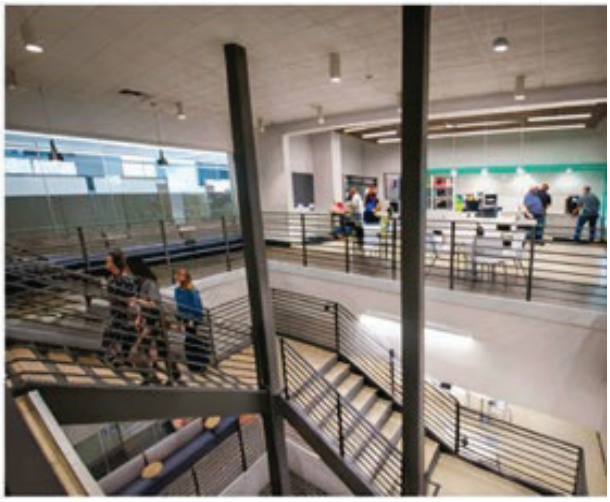
Economic Impacts of the TuX Project Under Oregon's Strategic Investment Program (SIP)



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Authorship and Acknowledgments

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Optimal Solutions Group (Optimal) is responsible for this analysis, which evaluates the economic impacts of the TuX Project under Oregon's Strategic Investment Program (SIP). Founded in 2000 and based in the University of Maryland Discovery District, the firm specializes in economic impact analysis, program evaluation, and data science.

For more information about Optimal Solutions Group, please visit: **www.optimalsolutionsgroup.com**

Acknowledgments

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Executive Summary

This report presents an independent analysis of the estimated economic impacts associated with the **TuX Project**, a major expansion of Lam Research's semiconductor equipment manufacturing and R&D operations in Washington County, Oregon. The analysis evaluates the proposed project's contributions to regional economic activity, employment, and earnings under Oregon's Strategic Investment Program (SIP). Fiscal impacts are outside the scope of this report and are expected to be addressed separately by Washington County.

All economic impact figures presented in this report are estimates derived from input–output modeling and are subject to standard modeling assumptions and limitations. The estimates measure economic activity supported within Washington County, including direct project activity, supplier and vendor activity, and household spending supported by worker earnings.

Key Economic Impacts

The TuX Project represents a significant capital investment that is expected to generate both short-term construction impacts and long-term operational benefits within Washington County:

- **Construction Phase — one-time:** Approximately **$519.6 million** in total output, **$284.4 million** in value added, and **1,420 jobs supported**, driven primarily by specialty trades and general construction activity.
- **Capital Investment — one-time:** Approximately **$357.6 million** in total output, **$207.2 million** in value added, and **669 jobs supported**, largely reflecting locally captured services related to equipment installation, logistics, transportation, distribution, and technical support.
- **Operations — annual, ongoing:** Approximately **$51.5 million** in annual output, **$27.8 million** in value added, and **152 jobs supported annually**, concentrated in high-skill R&D, laboratory, engineering, testing, and technical functions.

In addition, the project is expected to support approximately **445 direct jobs**, with average annual earnings of about **$173,000**. This figure reflects the projected mix

of direct project jobs and associated earnings assumptions and is not intended to represent the average wage across all industries in Washington County.[1]

Project Development Assumption

The estimates in this report are based on the project scope and investment levels described in Lam Research's SIP application. The analysis assumes that a SIP agreement provides conditions that allow Lam Research to proceed with the full level of development reflected in the application. If the final development is reduced, delayed, or otherwise modified because the company determines that the investment cannot be supported under applicable tax structures or project economics, the resulting economic impacts would be less expansive across the regional economy.

Regional and Supply Chain Effects

The TuX Project builds upon and strengthens Oregon's established semiconductor ecosystem. Project spending aligns closely with Washington County's existing supplier base, particularly in construction, engineering, equipment-related services, R&D, and specialized technical services. As a result, the project primarily reinforces existing industry clusters and supply chain linkages, supporting continued regional competitiveness in advanced manufacturing.

Overall, the TuX Project represents a substantial investment in advanced manufacturing and R&D that is expected to generate meaningful economic activity, support high-wage employment, and reinforce Washington County's role in the regional and national semiconductor economy.

Purpose of This Report

This report provides an objective, evidence-based analysis of the economic impacts associated with the TuX Project under Oregon's Strategic Investment Program (SIP). Its primary purpose is to inform Washington County decision-

[1] Average annual earnings are estimated based on the projected mix of direct project jobs associated with the TuX Project and related earnings assumptions. This figure represents a weighted average for anticipated project employment and is not intended to reflect the average wage across all industries or occupations in Washington County. It should also be interpreted separately from the broader input-output job impact estimates, which include jobs supported through direct, indirect, and induced economic activity.

makers by quantifying how project-related activity contributes to economic output, value added, earnings, and employment within the regional economy.

The analysis focuses on measuring the scale and composition of economic activity generated during the construction phase, capital investment phase, and ongoing operations, using industry-standard input–output modeling techniques. The report is limited to economic impacts and does not include fiscal impact analysis.

All estimates reflect the portion of project-related spending captured within Washington County and are based on available data and stated assumptions. Methodology notes and limitations are incorporated throughout the report to help readers understand how the estimates were developed and how they should be interpreted.

About the TUX Project

The TuX Project is a major expansion of Lam Research's existing campus in Tualatin, Oregon, within Washington County. The project includes approximately 210,000 square feet of office, laboratory, and industrial space, along with supporting infrastructure. The development is expected to be completed in phases, beginning with core facilities and followed by additional capacity and site improvements.

The project is designed to support semiconductor equipment manufacturing and research and development (R&D), including engineering, testing, laboratory, and related technical functions. It expands Lam Research's operational capacity in support of advanced semiconductor equipment innovation and production.

Located within Washington County's established "Silicon Forest" semiconductor cluster, the TuX Project leverages an existing base of skilled labor, supplier networks, and infrastructure. As such, it reinforces the region's role in the semiconductor industry while contributing to continued growth in advanced manufacturing, R&D, and innovation.

METHODOLOGY AT A GLANCE

How the Washington County impact estimates were developed

1. PLATFORM & APPROACH

Industry-standard input-output analysis using the Revelo Economic Impact platform and BEA RIMS II multipliers for Washington County, Oregon.

2. WHAT IS MEASURED

Output
Total economic activity generated by the project.

Value Added
Contribution to Washington County GDP, including labor income, business income, and taxes on production.

Earnings
Labor income supported, including wages and benefits.

Jobs
Employment supported by project-related activity.

3. IMPACT TYPES

Direct
Project-related activity itself.

Example: *Lam Research spending* on construction, operations, and locally captured equipment-related services.

Indirect
Supplier and vendor activity supported by the project.

Example: engineering firms, specialty trades, logistics providers, installation services, and professional services.

Induced
Household spending supported by worker income.

Example: spending on housing, food, retail, healthcare, and local services.

All three impact types contribute to the **Output, Value Added, Earnings**, and **Jobs** totals shown in this report.

4. GEOGRAPHIC SCOPE

Estimates reflect the portion of project-related spending captured within Washington County.

5. CAPITAL INVESTMENT TREATMENT

For machinery and equipment, the analysis counts only locally captured service components, such as transportation, distribution, installation, and technical support.

6. TIMEFRAMES

1. **One-time impacts:** construction and capital investment
2. **Recurring annual impacts:** operations

7. IMPORTANT NOTE

These results are modeled estimates based on available data and stated assumptions.
All dollar values are reported in current (nominal) dollars.

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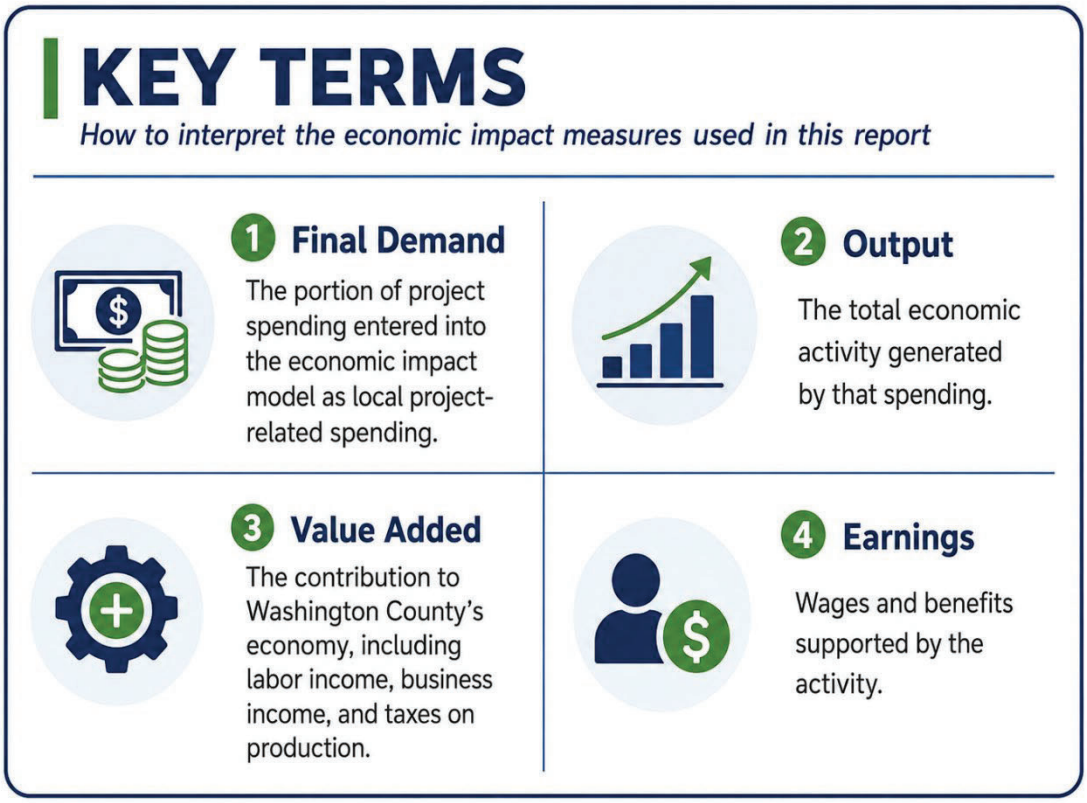
Construction Phase Impacts

The construction phase of the TuX Project represents a significant one-time economic impact in Washington County. Of approximately **$831.8 million** in total construction spending, an estimated **$332.7 million** is expected to be captured locally as final demand within Washington County. This locally captured spending is estimated to generate approximately **$519.6 million** in total output, **$284.4 million** in value added, and **$95.6 million** in labor earnings. In total, construction activity is estimated to support approximately **1,420 jobs** over the construction period.

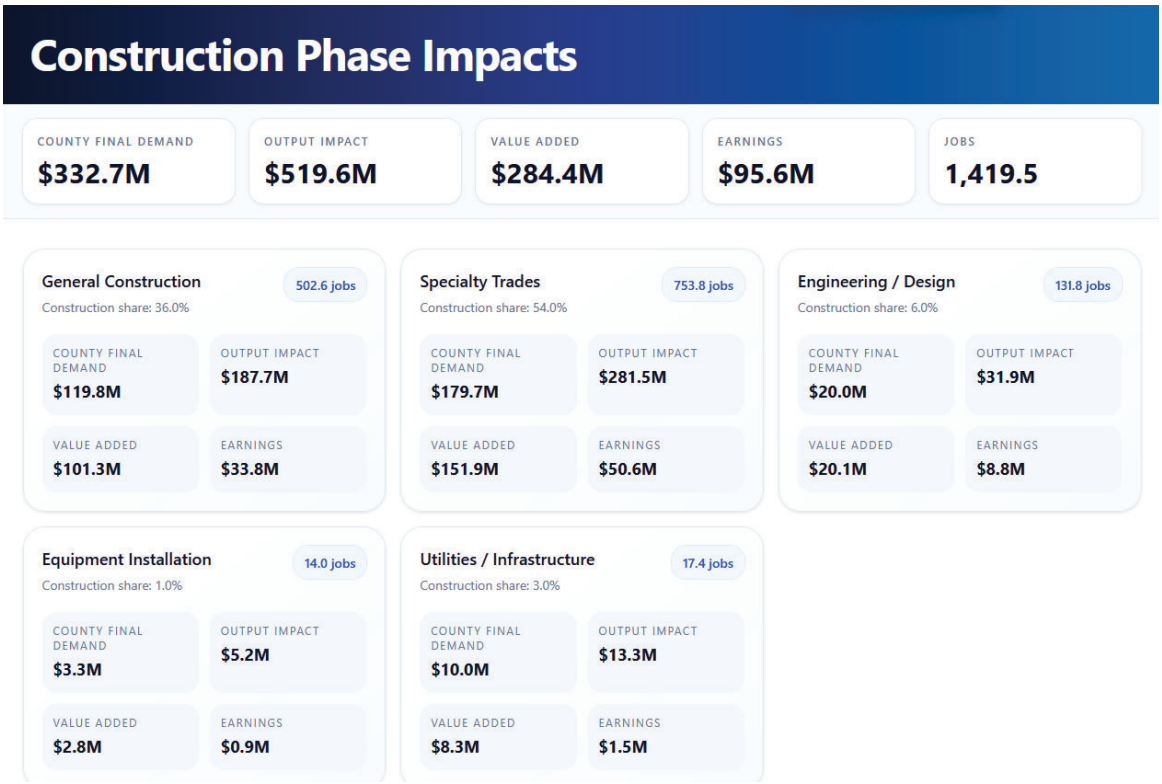


Most construction-related impacts are concentrated in specialty trades and general construction, which together account for roughly 90% of total construction activity. Specialty trades include activities such as electrical, plumbing, HVAC, site preparation, concrete, structural, finishing, and related contractor services. Specialty trades alone generate approximately **$281.5 million** in output and support **754 jobs**, while general construction contributes approximately **$187.7 million** in output and supports **503 jobs**. Smaller

contributions come from engineering, utilities, and equipment installation services.

These impacts include **direct, indirect, and induced effects**. Direct impacts reflect construction activity tied to the project itself. Indirect impacts reflect supplier and vendor activity, including subcontractors, materials suppliers, engineering firms, logistics providers, and related professional services. Induced impacts reflect household spending supported by worker earnings. In practical terms, construction workers and workers supported through the supply chain earn income that may be spent on housing, food, retail, healthcare, transportation, and local services, creating additional economic activity in Washington County and nearby communities.

Because construction workers, contractors, and suppliers must be present during the construction period, a portion of project-related spending is expected to circulate locally while the project is being built. These impacts are temporary and occur over the approximately three-year construction period, but they represent a substantial short-term stimulus to the regional economy, particularly for local contractors, workers, suppliers, and service providers.



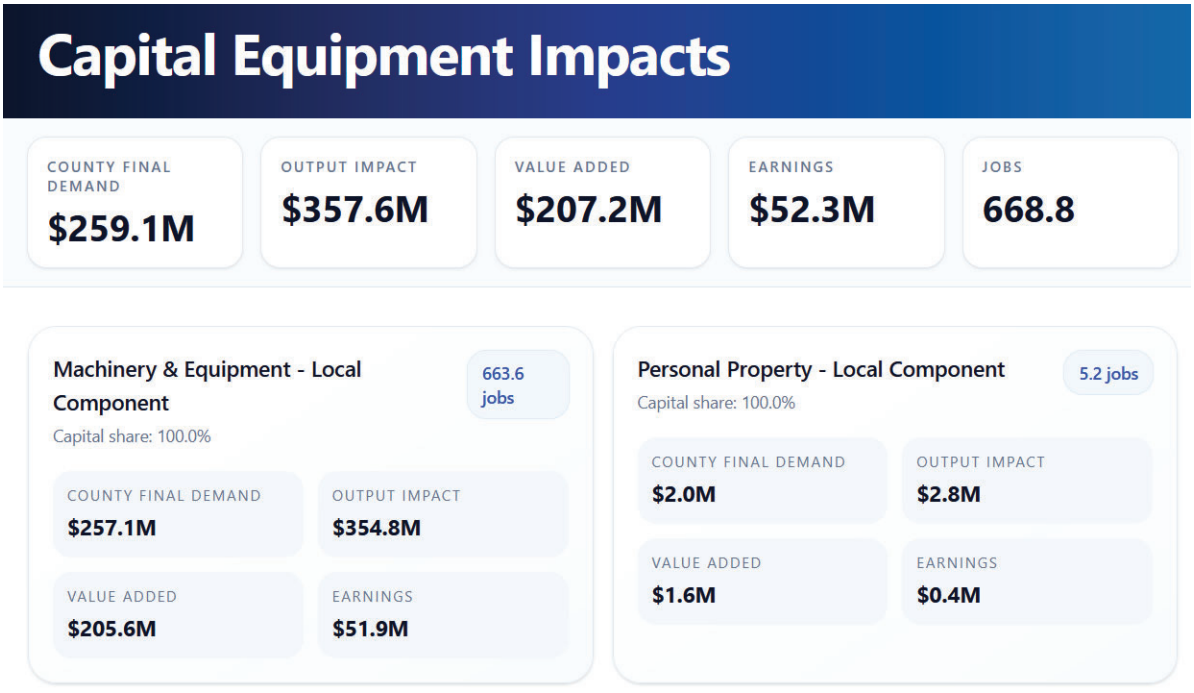
Note: All values are estimated economic impacts based on input–output modeling.

Capital Equipment Impacts

In addition to construction, the TuX Project generates significant economic activity through capital investment in specialized machinery and equipment. This type of investment is central to semiconductor equipment manufacturing and R&D, where advanced tools, laboratory systems, and technical infrastructure support engineering, testing, and innovation activity.

Because most machinery and equipment is manufactured outside the region, this analysis does **not** treat the full equipment purchase value as a local Washington County impact. Instead, the analysis includes only the portion of capital-related spending expected to be captured locally, such as transportation, distribution, installation, equipment integration, technical support, and related professional services. Based on these assumptions, approximately **$259.1 million** in capital-related spending is estimated to be captured within Washington County.

This localized spending is estimated to generate approximately **$357.6 million** in total output, **$207.2 million** in value added, and **$52.3 million** in labor earnings, supporting approximately **669 jobs** within Washington County.



Note: All values are estimated economic impacts based on input–output modeling.

Clarifying note: The estimated **669 jobs** are not direct Lam Research jobs. They represent jobs supported within Washington County by locally captured machinery-and-equipment-related activity, including logistics, installation, technical services, supplier support, and related service activity.

Nearly all capital-related impacts are driven by machinery and equipment services, which account for the vast majority of output and jobs. These impacts reflect the specialized nature of semiconductor-related capital investment and the demand it creates for technical, installation, logistics, and support services associated with large-scale industrial and R&D facilities.

Unlike general construction activity, machinery and equipment investment is closely tied to ongoing R&D and production cycles. As technology changes and R&D needs evolve, specialized equipment may require upgrades, replacement, maintenance, calibration, and additional technical support over time. While the estimates presented here reflect the project-related capital investment assumptions used in this analysis, the nature of semiconductor R&D suggests that machinery and equipment can contribute to recurring cycles of service demand beyond the initial procurement and installation period.

Operations

Once operational, the TuX Project is estimated to generate ongoing, recurring economic activity throughout Washington County, including activity associated with the project's location in Tualatin. Of approximately **$78.7 million** in annual operating expenditures, about **$31.5 million** is estimated to be captured locally within Washington County, producing approximately **$51.5 million** in annual output, **$27.8 million** in value added, and **$11.6 million** in labor earnings. In total, operations are expected to support approximately **152 jobs** annually across Washington County.

Most operational impacts are concentrated in R&D and laboratory activities, which account for roughly 85% of total operational economic activity. These functions generate approximately **$44.0 million** in output and support about **124 jobs**, reflecting the project's focus on high-skill engineering, testing, laboratory, and innovation-related functions. The remaining impacts are associated with

support services and other functions, contributing a smaller share of output and employment.

Unlike construction and capital investment, these impacts are **recurring annual impacts** and are expected to persist over time. They represent a stable and ongoing contribution to Washington County's regional economy, particularly in advanced manufacturing, R&D, and technical services. City of Tualatin impacts are addressed separately through the City-level allocation analysis.

Note: All values are estimated economic impacts based on input–output modeling.

Workforce Impacts and Policy Alignment

The TuX Project is expected to support approximately **445 direct jobs**, primarily in high-skill roles, including engineers, scientists, technicians, and related technical personnel. This workforce profile reflects the project's emphasis on advanced manufacturing and R&D and aligns with Washington County's existing semiconductor labor market.

The **445 direct jobs** should be interpreted separately from the **152 jobs** referenced in the Operations section. The 445 figure represents anticipated direct project employment associated with Lam Research's expanded operations. By

contrast, the 152 jobs estimate reflects annual employment supported within Washington County through the input-output model based on locally captured operating expenditures, including supplier activity and related economic effects. Because these figures measure different concepts, they should not be added together or treated as interchangeable.

Average annual earnings are estimated at approximately **$173,000**, significantly above regional benchmarks, indicating a strong contribution to high-wage, knowledge-intensive employment. These outcomes are consistent with regional policy goals focused on job quality, innovation-driven economic growth, and access to high-skill career pathways.

The project is also broadly aligned with existing education and training pipelines that support semiconductor and advanced manufacturing careers. Under SIP-related workforce requirements, the firm is expected to coordinate with **Worksystems, Inc. (WSI)** through the required hiring-related agreement or process. In addition, several regional initiatives and models are available to support workforce participation during both the construction and operations phases, including Worksystems' Quality Jobs Initiative, Construction Career Pathways programs, and Quick Start-type training models.

This analysis does not independently evaluate the firm's participation in specific workforce programs unless such participation is documented in the application or related materials. Instead, the report focuses on the employment and earnings impacts associated with the project, while noting that regional workforce programs can help connect local residents to quality, high-wage jobs supported by the project.

Supply Chain

The TuX Project is expected to reinforce and expand Washington County's existing semiconductor supply chain rather than create an entirely new supplier network. Project spending, particularly in construction, engineering, equipment-related services, maintenance, professional services, and ongoing operations, aligns closely with the region's established base of specialized firms.

The intake assumptions indicate meaningful local spending commitments and opportunities for Washington County businesses. Approximately **40% of construction spending** is expected to be captured by firms in Washington County, representing about **$332.7 million** in locally captured construction activity. Once the project is operational, approximately **40% of annual operating expenditures** are expected to be captured locally, representing about **$31.5 million per year** in Washington County business activity. In addition, the intake form identifies a **38% local procurement share** expected to go to Washington County businesses.

These local capture assumptions are important because supplier participation is a core policy consideration for County SIP evaluation. Local spending supports not only direct project delivery but also indirect economic activity among contractors, subcontractors, suppliers, logistics providers, maintenance firms, engineering firms, professional service providers, and other regional businesses that support semiconductor-related activity.

The project also supports local workforce-linked supply chain effects. The intake assumptions indicate that **37% of the construction workforce** is expected to reside in Washington County and that **72.16% of workers** are expected to reside in Washington County. These worker-residence assumptions support induced economic effects, as wages earned through project-related activity may be spent on housing, food, retail, healthcare, transportation, and other local services.

While detailed information on the number of participating Washington County suppliers and diverse supplier spending was not available, the available intake data indicate that the project is expected to generate meaningful opportunities for local firms. Continued regional supplier engagement could further strengthen the project's alignment with County SIP policy objectives by increasing local

procurement, supporting small and specialized businesses, and reinforcing Washington County's role in the regional semiconductor ecosystem.

Overall, the TuX Project is expected to sustain demand for specialized suppliers, strengthen existing industry linkages, and support the region's continued competitiveness in advanced semiconductor production.

Bottom Line

The TuX Project is expected to generate substantial economic activity in Washington County through one-time construction, capital investment, and recurring annual operations. The project supports local output, value added, earnings, and jobs by creating demand for construction, engineering, equipment-related services, R&D, technical functions, suppliers, and worker-supported household spending.

The estimated impacts depend on the project proceeding at the scope and investment levels reflected in Lam Research's SIP application. If the final development is reduced, delayed, or modified because the company determines that the investment cannot be supported under applicable tax structures or project economics, the resulting economic impacts would be less expansive across the regional economy.

Overall, the project would reinforce Washington County's role in Oregon's semiconductor ecosystem by supporting high-wage employment, strengthening supplier networks, and expanding advanced manufacturing and R&D-related activity within the regional economy.