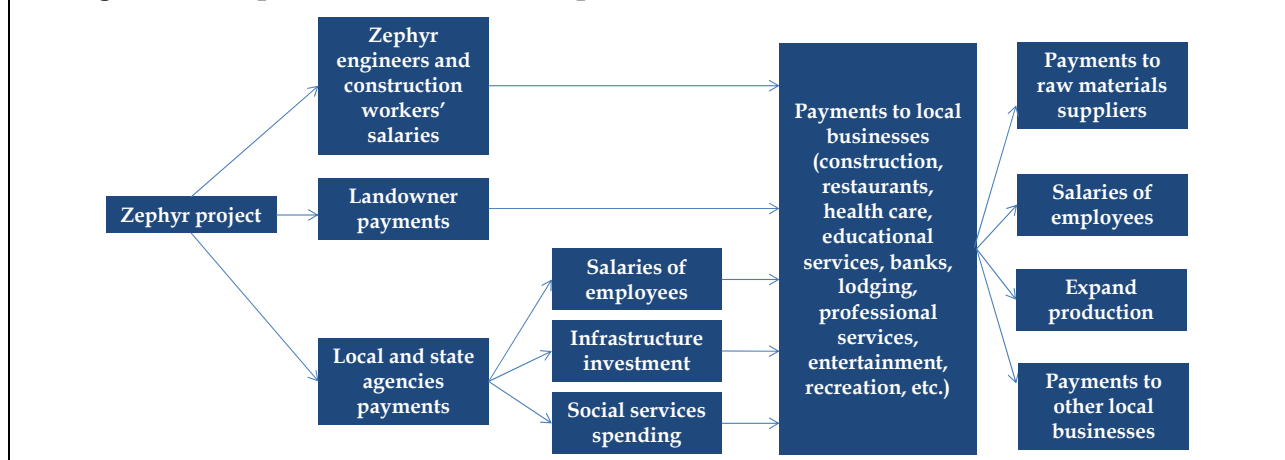
During the development and construction phase (2013-2020), the Zephyr Project is expected to result in more than 11,750 total jobs created, total additional in-state economic output of roughly \$1 billion and total additional in-state tax revenues of approximately \$97 million during the 2013-2020 period.

During the development phase of the Zephyr Project (2013-2016), Zephyr will hire local staff that will be involved in activities such as engineering, compliance, procurement, and other management activities. Over this period, Zephyr will create on average more than 40 direct jobs per year.

The construction of the Zephyr Project is anticipated to start in 2017. Over the course of the construction cycle, the Zephyr Project will create approximately 11,750 total jobs – an average of more than 580 direct jobs per year in the four states. Construction jobs will be associated with the installation of the converter stations as well as transmission poles and wires. In addition to actual construction services, Zephyr will need to hire local administrative staff and pay for various on-site services (e.g., engineering services and other technical services). The in-state (direct) jobs created by the Project will result in an increase in demand for other goods and services within the states (for example, construction workers will spend a portion of their salaries on food and lodging in the vicinity of the construction site).

The Project will also incur direct spending in the four states, including non-labor installation costs, as well as fees and taxes paid to the local and state governments. In addition, Zephyr will be making payments to landowners impacted by the construction of the Project through the negotiated easements. With more revenues/sales, local businesses may have hire more people and/or expand production.

Figure 5. Simple illustration of how the Zephyr Project creates benefits in the four states during the development and construction phase



Some of the payments expected to be made during the construction phase, such as licenses and permit costs, will also go to the state and local government agencies, which the government agencies can then include in their annual operating budgets and expand their government operations. Figure 5 illustrates how the Zephyr Project creates benefits in CO, NV, UT, and WY during the development and construction period.

Zephyr provided LEI with its estimated spending for the Zephyr Project. A total of approximately \$2.6 billion¹⁵ is anticipated over the development and construction phases and approximately 45% of this budget will consist of in-state spending. Zephyr’s total in-state spending during the development and construction phases is shown in Figure 6 below.

Figure 6. Breakdown of anticipated direct in-state spending during the development and constructions phases, by state (nominal \$ millions)

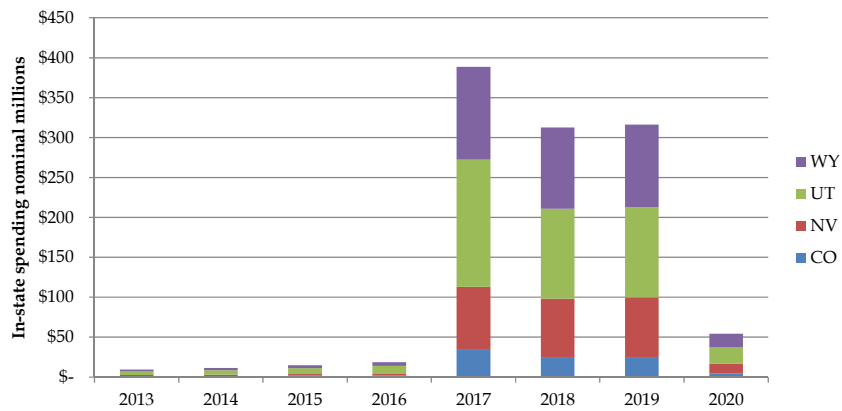
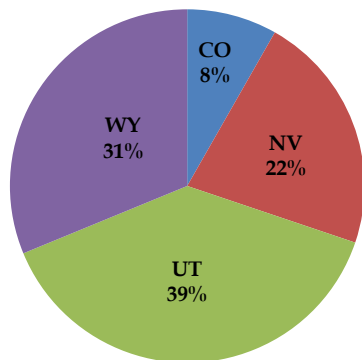


Figure 7. Breakdown of anticipated direct in-state spending by state during the development and construction phase (in nominal \$ millions)



State	Estimated total direct in-state spending (\$ millions)
CO	\$ 93
NV	\$ 247
UT	\$ 434
WY	\$ 352
Total	\$ 1,126

Source: Zephyr Power Transmission, LLC

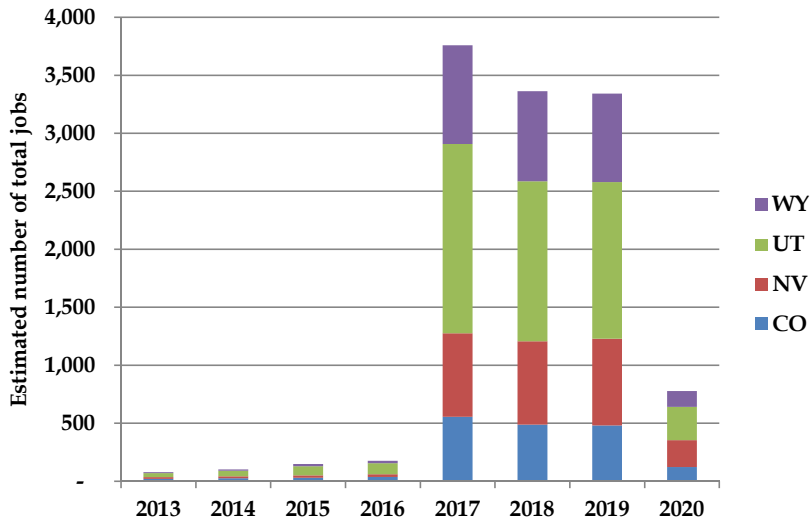
¹⁵ See footnote 2.

Given the methodology for allocating the direct in-state spending discussed in Section 2.2, UT and WY are expected to receive most of the in-state spending budget, with 39% and 31% of total anticipated in-state spending, respectively, as seen in the figure above. UT has the highest in-state spending budget during the development and construction phase because more than 50% of the Zephyr’s mileage will be located in that state. WY has the second highest estimated in-state spending budget during the 2013-2020 period since one converter substation will be placed in this state. Despite having the fewest miles, NV has 22% of total spending due to the location of the second converter station.

3.1.1 Job creation impact

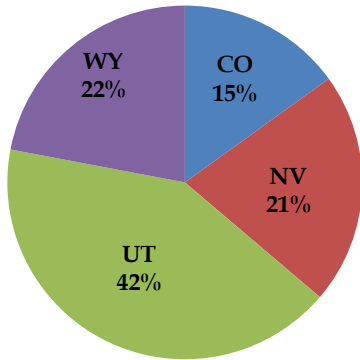
An estimate of more than 11,750 total jobs or on an annual basis, nearly 1,470 total jobs per year are expected to be created on average during the development and construction phase. Zephyr-related annual employment is expected to peak at around 3,760 jobs in 2017.¹⁶ Over the entire 2013-2020 period, UT and WY are expected to benefit most from the Project in terms of job creation, with 42% and 22% of the total, respectively. This is due to the larger estimated in-state spending allocated to these two states compared to the other two states. Figure 9 shows the breakdown of the total jobs by state for the development and construction phase.

Figure 8. Estimated number of in-state total jobs created during the development and construction phase, by state



¹⁶ Annual employment is expected to peak in 2017 because there are more indirect and induced jobs created in this year due to the anticipated land acquisition payments.

Figure 9. Breakdown of the estimated in-state total jobs by state created during the development and construction phase



State	Estimated Total Number of Jobs
CO	1,767
NV	2,492
UT	4,906
WY	2,587
TOTAL	11,752

Total jobs figure include direct jobs (e.g., workers directly involved with the Zephyr Project) and also indirect and induced jobs. Over the 2013-2020 period of development and construction, direct jobs are expected to represent 40% (or an average of more than 580 direct jobs per year) of the total jobs created. Indirect and induced jobs are expected to account for 11% and 49% of the total jobs created, respectively, as shown in Figure 10.

Over 40% of the direct jobs as well as indirect and induced jobs will be in UT because as discussed earlier, more than 40% of the anticipated in-state spending during the development and construction phase will be in this state. Figure 10 shows the estimated annual breakdown of direct, indirect and induced jobs by state and Figure 11 and Figure 12 present the breakdown of the estimated in-state direct jobs by state during the development and construction phase.

Furthermore, almost half of the total jobs created will come from the construction sector. Based on the pie chart shown in Figure 13 below, some of the most affected local industries are related to services required by the engineers and construction workers, such as retail trade, health care, real-estate, accommodations and food services/restaurants.

Figure 10. Breakdown of direct, indirect, and induced jobs during the development and construction phase

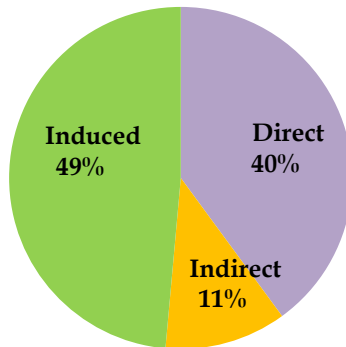


Figure 11. Estimated number of in-state direct, indirect, and induced job creation during the development and construction phase, by state

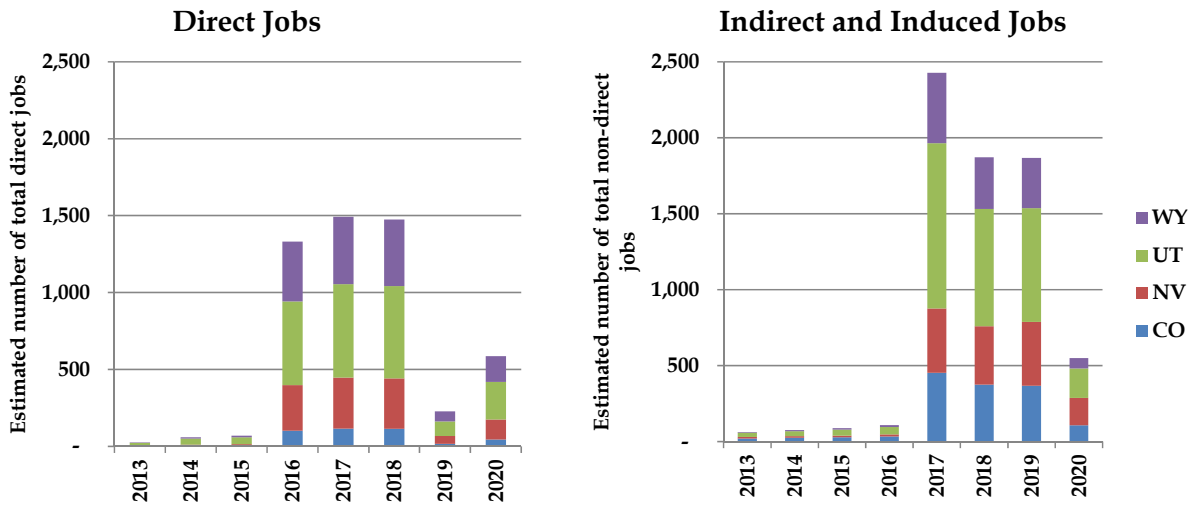
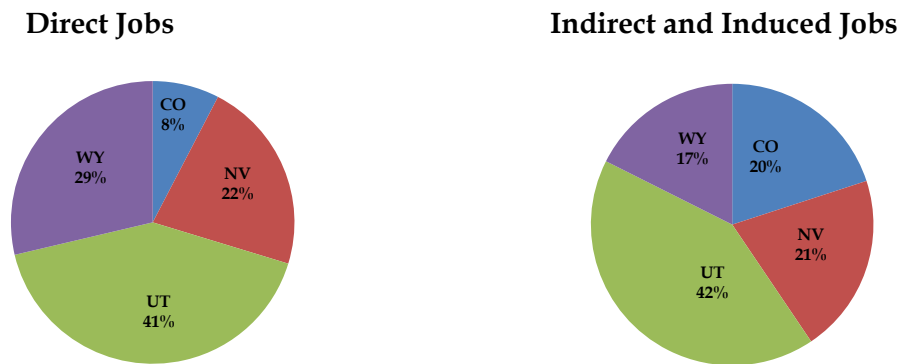


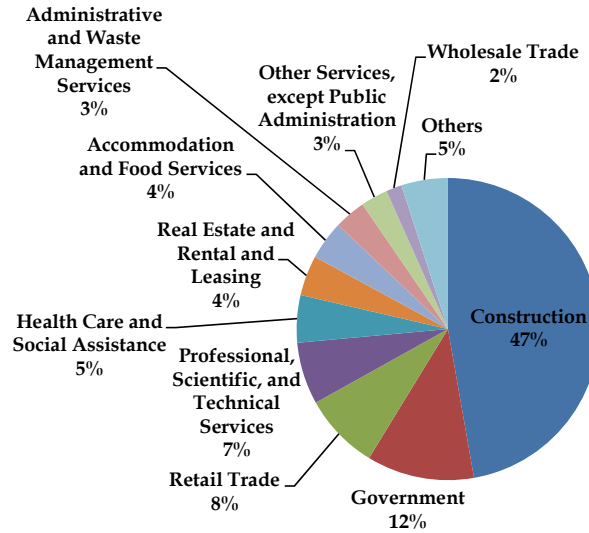
Figure 12. Breakdown of in-state direct jobs by state during the development and construction phase



State	Total Direct Jobs
CO	358
NV	1,038
UT	1,952
WY	1,347
Total	4,695

State	Total Indirect & Induced Jobs
CO	1,409
NV	1,454
UT	2,954
WY	1,240
Total	7,057

Figure 13. Breakdown of total in-state jobs created during the development and construction phase



Note: Others include the following sectors: manufacturing, finance and insurance, arts, entertainment and recreation, educational services, information, transportation and warehousing, utilities, and management of companies and enterprises.

3.1.2 GDP impact

In addition to the jobs that will be supported by the Project, Zephyr will also improve the economies of the four states. Over the eight-year development and construction phase, the Project is anticipated to increase the economic output of the four states by an estimated total of more than \$1 billion or an average of nearly \$133 million per year. UT and NV will benefit the most, with shares of the total additional in-state output of 35% and 30%, respectively, while WY's and CO's shares of the aggregate GDP impact are 19% and 16%, respectively. UT's economy benefits the most because of its large share of the O&M spending. Although WY has a higher estimated in-state spending budget than NV, the GDP impact is higher in NV due to effective "investment multiplier" in REMI's P1+ model. The initial size of NV's local economy is larger as compared to WY's local economy. In fact, WY's Gross State Product ("GSP") in 2011 is only 28% of NV's GSP for that year.¹⁷ The larger the local economy, the larger the induced effects of an investment.¹⁸ The annual estimated increase in state GDPs is shown in Figure 14 below while the breakdown of the GDP increases by state is shown in Figure 15.

¹⁷ In 2011, the Gross State Product ("GSP") of NV is \$113 billion compared to WY's GSP of only \$32 billion. (Source: BEA, *Widespread Economic Growth Across States in 2011*, June 5, 2012. See Table 1).

¹⁸ Economic theory asserts that a larger local economy will be more diversified and will dispose of 'slack capacity' more readily in response to an increase in demand than a smaller local economy.

Figure 14. Estimated increase in state GDPs during the development and construction phase, by state (nominal \$ millions)

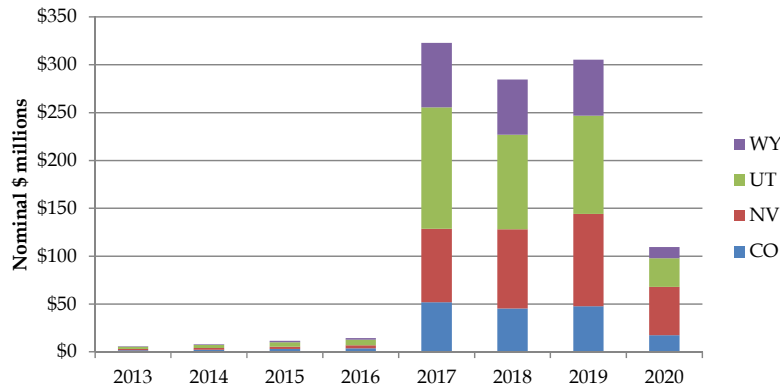
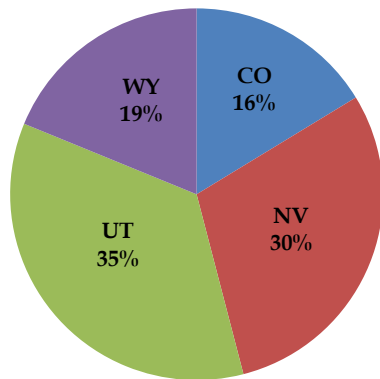


Figure 15. Breakdown of GDP increases by state during the development and construction phase (nominal \$ millions)



State	Estimated total increase in GDPs (\$ millions)
CO	\$ 173
NV	\$ 315
UT	\$ 374
WY	\$ 200
TOTAL	\$ 1,062

3.1.3 Tax revenue impact

Furthermore, the Zephyr Project is expected to increase the income tax (personal and corporate) and sales tax revenues generated across the four states traversed by Zephyr by an estimated total of \$97 million over the 2013 to 2020 period. On average, this is approximately \$12 million per year of additional tax revenues for the four states. More than a third or approximately \$33 million will be collected in 2017, which is the first year of the construction of the Project.

The largest tax collecting beneficiary is expected to be UT, with more than 50% of the additional total tax revenue generation as shown in Figure 17.¹⁹ CO, NV, and WY are expected to collect 19%, 18% and 10% of the estimated additional tax revenues, respectively, over the period.

Figure 16. Estimated additional tax revenues generated during the development and construction phase, by state (nominal \$ millions)

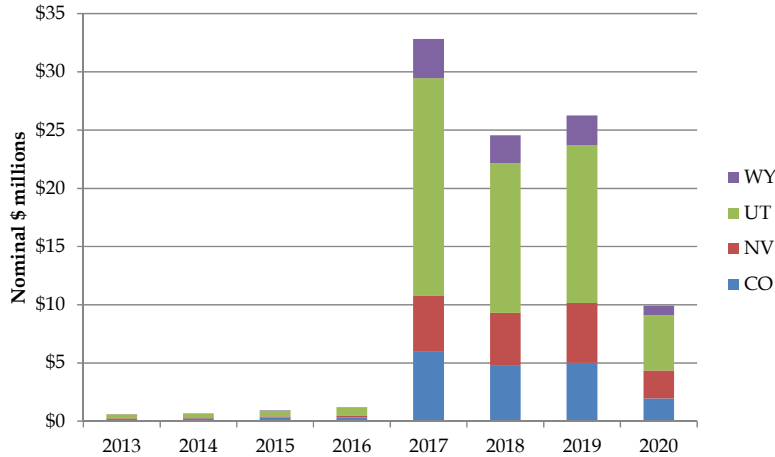
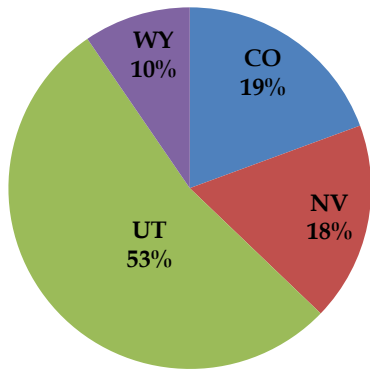


Figure 17. Breakdown of additional tax revenues generated during the development and construction phase, by state (nominal \$ millions)



State	Estimated increase in total tax revenues (\$ millions)
CO	\$ 19
NV	\$ 17
UT	\$ 52
WY	\$ 9
Total	\$ 97

¹⁹ As noted in Exhibit B, NV and WY do not levy corporate and personal income tax.

4 Macroeconomic impact: operations phase of Zephyr

The Zephyr Project is expected to start its first full year of operations in 2021.²⁰ In-state spending in the four states will continue even after the construction phase comes to an end, as Zephyr will perform operations and maintenance tasks locally, as well as pay local property taxes, service fees and leases. As depicted in Figure 5 on page 12, the Zephyr Project will continue to create benefits after the start of commercial operations.

Total in-state spending will be approximately \$220 million over the first five years of Zephyr's operations or an average of \$44 million per year. Operating costs (mainly property taxes,²¹ easements and operating labor costs) are expected to represent 59% of total in-state spending, while maintenance costs (mainly control & communication costs, maintenance labor costs and line maintenance costs) are expected to represent 41% of total in-state spending. It should be noted that the direct in-state spending is expected to continue through the life of the Project.

As shown in Figure 18 and Figure 19, UT and WY are expected to receive most of the in-state spending budget, with 32% of total anticipated in-state spending towards each of the two states, while NV and CO are expected to see 27% and 10% of total in-state spending over the same period, respectively. Similar to the development and construction phase, UT has the highest in-state spending budget due to the relatively higher line-mileage to be built in this state compared to the other states. WY has the second highest in-state spending budget because in addition to the converter substation being located in this state, WY is also host to the interconnecting AC transmission line. This means additional in-state spending budget for WY for the operations and maintenance costs of the AC transmission line.

The Zephyr Project will create and support a number of direct jobs to perform operations and maintenance of both the converter stations and the transmission line throughout the life of the Project.

Based on LEI's analysis, the first five years of the full operations of the Zephyr Project will create and support an increase in the number of total jobs in the government as well as the service sectors such as retail trade, health care and social assistance, accommodation and food services, construction, professional and technical services, and real estate and rental and leasing. Since direct in-state spending is expected through the life of the Project, it is also expected that job creation impacts will continue beyond the first five years of the Project's operations.

²⁰ The Project is expected to start commercial operations in late 2020.

²¹ Based on Zephyr's estimates, 42% of these property tax payments will go to UT while 22% will go to WY, 20% to NV, and 16% to CO.

Figure 18. Annual breakdown of anticipated direct in-state spending during the first five years of operations, by state (nominal \$ millions)

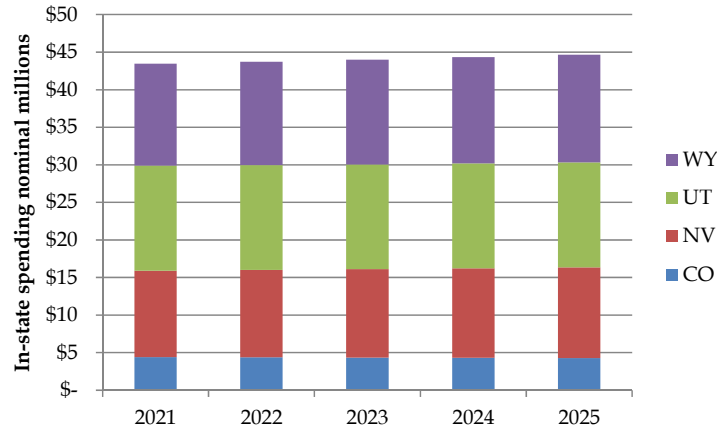
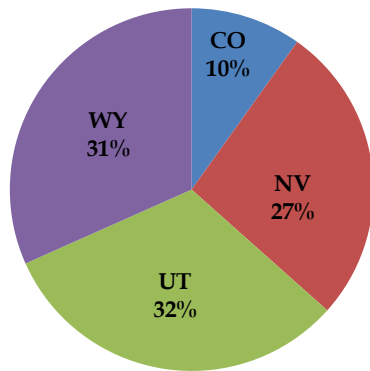


Figure 19. Breakdown of anticipated direct in-state spending by state during the first five years of operations (nominal \$ millions)



State	Estimated total direct in-state spending (\$ millions)
CO	\$ 22
NV	\$ 59
UT	\$ 70
WY	\$ 70
Total	\$ 220

Source: Zephyr Power Transmission, LLC

4.1.1 GDP impact

The Zephyr Project will also expand the economies of the four states. Based on LEI’s analysis, the Zephyr will contribute an estimated total of more than \$630 million to the economies of the four states from 2021 to 2025. This is equivalent to an average of close to \$127 million per annum. Approximately 47% of this will come from expansion of economic activities in NV, 26% from UT, 14% from CO, and 12% from WY as shown in Figure 21. As explained earlier, NV has a larger local economy compared to WY and UT and thus experiences a larger induced effect of investment than the other states. Zephyr expects that direct in-state spending will continue through the life of the Project, therefore, positive GDP impacts will continue in the longer term as well.

Figure 20. Estimated increase in GDPs during the first five years of operations, by state (nominal \$ millions)

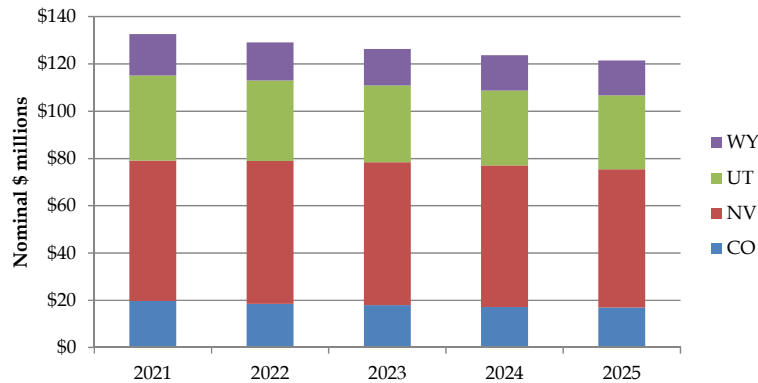
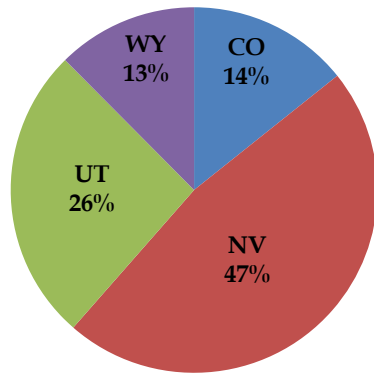


Figure 21. Breakdown of GDPs by state during the first five years of operations (nominal \$ millions)



State	Estimated total increase in GDPs (\$ millions)
CO	\$ 90
NV	\$ 299
UT	\$ 166
WY	\$ 79
TOTAL	\$ 633

4.1.2 Tax revenue impact

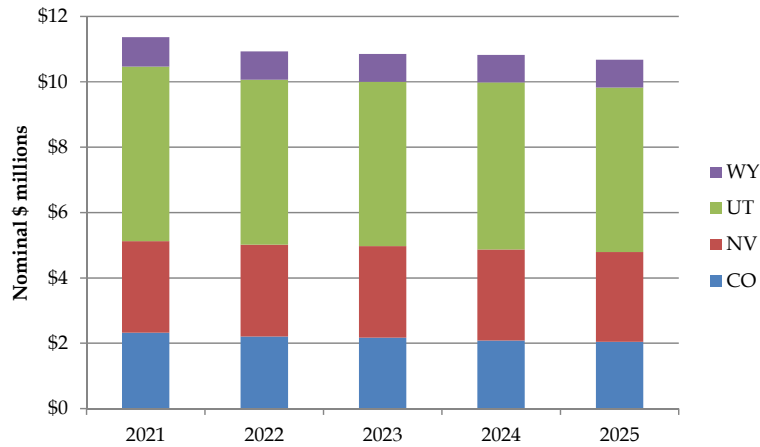
The Zephyr Project will also increase the income tax (personal and corporate) and sales tax revenues generated across the four states in each year of commercial operations. On average, an estimated \$11 million of additional income tax and sales tax revenues will be generated per annum from 2021 to 2025, representing a total additional tax revenue generation of roughly \$55 million over the entire period.²² UT will generate the highest tax revenues because it has the largest part of the proposed route.²³ NV, CO, and WY are expected to collect 26%, 20%, and 8% of the additional total tax revenues, respectively, over the period. Since direct in-state spending is expected to continue through the life of the Project, it is also anticipated that these tax revenue

²² See footnote 12.

²³ It should also be noted that NV and WY do not have a corporate income tax and personal income tax. Please refer to Appendix B (Section 6) for the tax rates used for each state and county.

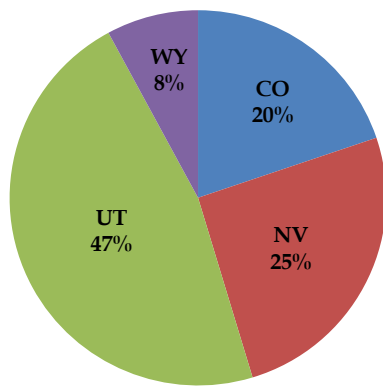
benefits will continue beyond the first five years of Zephyr’s operations. Figure 22 shows the estimated additional tax revenues for each year while Figure 23 presents the breakdown of the additional tax revenues by state.

Figure 22. Estimated additional tax revenue generation during the first five years of operations, by state (nominal \$ millions)



Note: Tax revenues include income (corporate and individual) tax and sales and county tax. Property taxes are not included.

Figure 23. Breakdown of additional tax revenues by state during the first five years of operations (nominal \$ millions)



State	Estimated increase in total tax revenues (\$ millions)
CO	\$ 11
NV	\$ 14
UT	\$ 26
WY	\$ 4
Total	\$ 55

5 Appendix A: Counties and miles crossed by the proposed route for Zephyr and summary of macroeconomic benefits by counties

State and County Name	Miles crossed by proposed route (miles)	Estimated total jobs created from 2013-2020	Estimated increase in GDPs for 2013-2020 (\$ nominal millions)	Estimated tax revenue increase for 2013-2020 (\$ nominal millions)
Wyoming	203.4	2,587	\$ 199.7	\$ 9.3
Platte County	14.99	1,028	\$ 71.7	\$ 3.2
Albany County	43.71	423	\$ 28.7	\$ 1.5
Carbon County	123.99	763	\$ 59.5	\$ 3.3
Sweetwater County (SE corner)	20.67	115	\$ 10.7	\$ 0.4
Rest of Wyoming	0	257	\$ 29.1	\$ 0.8
Colorado	92.0	1,767	\$ 173.0	\$ 18.8
Moffat County	87.74	498	\$ 31.5	\$ 4.6
Rio Blanco County (NW corner)	4.3	27	\$ 2.1	\$ 0.5
Rest of Colorado	0	1,242	\$ 139.4	\$ 13.6
Utah	431.8	4,905	\$ 374	\$ 52
Uintah County	52.06	300	\$ 26.6	\$ 4.0
Duchesne County	51.69	291	\$ 21.6	\$ 3.4
Wasatch County	19.82	156	\$ 10.3	\$ 1.5
Sanpete County (NW corner)	4.03	68	\$ 3.7	\$ 0.7
Utah County	30.57	850	\$ 63.5	\$ 8.2
Juab County	55.9	329	\$ 21.2	\$ 3.1
Millard County	92.6	478	\$ 30.6	\$ 4.9
Beaver County	33.45	179	\$ 11.5	\$ 1.8
Iron County	45.39	508	\$ 27.8	\$ 3.9
Washington County	46.33	677	\$ 44.9	\$ 6.1
Rest of Utah	0	1,072	\$ 112.7	\$ 13.9
Nevada	107.4	2,492	\$ 315.3	\$ 17.3
Lincoln County	22.82	134	\$ 5.3	\$ 0.4
Clark County	84.55	2,332	\$ 289.7	\$ 16.3
Rest of Nevada	0	26	\$ 20.3	\$ 0.6
Total	835	11,751	\$ 1,062.3	\$ 97.0

Source: Zephyr Power Transmission, LLC

6 Appendix B: County and state tax rates

County and state tax rates used for the calculation of incremental tax revenues generated in each of the counties crossed by the proposed routes:

County	State	Personal Income Tax Rate	Corporate Income Tax Rate	Sales and Use Tax Rate (State and County)	State Sales Tax Rate	County Sales Tax Rate
Albany County, WY	WY	0.0%	0.0%	6.0%	4.0%	2.0%
Beaver County, UT	UT	5.0%	5.0%	6.0%	4.7%	1.3%
Carbon County, WY	WY	0.0%	0.0%	6.0%	4.0%	2.0%
Clark County, NV	NV	0.0%	0.0%	8.1%	6.9%	1.3%
Duchesne County, UT	UT	5.0%	5.0%	6.0%	4.7%	1.3%
Iron County, UT	UT	5.0%	5.0%	6.0%	4.7%	1.3%
Juab County, UT	UT	5.0%	5.0%	6.0%	4.7%	1.3%
Lincoln County, NV	NV	0.0%	0.0%	7.1%	6.9%	0.2%
Millard County, UT	UT	5.0%	5.0%	6.0%	4.7%	1.3%
Moffat County, CO	CO	4.6%	4.6%	5.9%	2.9%	3.0%
Platte County, WY	WY	0.0%	0.0%	6.0%	4.0%	2.0%
Rio Blanco County, CO	CO	4.6%	4.6%	6.5%	2.9%	3.6%
Sanpete County, UT	UT	5.0%	5.0%	6.0%	4.7%	1.3%
Sweetwater County, WY	WY	0.0%	0.0%	5.0%	4.0%	1.0%
Uintah County, UT	UT	5.0%	5.0%	6.1%	4.7%	1.4%
Utah County, UT	UT	5.0%	5.0%	6.8%	4.7%	2.1%
Wasatch County, UT	UT	5.0%	5.0%	6.0%	4.7%	1.3%
Washington County, UT	UT	5.0%	5.0%	6.0%	4.7%	1.3%

Note: NV and WY do not have a corporate income tax and personal income tax

Sources: CO Department of Revenue – Division of Taxation; Utah State Tax Commission; WY Department of Revenue; and Nevada Department of Taxation

7 Appendix C: List of the 23 major industries used in the REMI PI+ Model

1. Forestry, Fishing, Related Activities, and Other
2. Mining
3. Utilities
4. Construction
5. Manufacturing
6. Wholesale Trade
7. Retail Trade
8. Transportation and Warehousing
9. Information
10. Finance and Insurance
11. Real estate and Rental and Leasing
12. Professional and Technical Services
13. Management of Companies and Enterprises
14. Administrative and Waste Services
15. Educational Services
16. Health Care and Social Assistance
17. Arts, Entertainment and Recreation
18. Accommodation and Food Services
19. Other Services, except Public Administration
20. State and Local Government
21. Federal, Civilian
22. Military
23. Farm (crop and animal production)