

Seattle Department of Transportation

# EAST MARGINAL WAY CORRIDOR IMPROVEMENT PROJECT

## Appendix D: Supporting Documents



Prepared for  
US Department of Transportation  
FY 2020 BUILD Grant Application

Submitted by



**Seattle**  
Department of  
Transportation



# APPENDIX D

## INTRODUCTION JOBS REPORT

The City of Seattle Department of Transportation (SDOT) is applying for a USDOT Better Utilizing Investments to Leverage Development (BUILD) 2020 grant to help fund East Marginal Way Corridor Improvement project. The construction of improvements associated with the East Marginal Way Corridor Improvement project is expected to create near-term economic impacts for the City of Seattle and State of Washington. These economic impacts would be driven by an increase in construction spending in the region, with construction funds originating from outside the local economy of significance (e.g., federal grant funding). These project expenditures would generate a short-term increase in demand for engineering and technical services, as well as construction-related labor and materials.

To quantify the near-term economic impacts of this project, this analysis utilized an input-output modeling framework based on multipliers from MIG Inc., the developers of IMPLAN.<sup>1</sup> U.S. National data were selected for the economic profile and multiplier set to enable simple comparison between projects for the purposes of BUILD grant funding. However, it is understood that local regions are expected to generate employment and economic output at rates that vary from the national average.

Two types of economic impacts are identified for this analysis.

- **Direct/Indirect Impacts:** Direct impacts represent new spending, hiring, and production by civil engineering construction companies to accommodate the demand for resources to complete the project. Indirect impacts result from the quantity of inter-industry purchases necessary to support the increase in production from the construction industry experiencing new demand for its goods and services. All industries that produce goods and services consumed by the construction industry will also increase production and, if necessary, hire new workers to meet the additional demand.
- **Induced Impacts:** Induced impacts stem from the re-spending of wages and salaries earned by workers benefitting from the increase in direct and indirect expenditure activity within an area. For example, if an increase in construction demand leads to new employment and earnings in a set of industries, workers in these industries will spend some proportion of their increased earnings at local retail shops, restaurants, and other places of commerce, which would further stimulate economic activity.

This report estimates three types of economic impacts.

- **Person-year jobs:** 100 person-year jobs may translate into 50 jobs supported for 2 years or 100 jobs supported for 1 year.
- **Earnings:** All forms of employment income, including Employee Compensation (wages and benefits) and Proprietor Income.
- **Output:** Output represents the value of industry production or economic activity. For manufacturers, this would be sales plus/minus change in inventory. For service sectors

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<sup>1</sup> <http://implan.com/>

production equals sales. For Retail and wholesale trade, output equals gross margin (as opposed to gross sales).

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## COSTS

The total capital costs of the East Marginal Way Corridor Improvement project are forecast to be \$37.66 million (2018 \$), excluding right of way land acquisition costs. The spending schedule for the project is provided below in Table 1, with completion anticipated in May 2024 and additional construction closeout continuing into 2025.

**Table 1: Capital Costs for Project, less Right of Way Costs (2018 \$ millions)**

2021	2022	2023	2024	2025	Total
\$1.56	\$10.85	\$15.59	\$7.98	\$1.69	<b>\$37.66</b>

Source: WSP Estimates 2020

## RESULTS

A summary of the short-term economic impacts is shown in Table 2.

**Table 2: Summary of Near-Term Economic Impacts**

<b>Direct + Indirect Impacts</b>	
Employment (Person-Year Jobs)	382 jobs
Earnings (2018 \$)	\$22,636,458
Economic Output (2018 \$)	\$72,097,024
<b>Induced Impacts</b>	
Employment (Person-Year Jobs)	217 jobs
Earnings (2018 \$)	\$10,516,849
Economic Output (2018 \$)	\$32,187,687
<b>Total Impacts</b>	
Employment (Person-Year Jobs)	599 jobs
Earnings (2018 \$)	\$33,153,307
Economic Output (2018 \$)	\$104,284,711

Source: WSP 2020

Assuming a BUILD grant is awarded to complete construction funding, the East Marginal Way Corridor Improvement project is expected to generate economic impacts for the region beginning in 2021. In total, the project is projected to create employment of 599 person-year jobs, including 382 direct and indirect person-year jobs.

Table 3 shows the number of persons directly and indirectly employed by the project per year.



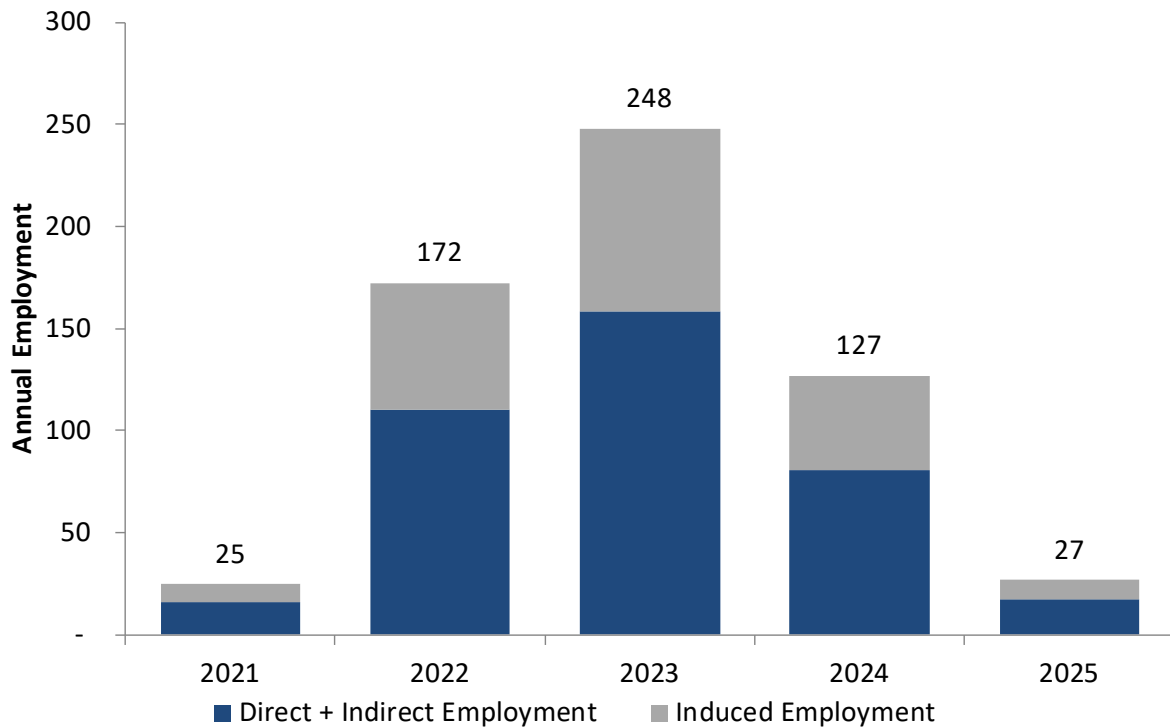
**Table 3: Direct and Indirect Jobs by Year**

	2021	2022	2023	2024	2025
Direct and Indirect Jobs	16	110	158	81	17
Induced Jobs	9	62	90	46	10

Source: WSP 2020

The project will generate an estimated average of 120 direct, indirect, and induced jobs per construction year. This includes 77 direct and indirect jobs, and 43 induced jobs. Figure 1 shows the profile of annual employment generated by the project's expenditures.

**Figure 1: Annual Employment During Construction**

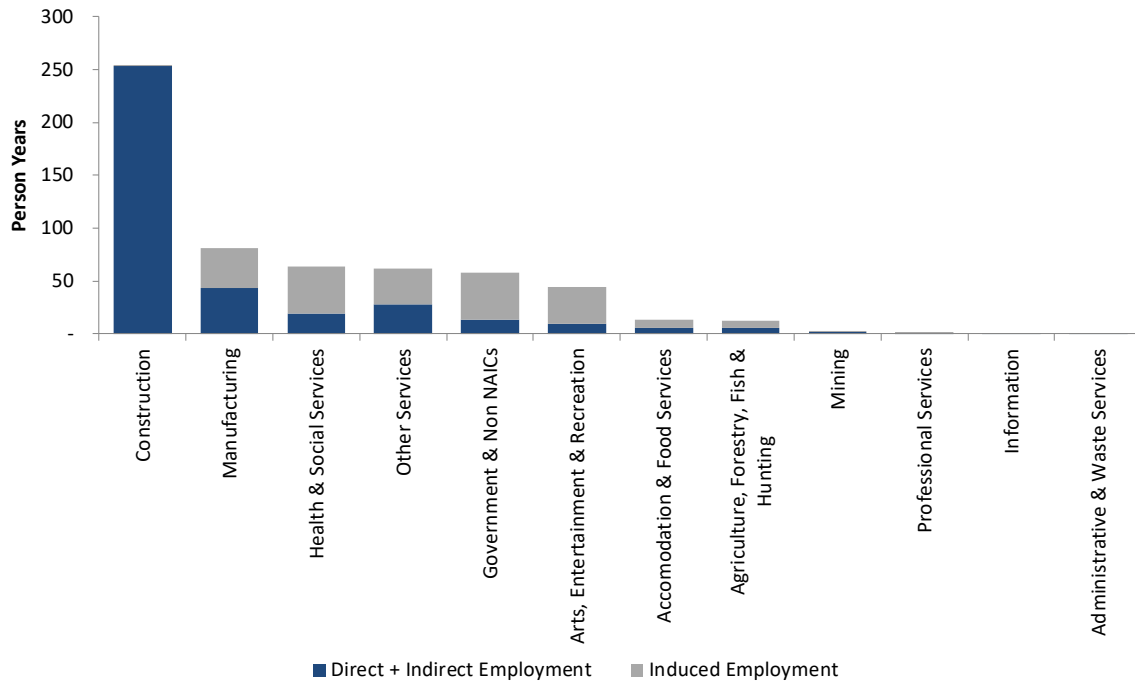


Source: WSP 2020

Figure 2 shows the breakdown of jobs created by industry and type of impact. The civil works construction sector is estimated to receive the largest increase in employment from the project (254 person-year jobs), all of which are direct jobs created. The other industries that will see the largest number of jobs created include manufacturing (81 person-year jobs), healthcare and social services (63 person-year jobs), other services (62 person-year jobs), government (58 person-year jobs), and arts, entertainment, and recreation (44 person-year jobs).

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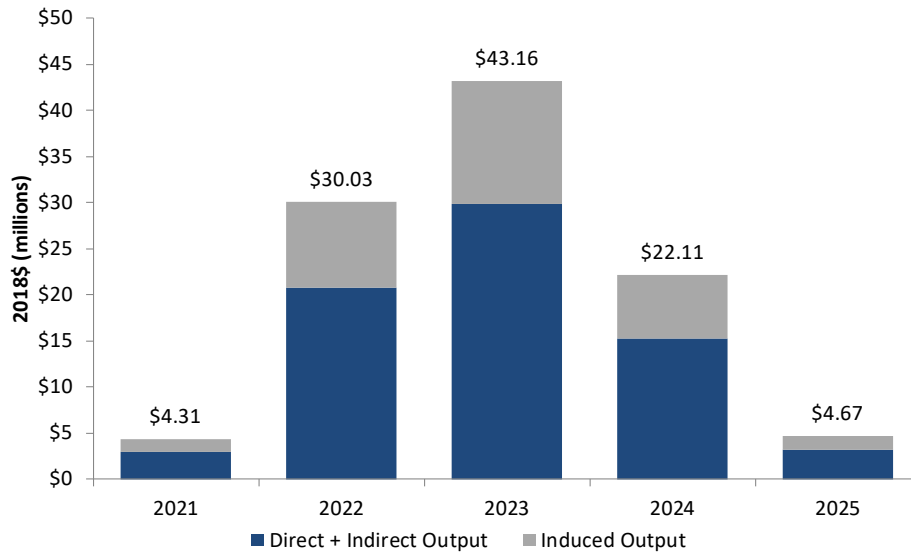
**Figure 2: Breakdown of Job Creation by Industry Sector and Type of Impact**



Source: WSP 2020

The amount of short-term economic activity generated by the project is shown in Figure 3. In total, the project would generate \$104.2 million in gross real economic output or activity (2018 dollars), with \$72.1 million in direct and indirect output and \$32.1 million in induced output. Consistent with construction expenditures most of the economic activity occurs between 2022 and 2024.

**Figure 3: Breakdown of the Value of Economic Output/Activity Generated by the Project**



Source: WSP 2020

