Date: **February 25, 2021**

To: **Joint Committee on Ways & Means Subcommittee on Transportation and Economic Development**

From: **Nick Batz, Business Oregon**

RE: **Follow up to Day One budget presentation questions**

Co-Chair Gomberg and Co-Chair Beyer,

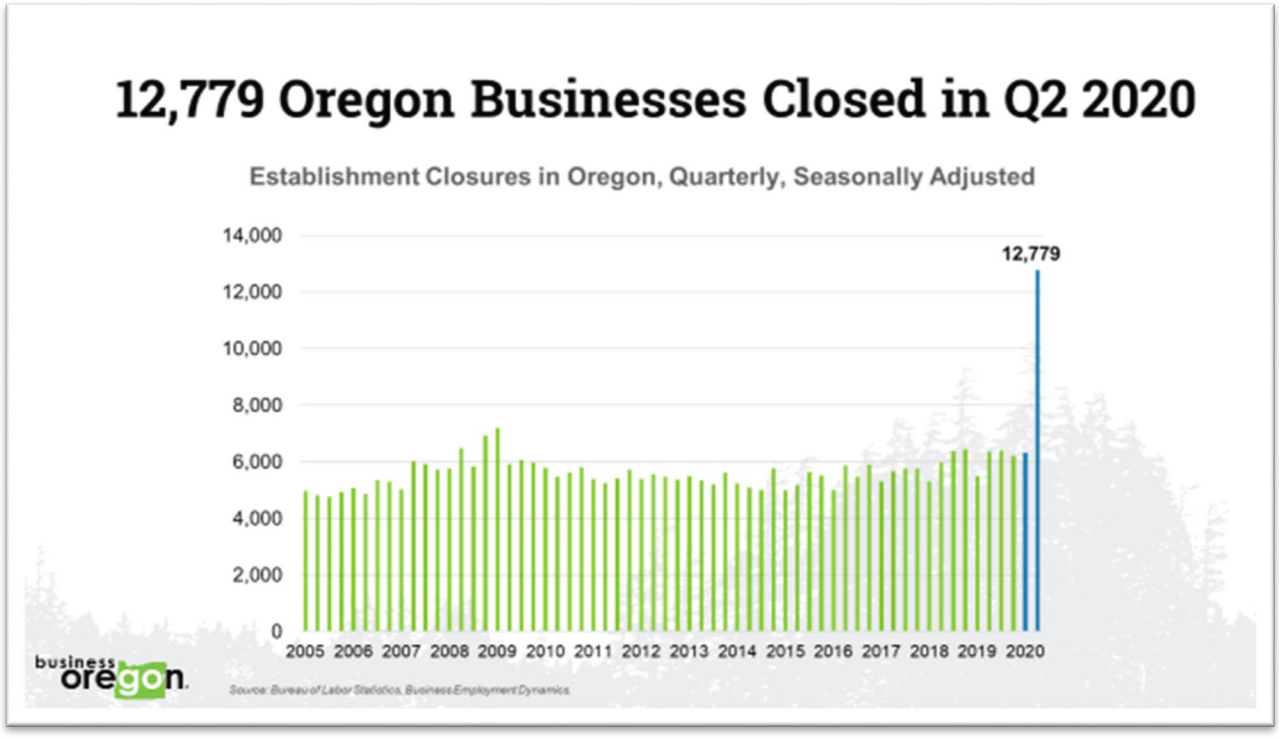
Please accept the following agency responses to committee questions asked during Business Oregon's budget presentation on February 24th, 2021.

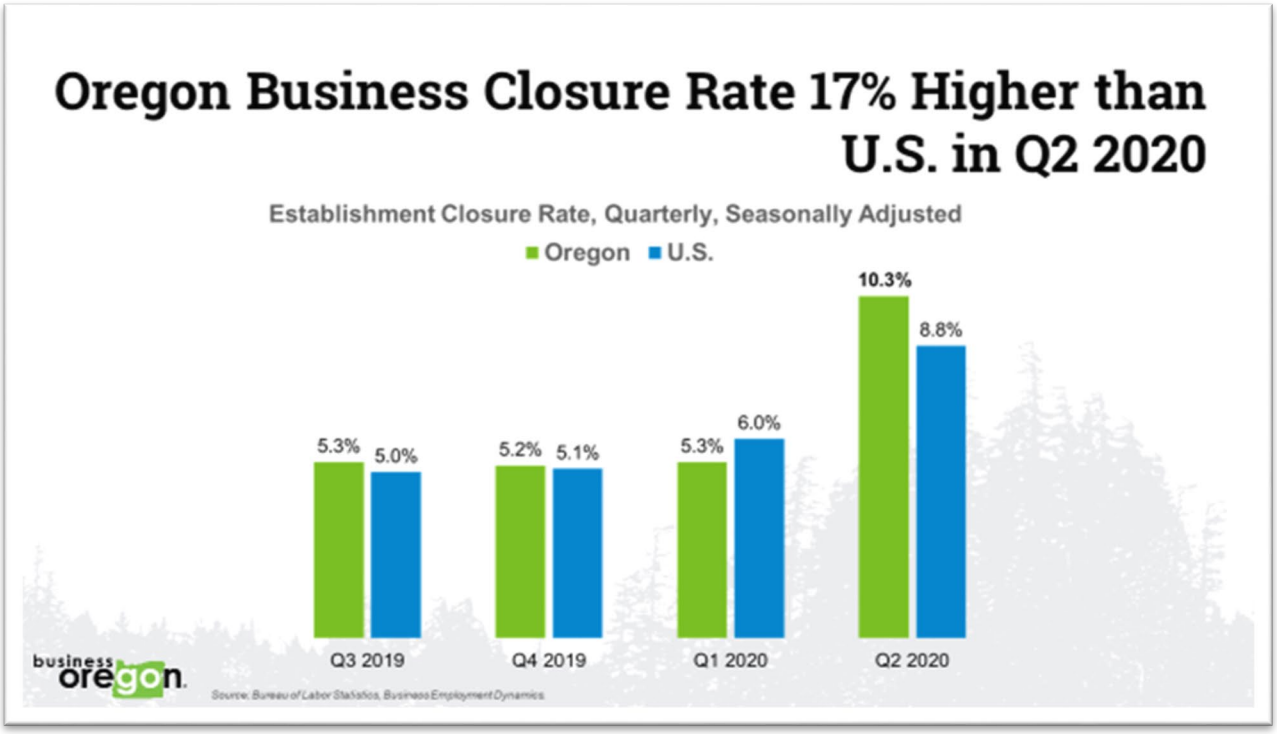
Regards,

Nick Batz

Representative Gomberg: **Do we have any updated slides on projected business closures due to COVID?**

While businesses don't report closures, per se, Business Employment Dynamics (BED) data from the Bureau of Labor Statistics (BLS) allows the tracking of gross and net employment and establishment changes over time, which can be used to estimate business closures. Newly released BED data from BLS reveals that nearly 13,000 businesses closed in Oregon in the second quarter of 2020, the most recent quarter available. A typical quarter in Oregon sees about 5,500 business closures in this data set.





Data is seasonally adjusted and limited to private employers with employees covered under Unemployment Insurance tax, so it does not include sole proprietors or self-employed.

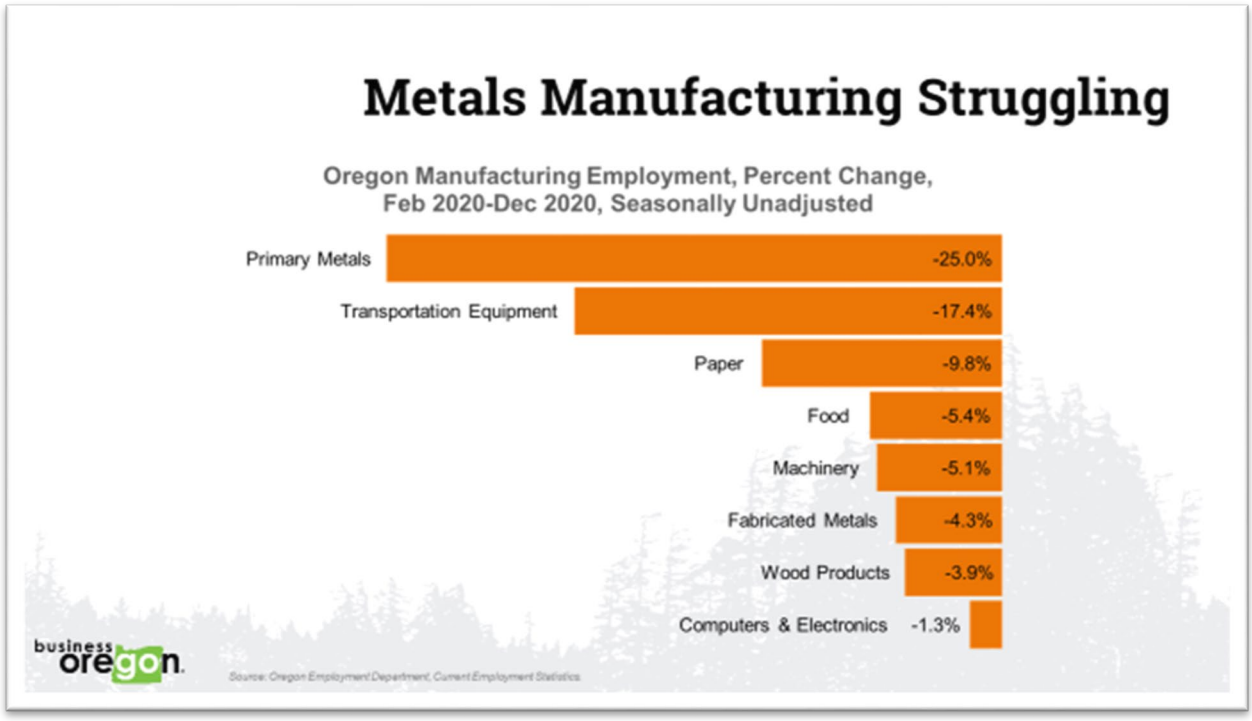
A closure is when an establishment with positive employment in the previous quarter reports zero employment in the current quarter. The closure could be permanent or temporary. A closure is considered permanent or a "death" if the establishment shows no employment for four consecutive quarters. An establishment that closes during the quarter may be a death, but BLS waits three quarters to determine whether it is a permanent closing or a temporary shutdown. Therefore, we don't yet have permanent closure data tied to COVID yet, as there is always a lag of three quarters for the publication of death statistics.

Representative Gomberg: **How does the definition of rural affect small cities?**

Business Oregon adheres to a statutory definition of rural. ORS 285A.010 (14) states "Rural area" means an area located entirely outside of the acknowledged Portland Metropolitan Area Regional Urban Growth Boundary and the acknowledged urban growth boundaries of cities with populations of 30,000 or more.

Senator Beyer: **Can we see more detail on the manufacturing employment sector data, taking a look within manufacturing to see how individual manufacturing sub-sectors are doing?**

Employment change in Oregon's manufacturing subsectors from pre-pandemic February 2020 to December 2020 is shown below. Change is shown as a percentage of employment. All subsectors of manufacturing have lost jobs since February, none more so than primary metals manufacturing.
(Graphic on following page)



Representative Jama: **Are you tracking green jobs created and how they impact our economy?**

As Chris Cummings indicated, we do not currently track jobs and establishments in "green" industries. We've looked at this in the past, and there are several reasons we don't do this.

Across data sources, economic data is organized by industry under NAICS (North American Industry Classification System) codes. These codes don't have specific green industry classifications we can pull data from. This is because many green jobs are located within other industry sectors. For example an architecture firm may have half the firm working on green building, while the rest of the firm focuses on more traditional building design. There's no way to pull out the green jobs from the non-green jobs.

The Bureau of Labor and Statistics (BLS) attempted to create definitions and track green jobs in its reporting for a short time, but no longer does so. Ad-hoc economic research projects can be done using survey methods paired with data collection and analysis to estimate green jobs, but not something that can be reported consistently over time. The Oregon Employment Department also did an analysis but it was not continued.

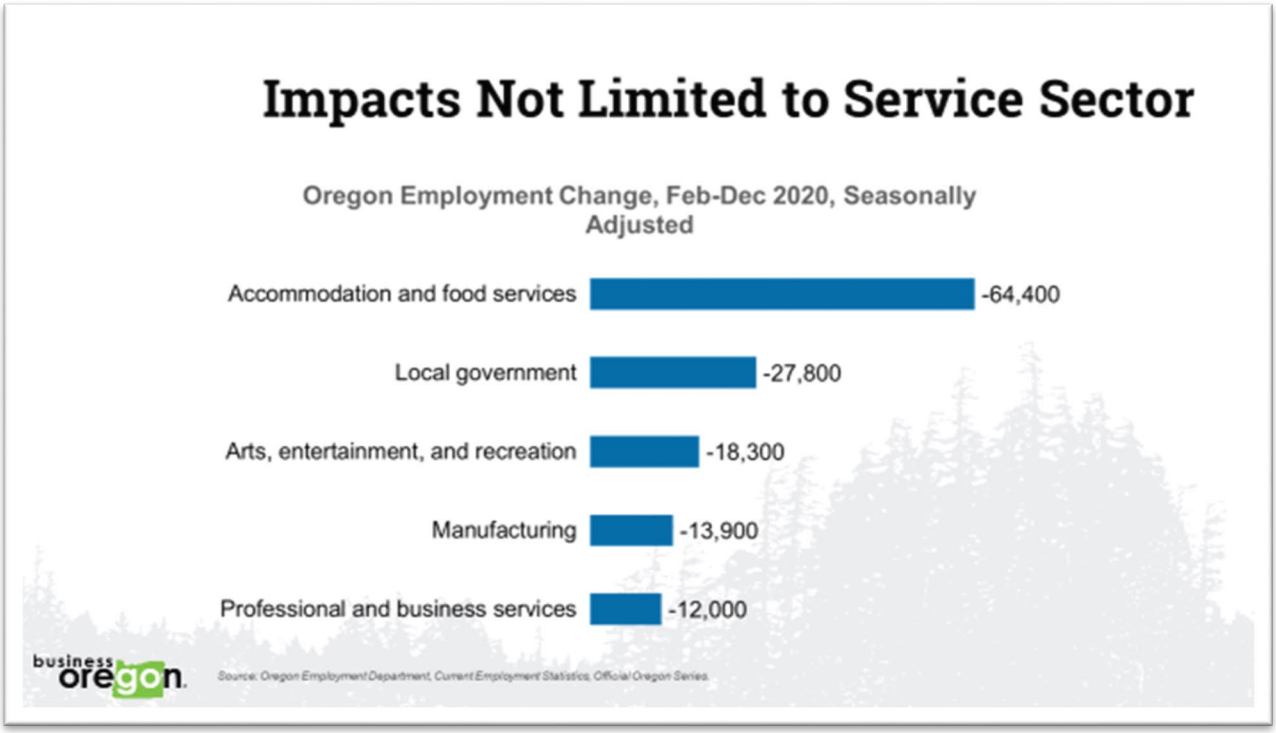
All that said, we certainly work to grow green jobs and industries. There are many clean technology and green businesses in our target industry groups, particularly in Business Services and Advanced Manufacturing.

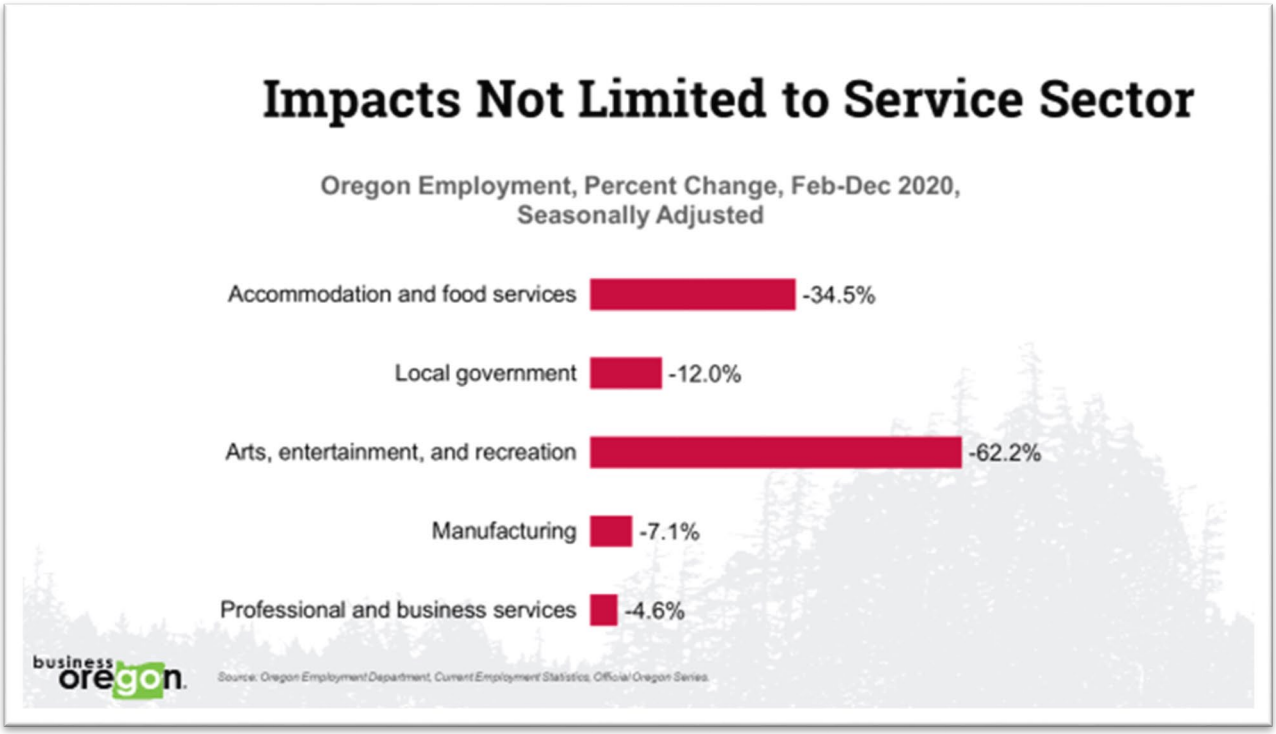
Senator Beyer: **What is your loss ratio?**

In the last five years, our loan write-offs have been zero for our infrastructure finance programs and less than 1% for our business finance programs.

Senator Hansell: **Regarding slide 16, can we see percentage of decline that aligns with the slide showing manufacturing sector job loss?**

Yes, below is the original slide in blue, then an additional slide that displays the percent change of employment within each of the same industry sectors.
(Graphic on following page)





Senator Beyer: **On all the federal grant programs, do allowable administrative costs cover full program admin or does the state need to subsidize?**

For each program included in the 21-23 GRB:

- EDA Grant Funds – administrative allowance will cover our costs.
- Credit Enhancement Fund - the programs where the capital is being deployed (OBDF and CEF) continue to cover payroll and S&S expenses.

- Community Development Block Grants – allowable admin costs do not cover the full cost of program administration. We are allowed a 2% administrative allowance, which we match 1 to 1 with SPWF, then we receive an additional $100,000 in federal funds for admin with no match required.
- Brownfields – allowable admin costs do not cover the full cost of program administration. Federal funds allow Business Oregon to charge for our direct costs associated with managing a specific project. Brownfields planning and policy work is funded with loan repayments.
- National Endowment for the Arts – we use federal funds for programs and grant awards; our staff is funded with General Fund dollars.

Senator Beyer: **Is your revolving loan fund supporting itself or is does it require additional recapitalization? Is that recapitalization just for operations or for the loan fund?**

Our revolving loan funds cover administrative expenses associated with these programs. They do not cover program needs – that requires recapitalization.

Senator Beyer: **The chart on page 36 shows reductions only… would like to see the program funding that remains.**

Oregon Business Development Department
Program Reductions 2021-23 Governor's Budget

Description	Current Service Level	2021-23 Governor's Budget	Reduction	Fund Source
Strategic Reserve Fund	9,218,465	8,611,989	(606,476)	Lottery Funds
Industry Competitiveness Fund	2,958,816	2,468,816	(490,000)	Lottery Funds
Solar Incentive Fund	3,244,128	2,717,334	(526,794)	General Funds
Oregon Manufacturing & Innovation Center	9,112,482	6,378,738	(2,733,744)	Lottery Funds
Small Business Development Centers	4,621,800	2,775,598	(1,846,202)	Lottery Funds
Oregon InC (inflation)	17,991,750	17,854,379	(137,371)	Lottery Funds

Representative Evans**: It would be helpful if Enterprise Zones reported on how many of their businesses start paying property taxes after their abatement sunsets.**

Enterprise Zones are a key tool for our regional development team to use as they work with local partners to retain and expand businesses in Oregon communities. Included on the state of Oregon's transparency website is a table of "Now Taxable Property of Former Enterprise Zone Exemptions." This report includes data from property that is now on the tax rolls after their Enterprise Zone abatement concluded in the prior year.

https://data.oregon.gov/Revenue-Expense/Part-C-Now-Taxable-Property-of-Former-Enterprise-Z/mxv7-8spd/data

This report is also included in the following pages.

All standard Enterprise Zone exemptions last for 3 years, and can be extended to 5 with agreement and approval from the zone sponsor, if certain qualifications apply. Rural long term enterprise zones can provide property tax abatement for 7–15 years, compared to the standard 3 to 5 years. These incentives depend on local approval and minimum levels for investment size, job creation and employee compensation.

A business can use the program again if they expand operations and add property again, along with new jobs, but cannot continue past the period of abatement allowed by law without another expansion project.

Property Now Taxable After E-Zone Exemption Expired Previous Year

Reporting Year	Property Tax Year	Name of Qualified Business Firm	Oregon County	First Year of Exemption Period	Exemption Period (Years)	Assessed Value of Exempt Property in Preceding Year	Estimated Assessed Value for Taxation in Current Year	Estimated Property Taxes to Be Imposed
2020	2020–2021	Glacier 45	Baker	2017	3	$ 64,730	$ 36,170	$ 543
2020	2020–2021	Natural Structures	Baker	2017	3	$ 111,873	$ 136,598	$ 2,049
2020	2020–2021	Peco	Clackamas	2015	5	$ 7,253,444	$ 6,335,131	$ 116,098
2020	2020–2021	Benchmade	Clackamas	2017	3	$ 2,603,480	$ 1,622,631	$ 29,566
2020	2020–2021	Bunzl	Clackamas	2017	3	$ 8,854,644	$ 8,847,036	$ 162,132
2020	2020–2021	J&D Refrigerated Services	Clackamas	2017	3	$ 9,467,215	$ 9,467,215	$ 173,496
2020	2020–2021	Portland Glass	Clackamas	2017	3	$ 2,303,079	$ 2,099,450	$ 38,475
2020	2020–2021	Sock it to Me	Clackamas	2017	3	$ 147,298	$ 121,126	$ 2,614
2020	2020–2021	Cascade Tissue Group	Columbia	2015	5	$ 26,404,200	$ 24,819,948	$ 385,032
2020	2020–2021	Teevin Terminal	Columbia	2015	5	$ 2,611,700	$ 2,454,998	$ 44,907
2020	2020–2021	Southport Lumber Co	Coos	2017	3	$ 4,629,400	$ 4,117,503	$ 40,745
2020	2020–2021	Bas X LLC	Deschutes	2015	5	$ 1,348,767	$ 812,466	$ 14,566
2020	2020–2021	Patheon Development PP	Deschutes	2015	5	$ 271,045	$ 271,045	$ 4,203
2020	2020–2021	PCC Schlosser	Deschutes	2015	5	$ 3,326,210	$ 3,326,210	$ 59,632
2020	2020–2021	Ammunition Development Corp	Deschutes	2016	4	$ 5,847,240	$ 5,847,240	$ 104,829
2020	2020–2021	Utility Trailer of Redmond Total	Deschutes	2016	4	$ 2,604,969	$ 2,604,969	$ 46,701
2020	2020–2021	10 Barrel Brewing Co	Deschutes	2017	3	$ 791,373	$ 791,373	$ 12,271
2020	2020–2021	856 Brewery LLC	Deschutes	2017	3	$ 4,632,613	$ 4,632,613	$ 71,833
2020	2020–2021	Bend Mailing Service	Deschutes	2017	3	$ 983,333	$ 983,333	$ 15,248
2020	2020–2021	Grace Bio Labs	Deschutes	2017	3	$ 336,129	$ 161,342	$ 2,502
2020	2020–2021	Kombucha Mama	Deschutes	2017	3	$ 42,899	$ 42,899	$ 665
2020	2020–2021	Kreft LLC	Deschutes	2017	3	$ 64,149	$ 64,149	$ 995
2020	2020–2021	McConnell Labs PP	Deschutes	2017	3	$ 186,755	$ 186,755	$ 3,348
2020	2020–2021	Metabolic Maintenance	Deschutes	2017	3	$ 102,443	$ 102,443	$ 1,664
2020	2020–2021	Monkless Brewing LLC	Deschutes	2017	3	$ 38,594	$ 38,594	$ 598
2020	2020–2021	PK Thompson Guitars	Deschutes	2017	3	$ 21,760	$ 21,760	$ 353
2020	2020–2021	Poltex	Deschutes	2017	3	$ 46,240	$ 46,240	$ 829
2020	2020–2021	Quicksilver Contracting	Deschutes	2017	3	$ 3,098,297	$ 3,098,297	$ 51,927
2020	2020–2021	Silver Moon Brewing Total	Deschutes	2017	3	$ 161,712	$ 161,712	$ 2,899
2020	2020–2021	WakeMakers LLC PP	Deschutes	2017	3	$ 38,146	$ 38,146	$ 591
2020	2020–2021	Worthy Brewing LLC PP	Deschutes	2017	3	$ 1,003,750	$ 1,003,750	$ 15,564
2020	2020–2021	Fred Wahl	Douglas	2017	3	$ 5,332,839	$ 5,332,839	$ 75,735
2020	2020–2021	Orenco Systems Inc R137234	Douglas	2017	3	$ 34,290	$ 34,290	$ 337
2020	2020–2021	Orenco Systems Inc R140055	Douglas	2017	3	$ 627,260	$ 627,260	$ 7,832
2020	2020–2021	Swanson Group Mfg LLC	Douglas	2017	3	$ 9,201,570	$ 9,201,570	$ 9,053
2020	2020–2021	Hood River Juice	Hood River	2017	3	$ 104,280	$ -	$ 1,500
2020	2020–2021	Nichols Hotel LLC	Hood River	2017	3	$ 6,768,460	$ 8,008,703	$ 119,918
2020	2020–2021	The Renewal Workshop	Hood River	2017	3	$ 489,927	$ 484,048	$ 7,248
2020	2020–2021	Diode Laser Concepts	Jackson	2015	5	$ 759,680	$ 759,680	$ 11,582
2020	2020–2021	Linde Gass	Jackson	2015	5	$ 9,960,590	$ 9,960,590	$ 147,449
2020	2020–2021	Big Tree Farms	Jackson	2017	3	$ 901,590	$ 901,590	$ 14,441
2020	2020–2021	Rogue Valley Micro Devices	Jackson	2017	3	$ 343,176	$ 343,176	$ 5,232
2020	2020–2021	Aero Air (dba Erickson Aero Tanker)	Jefferson	2015	5	$ 4,351,115	$ 3,195,180	$ 64,290
2020	2020–2021	First Call Resolution LLC	Josephine	2017	3	$ 19,362	$ 18,394	$ 246
2020	2020–2021	Taylor's Saugage INC	Josephine	2017	3	$ 70,780	$ 63,702	$ 740
2020	2020–2021	Freemont Mill	Klamath	2017	3	$ 495,550	$ 436,986	$ 5,157
2020	2020–2021	MCX	Klamath	2017	3	$ 100,207	$ 100,207	$ 1,721
2020	2020–2021	4 Him Food Group	Lane	2017	3	$ 831,488	$ 856,433	$ 14,232
2020	2020–2021	Ardelis (Rolf Prima)	Lane	2017	3	$ 5,977	$ 6,156	$ 105
2020	2020–2021	King Estate Winery	Lane	2017	3	$ 151,459	$ 156,003	$ 2,814
2020	2020–2021	MW Stern (Soup Nation)	Lane	2017	3	$ 101,485	$ 104,530	$ 2,048
2020	2020–2021	Ninkasi Brewing Co	Lane	2017	3	$ 88,329	$ 90,979	$ 1,783
2020	2020–2021	Oregons Only Organics	Lane	2017	3	$ 907,983	$ 935,222	$ 17,254
2020	2020–2021	Oregon Brewing Company	Lincoln	2017	3	$ 2,609,690	$ 2,181,700	$ 39,660
2020	2020–2021	Betaseed INC	Linn	2015	5	$ 6,157,200	$ 5,888,000	$ 84,198
2020	2020–2021	MTI Partners LLC	Linn	2015	5	$ 1,394,169	$ 1,322,000	$ 23,135
2020	2020–2021	Albany Box Company	Linn	2017	3	$ 122,763	$ 114,000	$ 1,995
2020	2020–2021	Entek International	Linn	2015	5	$ 26,359,460	$ 24,291,000	$ 429,951
2020	2020–2021	Pacific Cast Tech	Linn	2015	5	$ 419,250	$ 395,000	$ 6,913

2020	2020–2021	Kar Investments (Big Wood Grindin	Linn		2017	3	$	391,808	$	379,000	$ 5,041
2020	2020–2021	McCool Millworks	Linn		2017	3	$	474,217	$	444,000	$ 7,548
2020	2020–2021	Target Corporation	Linn		2017	3	$	8,579,307	$	8,157,000	$ 142,748
2020	2020–2021	Jamieson Produce INC	Malheur		2017	3	$	1,219,910	$	1,256,507	$ 20,873
2020	2020–2021	Henningsen Cold Storage	Marion		2015	5	$	19,250,990	$	18,159,538	$ 354,794
2020	2020–2021	Reser's, Don Pancho	Marion		2017	3	$	2,756,130	$	2,591,632	$ 50,634
2020	2020–2021	Taylor Metal (Connext)	Marion		2017	3	$	740,650	$	728,703	$ 14,237
2020	2020–2021	Truit Brothers	Marion		2017	3	$	1,788,590	$	1,661,540	$ 32,463
2020	2020–2021	Ulven Forge	Marion		2017	3	$	287,720	$	248,840	$ 3,596
2020	2020–2021	GK Machine	Marion		2017	3	$	1,476,900	$	1,384,841	$ 17,081
2020	2020–2021	Willamette Valley Lumber	Marion		2017	3	$	802,650	$	753,645	$ 11,514
2020	2020–2021	Willamette Valley Pie Company	Marion		2017	3	$	24,601	$	24,023	$ 404
2020	2020–2021	Amazon	Morrow		2015	5	$	151,571,650	$	145,508,784	$ 2,037,254
2020	2020–2021	Amazon	Morrow		2017	3	$	207,306,970	$	147,187,949	$ 2,060,764
2020	2020–2021	Boardman Foods	Morrow		2017	3	$	7,986,570	$	7,187,913	$ 102,872
2020	2020–2021	Lamb Weston	Morrow		2017	3	$	5,865,840	$	5,572,548	$ 107,199
2020	2020–2021	[East Portland Enterprise Zone]	Multnomah		2015	5	$	8,276,344	$	4,853,280	$ 101,738
2020	2020–2021	[Gresham Enterprise Zone]	Multnomah	[combined]	[various]		$	38,532,744	$	38,532,744	$ 705,676
2020	2020–2021	[Portland Enterprise Zone]	Multnomah		2015	5	$	48,565,753	$	48,565,753	$ 951,227
2020	2020–2021	Hanard Machine (ATI)	Polk		2015	5	$	1,239,220	$	1,158,380	$ 21,636
2020	2020–2021	First Call Resolution	Polk		2017	3	$	26,099	$	26,099	$ 483
2020	2020–2021	MAK Metals/KAM Properties	Polk		2017	3	$	64,500	$	64,500	$ 913
2020	2020–2021	Pelican Brewing Inc	Tillamook		2015	5	$	73,240	$	68,677	$ 820
2020	2020–2021	Werner Gourmet Meat Snacks	Tillamook		2017	3	$	1,288,980	$	1,208,677	$ 14,433
2020	2020–2021	Hill Meat	Umatilla		2017	3	$	5,575,780	$	5,490,190	$ 105,184
2020	2020–2021	VADATA (Amazon)	Umatilla		2015	5	$	61,021,560	$	57,360,266	$ 910,101
2020	2020–2021	Oregon Grain	Umatilla		2017	3	$	150,000	$	146,000	$ 2,797
2020	2020–2021	Rocky Mt. Pipe (ATKORE)	Umatilla		2017	3	$	2,339,590	$	2,246,006	$ 43,030
2020	2020–2021	VADATA (Amazon)	Umatilla		2017	3	$	65,572,150	$	65,572,150	$ 1,040,394
2020	2020–2021	Integrated 3D	Wasco		2016	4	$	3,435,436	$	3,828,425	$ 75,706
2020	2020–2021	15 Mile Ventures	Wasco		2017	3	$	83,960	$	84,328	$ 1,668
2020	2020–2021	Sedition Brewing Co.	Wasco		2017	3	$	181,672	$	184,853	$ 3,655
2020	2020–2021	Adobe Systems Inc	Washington		2015	5	$	3,373,570	$	3,373,570	$ 57,951
2020	2020–2021	Alliance Packaging LLC	Washington		2015	5	$	19,226,070	$	19,226,070	$ 330,265
2020	2020–2021	Flexential Colorado Corp. (Aloclek)	Washington		2015	5	$	5,548,500	$	5,548,500	$ 95,312
2020	2020–2021	Greenspace LLC	Washington		2015	5	$	3,313,480	$	3,313,480	$ 56,919
2020	2020–2021	Infomart Portland LLC	Washington		2015	5	$	118,420	$	118,420	$ 2,034
2020	2020–2021	Jireh Semiconductor Inc	Washington		2015	5	$	523,310	$	523,310	$ 8,989
2020	2020–2021	Lithex Inc	Washington		2015	5	$	163,570	$	163,570	$ 2,810
2020	2020–2021	Netapp Inc	Washington		2015	5	$	1,045,010	$	1,045,010	$ 17,951
2020	2020–2021	Probuild Company LLC	Washington		2015	5	$	1,996,690	$	1,996,690	$ 41,181
2020	2020–2021	Salesforce.com Inc	Washington		2015	5	$	12,740	$	12,740	$ 219
2020	2020–2021	Umpqua Bank	Washington		2015	5	$	3,100,660	$	3,100,660	$ 55,519
2020	2020–2021	Vernier Properties LLC	Washington		2015	5	$	1,757,710	$	1,757,710	$ 36,252
2020	2020–2021	Virtual Supply Inc	Washington		2015	5	$	48,590	$	48,590	$ 1,002
2020	2020–2021	Chaucer Foods	Washington		2017	3	$	110,690	$	110,690	$ 1,963
2020	2020–2021	Consumer Cellular Inc	Washington		2017	3	$	650,510	$	650,510	$ 11,324
2020	2020–2021	Lieb Foods LLC	Washington		2017	3	$	1,653,470	$	1,653,470	$ 29,318
2020	2020–2021	A.R.E. Manufacturing	Yamhill		2017	3	$	527,680	$	336,743	$ 5,200
	Total Firms:		**108**				**$**	**858,229,617**	**$**	**773,718,904**	**$ 12,206,134**

Source: *https://data.oregon.gov/Revenue-Expense/Part-C-Now-Taxable-Property-of-Former-Enterprise-Z/mxv7-8spd/data*

Date: **March 2, 2021**

To: **Joint Committee on Ways & Means Subcommittee on Transportation and Economic Development**

From: **Nick Batz, Business Oregon**

RE: **Follow up to Day Two budget presentation questions**

Co-Chair Gomberg and Co-Chair Beyer,

Please accept the following agency responses (below and attached) to committee questions asked during Business Oregon's budget presentation on March 1st, 2021.

Regards,

Nick Batz

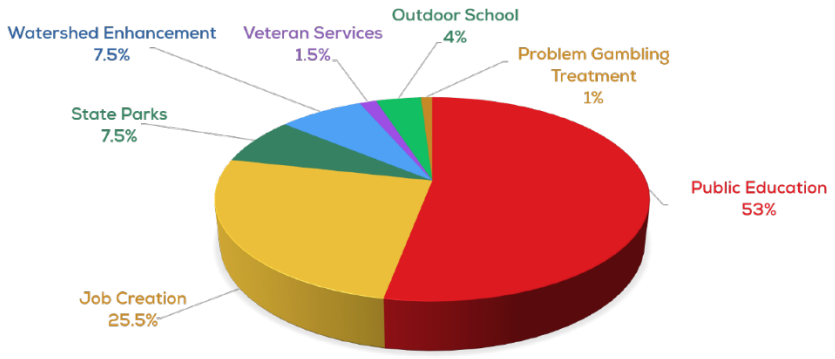
Senator Beyer: **Where have SIPs been used in rural areas?**

SIP is primarily used in rural areas, at the end of this document is the most recent report with current program users. There are four new SIP projects that have been approved but have not yet started using the program. Once they do, they will appear on future SIP annual reports. Three of these are rural projects:

County	Name of Proposed Project	Estimated Total Investment	Anticipated First Tax Year of Exemption	Date Approved
Morrow County	Wheatridge – Morrow - AMENDED	$854,500,000	2020	7/19/2019
Morrow County	Orchard Wind Farm	$51,432,838	2021	9/20/2019
Lake County	Obsidian Solar Center	$533,000,000	2023	12/13/2019
Clackamas County	Columbia Distribution Warehouse	$68,000,000	2021	5/22/2020

Senator Hansell: **Are most of your incentives lottery funded or general funded?**

As discussed during our budget presentation, most of our incentives are funded with lottery funds. The below chart is a summary of where Oregon's lottery funds flow. The yellow slice goes both to Business Oregon and directly to counties for economic development purposes.



Senator Hansell: **Is the Oregon funding for SBDCs a straight one-to-one match? If so, by reducing state funding are we reducing the amount of federal funds they receive?**

SBDCs: Based on the 2021 federal SBA funding levels, the match is up to $1,563,248/year or $3,126,496/biennium. Federal funding can be matched by non-federal sources except for "fees/training program income" and SBDCs do not charge for 1:1 assistance. Each center is asked to provide a level of local funds to match federal and state funds and more rural communities would have a hard time making up for lost state and/or federal funds.

OMEP: For every one dollar OMEP puts in, the National Institute of Standards and Technology (NIST) puts in one dollar, via a statutory 50% base award match requirement. During COVID-19, the NIST match was temporarily waived for all MEP centers. OMEP took advantage of that relief so OMEP was able to draw the full federal award. If they didn't have this cost share relief, thru February of this fiscal year, OMEP would have been under-matched by $174K so under normal circumstances that would have been left on the table. The cost share relief is temporary and will go back to 1:1. Federal funding can be matched by any non-federal source (including state funding, client revenue, etc.).

GCAP: The Government Contract Assistance Program is funded on an annual basis from September 01 – August 31. GCAP anticipates that their match ratio will remain about 2 to 1 – two federal dollars to 1 non-federal dollar. GCAP cannot charge for counseling or training and any fees they can collect cannot count toward their non-federal math. GCAP has historically partnered with other targeted business assistance entities, like Pacific Northwest Defense Coalition and the Hispanic Metro Chamber. However their contributions only support a specific counselor housed at their sites, and not the overall statewide program. The only non-federal cash they use for match is from the state.

Senator Beyer: **Does a reduction in state funds for GCAP leave federal funds on the table? How much federal money is Oregon leaving on the table by not maximizing our state funding to your programs?**

SBDC: The 2021-23 GRB of $2,625,000 leaves approximately $501,496 for the biennium on the table with State matching funds alone.

OMEP: None currently due to the temporary cost share relief. There is a budget proposal before Congress to increase the NIST base award funding for all MEP centers from $150M to $245M (allocated based on # of manufacturers per state). The Biden Administration has proposed quadrupling the amount of NIST MEP funding to $600M. It is unclear if this increase will be implemented but OMEP is assuming that any increase will require OMEP to match the increase in award to draw the funds.

GCAP: As a statewide program, GCAP can access up to $1,000,000 in federal dollars per year. This current year, GCAP accessed $623,000. Therefore, GCAP is leaving $377,000 on the table per year or $754,000 for the biennium.

Senator Beyer: **What is the criteria to receive a Rural Opportunities Initiative?**

Rural Opportunities Initiative (ROI) is run as a competitive grant program evaluated by a selection committee that includes the following partners: The Ford Family Foundation, Oregon Native American Chamber, the Small Business Development Center, USDA Rural Development, Oregon Main Street, Regional Solutions, and Travel Oregon. Criteria for selection includes: organizational capacity, demonstrated need, community buy-in, a plan for fulfilling the identified need, an understanding of ecosystem building principals, and budget.

Senator Beyer: **Have you done any research into the effectiveness of the innovation programs?**

Yes, attached is the Oregon InC budget note response and budget note response Q&A document that provides information on the effectiveness of the Signature Research Centers.

Oregon Strategic Investment Program (SIP) Projects based on 2020 Annual Employment and Payroll Reports*

Business firm – Project name (In order of determination by the Oregon Business Development Commission, following county process)	County	2018–19 Taxes paid on project property †	Taxes saved on exempt property †	Special SIP fees paid in 2019 †	Net revenue foregone locally †	Year out of 15-year exemption period †	Total investment by end of 2018 †	Net investment made since 2018	Newly created jobs ‡	Retained jobs ‡	Average wages/ salary (all jobs) ‡	Average wages and benefits (all jobs) ‡	State personal income tax revenue ‡
Intel Corporation – SIP2005	Washington	$2,231,000	$131,902,000	$39,923,000	$70,083,000	9th	$24,984,000,000	$13,640,000	2,482	7,246	$135,725	$155,712	$85,493,000
Georgia-Pacific Consumer Ops. LLC – Wauna Paper Mill–#7	Clatsop	$327,000	$2,451,000	$500,000	$1,544,000	11th	$465,000,000	$31,940,000	54	0	$91,056	$102,174	$278,000
Genentech USA, Inc. – Hillsboro Fill Finish Facility	Washington	$3,435,000	$2,261,000	$2,109,000	-$223,000	9th	$739,000,000	$43,110,000	530	0	$129,135	$140,861	$4,429,000
EDP Renewables NA/Telocaset..., LLCs – Elkhorn Valley	Union	$278,000	$770,000	$193,000	$449,000	11th	$206,000,000	-$530,000	9	0	$67,347	$80,076	$33,000
Avangrid Renewables – Klondike Wind Power III	Sherman	$529,000	$3,682,000	$2,731,000	$340,000	11th	$459,000,000	-$2,790,000	17	0	$81,193	$691,233	$77,000
Portland General Electric Company – Biglow Canyon Windfarm	Sherman	$513,000	$9,865,000	$6,374,000	$1,853,000	11th	$970,000,000	$16,110,000	26	0	$67,435	$97,299	$94,000
Invenergy, LLC – Willow Creek Energy	Gilliam–Morrow	$320,000	$489,000	$146,000	$262,000	10th	$130,000,000	$1,130,000	6	0	$57,212	$67,874	$18,000
Avangrid Renewables – Hay Canyon & Star Point Wind Farms	Sherman	$513,000	$1,915,000	$1,209,000	$388,000	10th	$329,000,000	-$1,660,000	11	0	$70,110	$94,649	$43,000
Avangrid Renewables – Pebble Spgs. & L. Juniper II A-B Wind	Gilliam	$346,000	$2,728,000	$2,129,000	$146,000	10th	$537,000,000	-$2,860,000	19	0	$74,975	$101,217	$77,000
Exelon Corporation – Echo Windfarms	Morrow–Umatilla	$448,000	$419,000	$195,000	$154,000	10th	$108,000,000	–	8	0	$69,291	$91,304	$31,000
Eurus Energy America Corporation – Combine Hills II	Umatilla	$321,000	$425,000	$194,000	$160,000	9th	$137,000,000	$40,000	6	1	$52,559	$58,455	$18,000
NEXTera Energy Resources, LLC – Stateline 3 Wind	Umatilla	$473,000	$328,000	$341,000	-$67,000	9th	$188,000,000	–	4	0	$77,469	$127,135	$18,000
Caithness Corporation – Shepherds Flats–Gilliam County	Gilliam	$308,000	$8,267,000	$3,845,000	$3,050,000	7th	$965,000,000	$1,080,000	43	0	$75,585	$107,330	$176,000
Caithness Corporation – Shepherds Flats–Morrow County	Morrow	$422,000	$3,390,000	$1,695,000	$1,132,000	7th	$278,000,000	$370,000	14	0	$75,585	$107,330	$57,000
Portland General Electric Company – Carty Generating Station	Morrow	$340,000	$6,999,000	$2,224,000	$3,613,000	2nd	$630,000,000	-$117,820,000	26	0	$132,011	$173,616	$225,000
Portland General Electric Company – Port Westward II	Columbia	$322,000	$2,742,000	$1,350,000	$937,000	4th	$303,000,000	$2,810,000	32	0	$129,524	$167,799	$272,000
Intel Corporation – SIP2014–1	Washington	$1,810,000	$33,361,000	$4,650,000	$23,173,000	2nd	$1,686,000,000	$1,268,820,000	1,885	0	$135,725	$155,712	$16,569,000
TOTAL|AVERAGE		**$13,000,000**	**$212,000,000**	**$70,000,000**	**$107,000,000**		**$33.1 billion**	**$1.3 billion**	**5,174**	**7,247**	**$134,378**	**$154,967**	**$108,000,000**

* For purposes of "gain-share" distributions to local governments under 2007 law, rather than verification of a statutory hiring requirement, of which there is none.

† For latest property tax year ending on prior June 30; 15-year exemption is on project property in excess of taxable portion, which begins at $25, $50 or $100 million and rises 3% per year; taxes paid are on taxable portion and possibly other associated property. Foregone revenue adjusted using standard factor for the approximately one-sixth that is shifted to other taxpayers under local levies, as well as subtracting special payments that consist of the statutory community service fee and locally negotiated amounts.

‡ Newly created and retained jobs (full-time equivalent–2,080 hours/year) associated directly with project, as of previous calendar year, excluding (indirect) jobs with or for construction, vendors, suppliers, tangential company operations, or even on-site contractors, other than a general project operator. State tax revenues based on wage data and latest average tax rates by income level from Department of Revenue statistics; does **not** include revenue associated with indirect jobs or any induced/multiplier effect of employee spending.

Source: Business Oregon (Oregon Business Development Department).

April 24, 2020

Oregon Business Development Department,
Oregon Innovation Council Budget Note

This report has been prepared in response to the budget note included with the Oregon Business Development Department's (OBDD's) 2019-21 budget. OBDD worked with the Oregon Innovation Council (Oregon InC) and the Signature Research Centers (SRCs) to respond. In addition to this introduction, each SRC has submitted information specific to their work and results.

The budget note states:

> *The OBDD, in collaboration with the Oregon Innovation Council, shall evaluate the feasibility and impact of eliminating ongoing state support for the three Signature Research Centers: ONAMI, OTRADI, and VertueLab. The Department shall report its findings to the Emergency Board in September, 2020.*

Budget note response:

Innovation is a clear driver of economic competitiveness. It fuels the creation of new technologies, companies and industries. It attracts talent, creates high-wage jobs, and ultimately drives economic growth. States that prioritize sustained investment in innovation and excel across a broad range of indicators are better positioned to compete long-term in the global economy and will be better equipped to recover from the current economic crisis.

The Oregon Innovation Council (Oregon InC) is Oregon's premier entity that prioritizes an innovation economy through development of a State Plan for Innovation and Economic Competitiveness, policy and directing the state's investments in innovation-based economic development. Oregon InC is a public-private partnership that helps create new jobs and new companies, facilitates private investment in Oregon startups, brings federal innovation funding back to the state and contributes to the diversification of Oregon's economy. Investments in innovation are critical for economic health because these investments help new companies grow high-wage jobs. Oregon InC was created in 2005 as the culmination of a statewide call to action and discussion, led by the Governor and Legislature and more than 40 leaders from the private sector, research universities and government. The charge was to create a new way to build innovation into the DNA of how Oregon does business.

Oregon's three SRCs were originally funded by Business Oregon in 2007. They target three sectors in which Oregon has strategic advantages and high-growth potential exists – those being materials science, biosciences and clean technology. Public support for the three SRCs has been a strategic and wise investment, and Oregon is in a stronger economic position because of the accomplishments of SRCs. Together, the SRCs have helped companies leverage about $100 million in state funding to bring in approximately $1.1 *billion* in federal and private funding for commercialization of technology in Oregon. This is a return of approximately 10:1 for the state's investment to date. In addition, the SRCs provide specialized and critical support services to entrepreneurs across the state that cannot be replaced by other groups currently in Oregon. SRCs provide cluster-specific mentoring, access to private and federal capital resources, business coaching, go-to market support, and other necessary support for science and research-based startups with high growth potential. The SRCs save these startups countless hours and dollars so that they can focus on developing their technologies and their businesses. They have proven to be a critical piece in Oregon's innovation economy.

With that background in mind, we will now address the *"feasibility and impact of eliminating ongoing support for the three SRCs…"*

Each biennium, as Oregon InC considers the content of the State Plan for Innovation and Economic Competitiveness, Oregon InC reviews goals, progress and analyzes current programs and investments to assess their effectiveness and recommends programs and budgets for the next biennium. In the 2015-17 biennia, the Council undertook a deep review of its programs, which resulted in changes to most portfolio programs. During this review, the Council determined that materials sciences, biosciences and clean tech were still the most strategic areas to direct sustained Oregon InC resources in order to continue to build off of the three existing SRCs and further facilitate successes that were being achieved in the development of high-growth, high-wage companies.

The effort did include changes to the SRCs' approaches and budgets, however, to better reflect conditions at the time. The Council views this review and optimization process as a key responsibility as it advises the state on the best use of resources. In addition, by statute, Oregon InC utilizes an audit committee to evaluate the performance of SRCs on a quarterly basis and has ensured that SRCs have sufficiently met their goals and benchmarks. The audit committee has the authority to recommend halting funding for programs if the situation warrants.

This year, as part of the Oregon Innovation Plan work that Oregon InC is undertaking, all portfolio programs, including the SRCs, will yet again be evaluated in a broader context of state- and nation-wide competitiveness, economic resiliency and return on investment. The outcome of this Innovation Plan work will be a 10-year statewide plan and roadmap for innovation. The intent is to share this plan with the legislature during the 2021 session.

To address the first question about the *"feasibility"* of eliminating ongoing state support for the SRCs, there are no significant impediments to the feasibility of halting funding to these organizations. Eliminating funding would lead to significant impacts, such as job losses, diminished small business support, etc. as discussed below, but it is feasible to eliminate state funding going forward.

Defunding the SRCs would signal to entrepreneurs that Oregon doesn't view innovation as a critical component of a robust economy, particularly one looking to support the next generation of employers. That said, one of the Council's roles is ensuring the SRCs' activities remain as effective and relevant as possible. The Council regularly looks at the SRCs for ways to adjust their activities to be better at supporting Oregon's innovators. Changes in the SRCs approaches to supporting innovation are reasonable and expected, but the complete defunding of the SRCs would be an indication that the state is retreating from supporting innovation and would remove key players from the overall innovation ecosystem in the state.

Oregon's ability to recover from the current economic crisis will depend in large part upon our capacity to evolve our current programming to meet new demands. The state's ability to foster the formation of innovation-based businesses and sustain their growth as they sale-up and generate new, high-paying jobs for our fellow citizens will in many ways dictate how our economy is positioned for growth in the coming decade.

In terms of the "impact" of eliminating state support, there would be real and significant impact for the State if these groups were eliminated. The SRCs are key service providers for innovative Oregon start-up companies. They have supported well over 300 early-stage companies to date, and without SCRs these companies would not have access to specialized technical assistance. In addition, they bolster the capabilities of the State's research universities by supporting researchers who want to translate research into viable products and businesses and by making connections to facilitate technology licensing agreements.

In closing, as stated above, while elimination of the SRCs is feasible, there would be a significant impact of doing so. These programs have provided a significant return on investment and investments in innovation-based

economic development in the post-COVID-19 world are even more critical than they were before. Support for the SRCs remains vital if Oregon wants to maintain its focus on growing technology and talent in certain, key emerging industry sectors. Eliminating SRC funding now would cause a dramatic reduction in the support system in the state for emerging small businesses in these sectors. Continuing to support the SRCs will ensure that Oregon is best positioned to grow its economy at an accelerated rate, just as we did after the Great Recession when the Legislature recognized the importance of maintaining investments in innovation during those difficult budgetary conditions. Oregon's ability to recover from this economic crisis will depend in large part upon its capacity to foster the formation of innovation-based businesses and sustain their growth as they scale-up and generate new, high-paying jobs.

Budget Response, ONAMI

Introduction to ONAMI:
ONAMI is a uniquely qualified team of technology and manufacturing executives (ex HP, FEI, Tektronix, Life Technologies, CH2M Hill), startup CEOs/founders of at least 10 companies, and professional investors in dozens of startups focused on disruptive technologies arising from science and research. We can provide, at little or no cost to entrepreneurs, a pre-company and pre-investment consulting/networking/mentoring service that no startup could afford on its own, and can be competent in just about any technical field – critical in a small state/market which nevertheless has great technology diversity.

History/mission:
ONAMI began its earliest efforts in late 2003 as the OCKED (Oregon Council for Knowledge and Economic Development, predecessor of Oregon InC) - recommended pilot Signature Research Center for "Multiscale Materials and Devices", soon renamed "Nanoscience and Microtechnologies", with the same meaning. This was found to be the biggest overlap among three factors: industry strength (we had global leadership assets in Intel semiconductor manufacturing, HP inkjet, Mentor Graphics, Xerox, and the rest of the "silicon forest" value chain), university research strengths (not nearly as notable or clear in areas with commercial potential) and "line of sight" to future growth markets that would furnish capital and create jobs in Oregon.

At the time, there was no active early stage venture capital in Oregon (Northwest Tech Ventures was started at the same time and also received economic development funds) and there was very little entrepreneurship activity or culture in the state's 4 research universities, which also needed better facilities and ambitious new faculty in order to grow into Oregon's fair share of federally funded research, particularly in the hot/trendy/well-funded area of "nanotechnology". Out of necessity, ONAMI first focused on accelerating research growth and exploited both the nanotechnology trend and the possibility of securing congressional earmark funding via unprecedented collaboration (including lobbying) among OHSU, OSU, PSU and the Pacific Northwest National Laboratory. The effort was wildly successful (see graphic), as were targeted investments in faculty start-up packages, open (i.e. to all researchers, industry and startups) university core facilities and a competitive proposal matching program that was the first predecessor of the current University Innovation Research Fund.

ONAMI's first Signature Faculty Fellow, Dr. Mas Subramanian of OSU, used start-up funds from ONAMI to discover the first new blue pigment in 200 years. "YInMn blue" also reflects infrared light, and is now approved by the EPA for commercial roofs. Energy savings and carbon reduction potential is very large.

We used $15M in state funds to leverage over $133M in federal funds and at the same time set the universities up for much of the ongoing S&T research funding strength they enjoy today. (Much) more detail can be supplied, but these early efforts 2003-2009 (Microtechnology-based Energy and Chemical Systems; Safer Nanomaterials and Nanotechnology; Nanoelectronics, Nanometrology and Nanomedicine; and Sustainable Materials Chemistry) also set the stage for many start-up companies– including Inpria, Valliscor, DeFunkify, and Pellucere.

Research Financial Summary (FY05-15):

- $4,380,000 for 12 signature researcher start-up fund awards
- $7,633,476 research matching funds, leveraging $78,497,275 in competitive funding
- $55,000,000 total congressional appropriations for 4 collaborative earmarks
- $2,874,855 shared facility support

ONAMI started with an aspiration, but not yet an effective method, for commercialization and private sector job creation. We quickly concluded that the essential means of doing this is start-up companies financed by risk capital and/or early revenue. We began our successful and nationally recognized (2012 Excellence in TBED Award from SSTI, numerous presentations for the National Governors Association) GAP Fund in late 2006. After starting out as a grant fund – like SBIR/STTR but with flexible use of funds, milestone-tranching and intensive engagement from our domain expert EIRs – the ONAMI GAP fund began taking interest/equity in technology and companies once we were sure we could do so without jeopardizing future investment.

The GAP fund results were outstanding and we have often been cited as a national model for what is now standard in most state and large university commercialization programs.

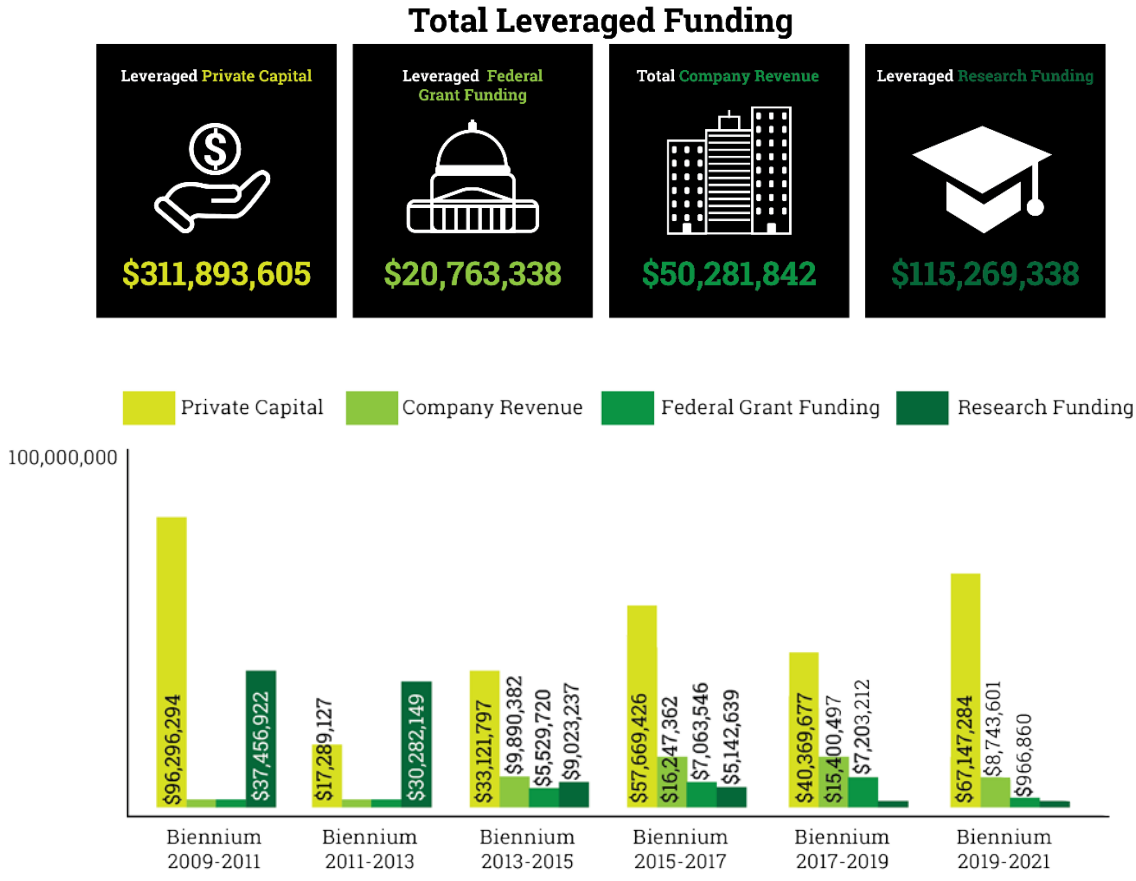
Financial Summary of Commercialization (FY07-present):

- Over $383M in leveraged funds deployed in Oregon
- Creating more than 384 Oregon jobs.
- $10,985,664 gap grants in support of 52 Oregon startups
- $1,177,312 follow on projects or direct investments in portfolio companies
- $985,343 for 25 graduate student internships in 18 portfolio companies
- $721,344 in cash returns to ONAMI as well as significant unrealized equity value in portfolio companies

ACHIEVING OREGON'S ECONOMIC DEVELOPMENT GOALS

ONAMI Funding Portfolio:

ONAMI's gap fund portfolio leverage is broken out by biennium as follows, including private capital, product and service revenue, and federal grants (SBIR, STTR, DOE, DOD, etc.) These amounts do not include another ~$1.1B raised for company operations outside of Oregon.



There is nothing more effective for economic development – or more neglected by the private capital markets – than seed and pre-seed capital investment in university spinouts and other deep science startups. These results show that pairing technology initiatives with gap funding has great leverage.

Metrics

ONAMI's most consistent, key metric has been financial leverage jobs. Start-up/spinout company jobs are an important metric as well, but a lagging indicator given the time it takes startups to create significant job numbers.

Success Stories at different stages of company development

ONAMI has generally provided the first money into its portfolio companies, and often involved in team and company formation. We're particularly proud that Inpria of Corvallis, a 2007 OSU spinout for which ONAMI found the CEO and provided gap funding/facility access grants/graduate intern, has raised $75M in capital and become a globally important semiconductor materials company which owns a technology that is essential for continued Moore's Law scaling. ONAMI also put the first (2012) funding into Energy Storage Systems of Wilsonville, which has raised $45M in capital to create the word's' lowest cost and greenest energy storage technology (iron flow battery). DeFunkify, Nemametrix, Tomegavax, Valliscor, AbSci, Onboard Dynamics, Agility Robotics, Diatomix, Liquid Wire are also excellent examples of successful startups....see our portfolio and news pages for more examples.

Perhaps Liquid Wire of Beaverton is the quintessential ONAMI success story. We'll let founder/CEO Mark Ronay tell it in his own words:

> *"Liquid Wire would not be here if it weren't for both the Launch/GAP funding and the EIR program. In the 4 years since founding Liquid Wire I've met many CEOs of materials and hardware companies. All of them report the same: early stage funding is essentially unavailable and there is not a strong culture of entrepreneurialism in the materials and chemistry fields. The most successful companies come out of a small handful of top ranked R&D universities that have the infrastructure in place to fund development up to the point where its commercially attractive. All of these universities have strong relationships with dedicated incubators. It's a proven system and ONAMI is putting it in place here in Oregon.*
>
> *"ONAMI provides something that no other Oregon accelerator or fund does: Dedicated investment into highly technical businesses that other funders don't have the capacity to evaluate and the EIR program. I cannot overstate how much impact that combination has. John Brewer provided critical guidance and encouragement to what was otherwise an entirely technical team, while the funding provided resources to actually follow through on the business plans that eventually led to our Series A. In 2016 Liquid Wire was an interesting research program at Portland State University. Today we employ 15 people in Oregon and have attracted over $10 million dollars in out of state funding. That wouldn't have happened without ONAMI and I'm really concerned to hear that the future of the organization is in doubt."*

Liquid Wire and top tier venture investor Deerfield Management approved announcement of the $10M equity investment on July 3, 2020.

Geographic and DEI impacts of our work/companies:
Science-based companies are more prevalent in major metro areas and university towns, which is why ONAMI's portfolio is largely found in Washington (5), Multnomah (15), Benton (17), Lane (8), Clackamas (2), Linn (1), Yamhill (1) and Deschutes (3) counties.

One of the most impactful and appreciated things we have done is the Graduate Internships in Startups program, developed to give STEM graduate students a 6-9 month technical internship in an ONAMI portfolio company. 90% of the students became permanent employees and one of them is now the CEO of another portfolio company. Of the 29 interns who participated in the internship program, seven (7) were female and 22 were male. The program included seven (7) minority students and one (1) US veteran.

We were thrilled recently to see one of our female minority (Native American) founder-entrepreneurs, Rachel Dreilinger of OHSU medical device spinout Neuramedica, profiled and celebrated by the NIH National Institute of Neurological Disorders and Stroke.

University connections:
About two-thirds of ONAMI's commercialization cases and portfolio companies have come from the 4 research universities, and ONAMI's staff are among the best in the US at all aspects of research commercialization, from IP protection strategy to market discovery to company and team formation to financial planning and capital raising. Our staff currently serve on the external advisory board of the UO Knight Campus (A. Sick), OHSU BIP proposal evaluation committee (S. Rung), OSU UVDF proposal evaluation committee (S. Rung) and the PSU UVDF proposal evaluation committee. We also regularly volunteer as mentors and pitch coaches for entrepreneurship classes and accelerator cohorts.

ONAMI'S CURRENT WORK

Current activities and near-term goals:
ONAMI's current work is discovering and advancing Oregon-based technologies (from both university and independent inventors across the state) that have potential to become significant Oregon companies, measured in terms of leveraged funding (SBIR/STTR, private capital) revenue and Oregon employment. We contribute to these technologies using a four step process of (1) pipeline prospecting (dozens of cases per year), (2) in-depth opportunity evaluation (IP, market need and size, competitive analysis, likelihood to grow and create jobs in Oregon), (3) business planning (market research, target market selection, SBIR/STTR commercialization plan assistance, team formation) and (4) capital fundraising assistance, ongoing mentoring and networking (talent, investors, customers).

The expected outcomes for the FY19-20 biennium are well over 50 pipeline screenings, 9 market opportunity investigations, 4 cases through business planning, at least 2-4 SBIR/STTR applications (with significant ONAMI contribution), at least 1 new company formation, continuing active support (e.g. board service) for at least 3 portfolio companies, We are also providing continuing support for selected companies in our more established portfolio.. Though there is no explicit goal, we track results and expect these companies to raise many $10Ms of capital and hire dozens more Oregonians this biennium.

Budget Response, OTRADI

Introduction to OTRADI

OTRADI is a state-funded non-profit innovation center that advances bioscience commercialization, product development and startup business incubation in Oregon. Since its launch in 2007, OTRADI has been dedicated to broad-based bioscience research, with an emphasis on industry growth and job creation in Oregon. OTRADI achieves these goals through strategic partnerships with businesses and universities to discover, develop and commercialize drugs, diagnostics, medical devices, and other bioscience products. OTRADI designed and built-out Oregon's first, and only, bioscience-focused incubator – the OTRADI Bioscience Incubator (OBI) to fill the gap between research and commercialization by providing resources and expertise found nowhere else in Oregon. The OBI has been at full capacity since opening in 2013, with six bioscience client companies. In response to an ever-growing waiting list of bio startups, the OBI has expanded to 22,000+ square feet and is now home to thirty-one start-up companies working on innovative new health and wellness products, including drugs/therapeutics/treatments, diagnostics, medical devices, wearables, consumer health products and digital health IT products. OBI companies incubate more than 126 FTE and 32 part-time employees at .5 FTE for a total of approximately 142 full-time equivalent high-quality jobs for Oregon's bioscience sector.

The OBI serves emerging companies and scientists who want to dedicate their resources to their research rather than investing in build-out and equipment. The multi-client company bioscience complex provides startups and scientists access to entrepreneurial mentoring, state-of-the-art bioscience facilities, meeting space and shared scientific equipment.

Oregon Opportunity: Why Oregon? Why Now?

The OBI strengthens the industry by eliminating barriers between innovation and market capitalization and aid Oregon in its economic recovery by fueling job growth in the bioscience sector.

Oregon's bioscience industry has experienced incredible growth in the past 15 years. In the most recent economic impact survey, in the 15-year period between 2002 and 2017, private bioscience employment increased 77 percent (+4,800 jobs), total wages increased 178 percent (+$489.7 million), and average annual wages increased 57 percent (+$25,200). Oregon's 800+ life sciences companies and leading academic and research institutions employed over 19,000 individuals earning $1.96 billion and directly contributed $6.5 billion to Oregon's economy in 2017 (see *Economic Impact of Bioscience in Oregon Report* here). In addition, the recent *Oregon Innovation & Entrepreneurship Benchmarking and Best Practices Report* shows that over the past 25 years, all net new job creation and 20% of gross job growth has come from start-up companies less than five years old, with the majority of those jobs created by a small percentage of high growth firms (see Oregon Innovation & Entrepreneurship Benchmarking and Best Practices Report here).

Oregon Bioscience Incubator (OBI) is a Key Driver of the Bioscience Sector in Oregon

OTRADI's mission is to fuel the economic development of Oregon's bioscience/health and wellness/digital health IT industry by translating innovative research into products and companies that benefit human health and create high-wage jobs for Oregon.

The OBI is Oregon's premiere bio/digital health IT incubator and the hub of bioscience entrepreneurism in Oregon. The OBI leverages its extensive advisor network (currently 100+ business and scientific advisors) to provide pro bono expertise and mentorship to bio-entrepreneurs and startups. The OBI also serves as a "first stop shop" for new bio companies forming in Oregon, companies considering moving to Oregon, investors interested in cutting edge technologies and others. OBI developed and curate an interactive and searchable map of the entire bioscience ecosystem in Oregon, including established companies, start-up companies, research universities, investors, incubators/accelerators, suppliers, etc., with

more than 300 companies currently working across these sectors today.

In addition to training and networking opportunities, the OBI provides crucial laboratory space for startups that need this specialized physical space to complete experiments and develop successful products ready for VC investment and FDA approval.

OBI is located on Portland's South Waterfront, in the heart of the health and sciences cluster and within walking distance of OHSU. Regardless of size, bioscience companies flourish when clustered in near proximity to one another and to major research universities, allowing for economies of scale in sharing core scientific equipment and expertise. Bioscience companies produce family-wage jobs and lead to a multiplier effect of suppliers and service providers.

OTRADI'S CURRENT WORK

Current Activities

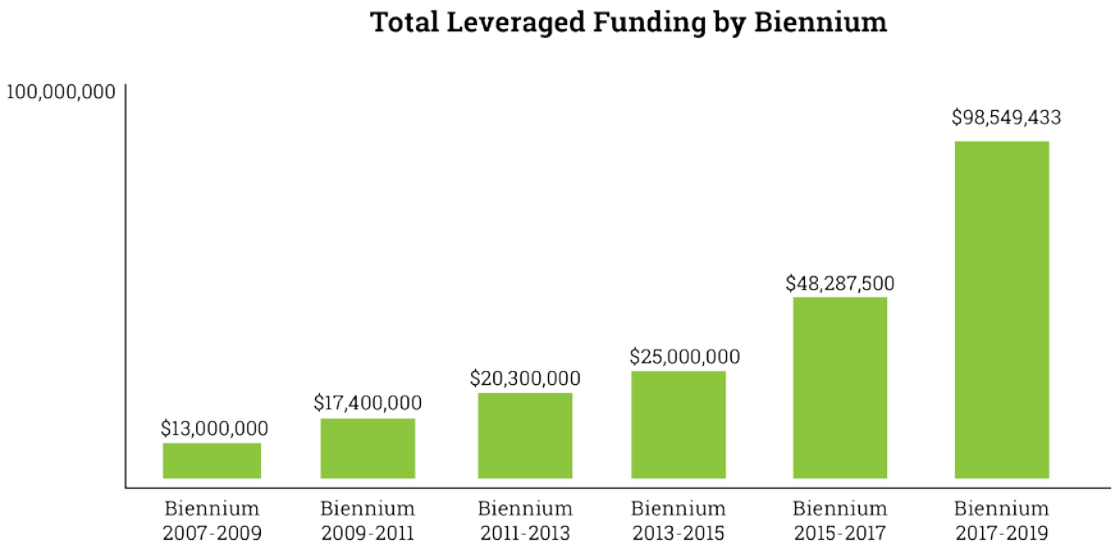
Even during the COVID-19 pandemic, OTRADI continues to provide our bioscience companies with necessary support and services so they can continue their vital work; fulfilling our mandate, promise, and commitment to our contract with the State to keep these burgeoning companies afloat. We have refocused our efforts to continue supporting these companies in this new environment through virtual programming such as Lunch and Learns, virtual CEO roundtable discussions, activating an incubator slack channel, etc. to ensure continued camaraderie within the OTRADI community. The research done by many of our incubator companies is considered critical and essential. Most importantly, many of our start-up companies are working toward combatting the COVID-19 virus, some of which are listed below:

- Hemex Health is working on a fast, low cost and accurate point of care diagnostic for COVID-19. It is built on their miniaturized electrophoresis platform. They are applying for grants to perform the needed work and have received a $50K Enhanced Innovation Grant from Oregon InC to be used for developing and validating a rapid test on existing Gazelle platform to detect SARS-CoV-2 Infection that targets viral proteins.
- Nelson Bio Lab is working with other companies to develop COVID-19 diagnostic kits. They already have samples and have obtained samples from other Chinese companies. The FDA has accepted them. If necessary, they can provide kits.
- Sirona Dx is exploring a COVID-19 project with OHSU / Knight Cancer using their CyTOF system.
- Sonivate Medical, Inc. is part of a group of institutions (including Duke University Medical School) submitting a White Paper on 3/21 regarding detection of COVID-19 using artificial intelligence (AI) and Sonivate's SonicEye Dual-Array Ultrasound System. The objective is to evaluate a patient's condition on a 20-point scale with a minimally trained clinician. There is no guarantee that this will be accepted and funded.
- StoneStable, Inc. is working with common cold Coronaviruses (OC43) and recombinant Adenoviruses (Ad5-GFP) for COVID-19 vaccine development.
- VIR Bio announced that ". . . laboratory testing showed two of its antibody drugs appeared to neutralize the coronavirus that causes Covid-19 and that it would pursue testing them in people." Read full STAT article here.

ACHIEVING OREGON'S ECONOMIC DEVELOPMENT GOALS

OTRADI's Funding Portfolio:

Financial ROI Summary (2007-2019):



Connections with universities

OTRADI has worked with over 150 researchers from Oregon universities across the state (OHSU, OSU, PSU, U of O) since our inception in 2007, OTRADI affiliated researches have generated $50 million in licensing revenue for universities in Oregon and >$615 million in private, federal and foundation funding for Oregon.

Twenty-one of the OBI's forty-seven retrospective companies are university spinoffs. With $1.2 billion of new investment into OHSU's Knight Cancer Institute and more than $500 million of philanthropic investment into U of O's Knight Campus for Accelerating Scientific Impact, demand for incubator space from spinoffs and startups will grow exponentially in the near future.

The start-up bioscience business sector in Oregon is growing, spurred on by strong university research spinoff company formation. The majority of bioscience startups in Oregon are "spinoff" companies whose technology is driven by university-derived scientific research. These start-up companies, which are generally funded by federal small business (SBIR/STTR) grants and have on average 1-8 employees, can sublease small lab spaces at the Portland State Business Accelerator (PSBA) and larger/more bio-focused lab and office space at OBI.

Success stories

Aronora

Portland biotech inks $9M+ deal for drug royalties

Aronora Inc., a Portland biotech startup developing a new kind of blood clot treatment, has inked a deal with Xoma Corp. (NASDAQ: XOMA) for royalty rights related to five drug candidates.

Founded in 2009, Aronora has collected $25 million in NIH Small Business Innovation Research grants.

Hemex Health

Diagnostic Platform for Low Resource Settings Integrates Miniaturized Technologies with AI

Hemex Health, Portland, Ore, has launched the Gazelle Diagnostic platform, designed for use at point of need in low-resource areas. Available tests include one for sickle cell disease, which delivers results in 8 minutes and is approved for use in the Europe Union as well as Ghana and India. A malaria diagnostic delivers results in 1 minute and has the CE mark. Neither are currently FDA approved. Hemex is currently developing additional tests for covid-19 and anemia.

Vir Biotechnology

Vir Biotechnology and Biogen Execute Agreement to Manufacture SARS-CoV-2 Antibodies for Potential COVID-19 Treatment

Vir's SARS-CoV-2 antibody development candidates, VIR-7831 and VIR-7832, have demonstrated high affinity for the SARS-CoV-2 spike protein and the ability to neutralize SARS-CoV-2 in live-virus cellular assays. The execution of this definitive agreement allows Vir to advance the development of its antibody candidates and complements its existing manufacturing agreements with WuXi Biologics (stock code: 2269.HK) and Samsung Biologics Co., Ltd. (207940.KS).

OBI Alumni – AbSci

AbSci Closes $15.4 M in Series D Funding to Accelerate Growth and Scale Disruptive Protein PrintingTM Technology, Announces Exclusive Co-Marketing Partnership with KBI Biopharma

AbSci, the Protein Printing™ company with a best-in-class *E. coli* cell line for rapid and low-cost biomanufacturing of complex biotherapeutics, announced the completion of a $10.4M Series D financing led by KBI Biopharma and JSR Life Sciences. Existing investors Phoenix Venture Partners, Oregon Venture Fund, WRF Capital, and Columbia Ventures Corporation also participated in the financing. The financing also includes $5M in term debt. The proceeds from the financing will be used for expansion of AbSci facilities and team in order to meet commercial demand for AbSci's technology.

Sanofi turns to high titer E. Coli platform in AbSci deal

The SoluPro E.coli manufacturing platform will be applied to two of Sanofi's biologic candidates under a partnership deal with AbSci. Financial details of the deal have not been divulged, but the French Big Biopharma firm will use AbSci's SoluPro expression platform on two of its molecules. The work will be undertaken at AbSci's facilities in Vancouver, Washington, USA.

Click here to see our full list of 2018 Client Company Wins and 2019 Client Company Wins.

Near-term goals
In addition to the metrics included in our OTRADI Scope of Work and Performance Metrics for 2019 – 2021, OTRADI is actively seeking HIOP funding to expand the incubator with the goal of retaining and growing generations of promising, lab-based, bioscience start-up companies in Oregon. The OBI has an ever-growing waiting list of fledgling start-up companies eager to move into our facility. The increasing numbers of bio start-up companies in Oregon, and therefore the high demand for lab space, has left these companies stranded. This expansion will allow the OBI to engage additional companies on our waiting list.

OTRADI has been working with our current landlord to negotiate OBI's continued expansion within the building, which was capped prior to now. To continue expanding within our current building, OTRADI has signed a 12-year lease term that now allows us the option to grow and expand at our current location, which had been halted until now.

Lastly, the digital health sector in Oregon has more than doubled in the past biennium. OTRADI has determined there are currently 130+ Digital Health companies in the State of Oregon, and this number continues to grow as adoption of connected devices and personalized medicine skyrockets. This sector will also continue to grow more rapidly given the current COVID-19 pandemic. OTRADI is working toward being recognized as the Digital Health Center of Excellence in Oregon and beyond. Given the circumstances the entire world is experiencing, OTRADI will continue to defend what we have, grow, and diversify to continue supporting health innovation in the State of Oregon.

Feasibility and impact
To address the budget note question regarding feasibility of eliminating ongoing state support for the SRCs, OTRADI has committed to a 12-year lease term, and we have individual leases with each of our 31 incubator companies. The OBI has an ever-growing waiting list of fledgling start-up companies eager to move into our facility. The increasing number of bio startups in Oregon, and therefore the high demand for lab space, has left these companies stranded. Oregon has no pre-built-out laboratory space available for these smaller start-up companies to lease other than the OBI or the Portland State Business Accelerator, leaving companies with two options: 1) participate in a bioscience focused incubator and utilize the shared resources and equipment they provide, or 2) invest upfront in building out their own capital-intensive lab facilities and purchasing shared equipment as they are striving to grow their company.

Budget Response, VertueLab

Introduction to VertueLab:
VertueLab's mission is to unleash innovation and entrepreneurship that will solve environmental challenges and catalyze shared economic prosperity. VertueLab provides funding and entrepreneurial support to Oregon clean tech startups, helping them to scale and create jobs, generate revenue, and attract new capital to the state. VertueLab was created in 2007 with funding from the State of Oregon as part of the first round of funding recommendations from the Oregon Innovation Council. During VertueLab's 12-year history, its seasoned team has developed unique expertise to deliver best-in-class support to Oregon companies providing critical solutions to major environmental challenges. As envisioned by the original Oregon Innovation Council members and legislators, the investment in the signature research centers was a long-term investment and the results today reflect that. The hundreds of jobs and tens of millions of dollars of follow-on investment and revenue secured by VertueLab's portfolio companies in the past 2-3 years reflect funding and support provided 5-8 years ago. The work VertueLab is doing in the current biennium will pay economic development dividends throughout the coming decade.

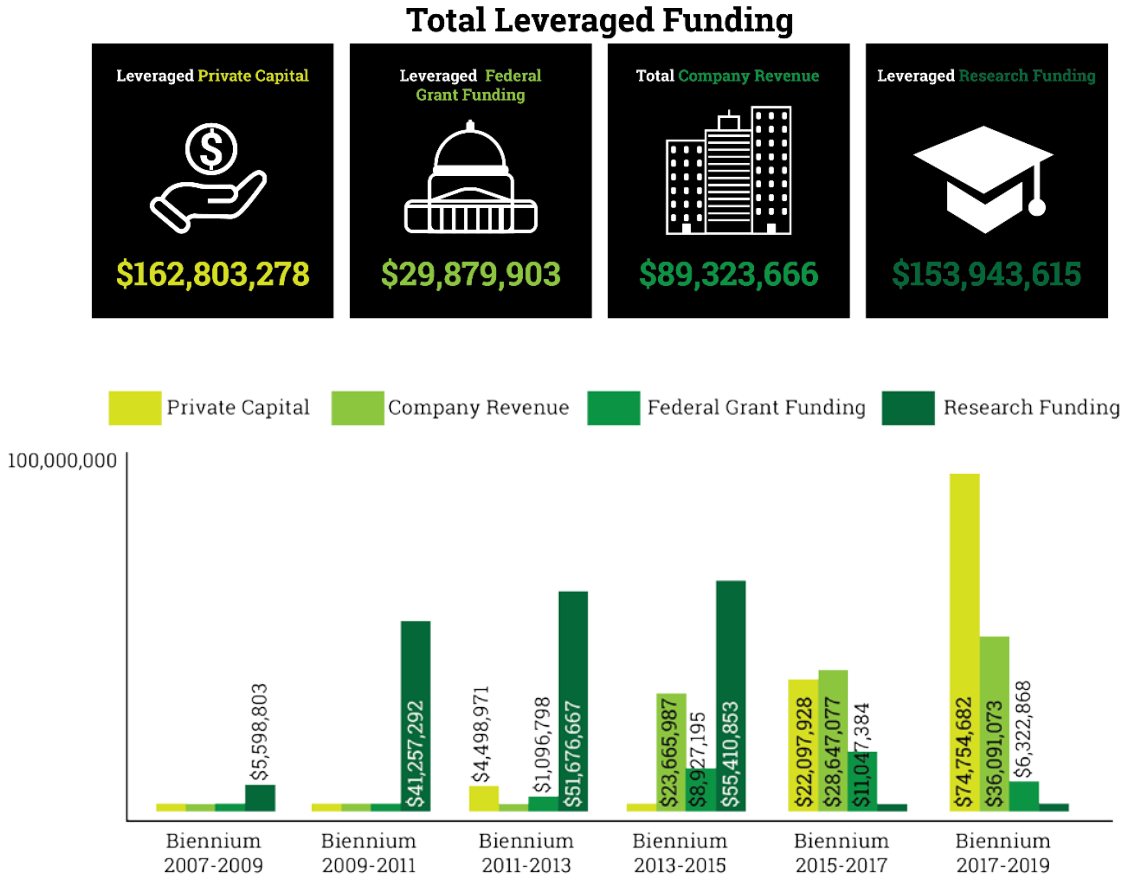
ACHIEVING OREGON'S ECONOMIC DEVELOPMENT GOALS

Attracting Capital to Oregon
VertueLab has utilized a portion of its Business Oregon grant funds to secure 11 federal grants for providing expanded VertueLab services in Oregon from the US Small Business Administration and the US Economic Development Administration. These federal grants all required matching dollars equal to 75%-100% of the federal amount, and would not have been secured without the Business Oregon funds. The SBA grant dollars have enabled us to provide assistance to more than 170 Oregon small businesses in learning about, applying for, and securing over $7 million in federal grants from numerous agencies including the Department of Energy, Department of Agriculture, National Institutes of Health, and National Science Foundation.

Financial Summary:

- Over $441M in leveraged funds deployed in Oregon
- Creating and retaining more than 500 Oregon jobs.
- $7,540,144 awards in support of Oregon companies
- $1,177,312 follow on projects or direct investments in portfolio companies

VertueLab's Funding Portfolio:



Improving Access to Capital for Underserved Populations:

- Percent of Portfolio Companies that are located outside of Portland metro: 45%
- Percent of Portfolio Companies with Women on Founding Team: 28%
- Percent of Portfolio Companies with Minorities on Founding Team: 20%

Stimulating Oregon Manufacturing:

Clean tech creates white collar jobs (such as in science & technology) as well as blue collar jobs making hard goods. The Brookings Institution's report, *Sizing the Clean Economy*, confirms that the clean economy is manufacturing and export intensive, with about 26% of all clean economy jobs offered by manufacturing establishments, as compared to just 9% in the broader economy.

Number of VertueLab companies that are actively manufacturing in and shipping from Oregon today: 16, over 50% of which are outside the Portland Metro region.

OUTCOMES EXPECTED FROM THE 2019-2021 BIENNIUM

In the 2019-21 biennium, VertueLab is working towards achieving outcomes consistent with its decade-long track record described above: supporting companies that create jobs, earn revenue, and attract follow-on investment, all while creating wealth-creation opportunities for Oregonians who have historically had less access, and reinforcing Oregon's reputation as a leader in innovating solutions to environmental challenges.

By the end of this biennium, we will have launched, fundraised for, and made investments from its Climate Impact Fund I. In addition, through our support programs, it is working to achieve a target of helping its companies attract at least $60 million in additional investment and grant funding to the state. VertueLab's SBIR/STTR support program has a target of helping at least 5 Oregon companies to success in securing federal grant funding with its grant-writing assistance. In

addition, our accelerator program will graduate at least 6 emerging Oregon clean-tech startups and will award 2 accelerator alumni companies with prototype grants to get them further along the path to market. These outcomes are only possible with the financial support of the State of Oregon.

Currently, three federal grants and one corporate grants fund portions of all 10 our staff positions (9 FTE), but the majority (75%) of the team's payroll expenses are covered by Business Oregon funding and all of the federal grants are dependent on the Business Oregon grant as the source of required matching dollars. If Business Oregon funding was withheld entirely, we would not be able to secure or retain federal grants and virtually all staff positions would be at risk of being eliminated.

OUTCOMES TO DATE

VertueLab has provided grants and investments to 47 Oregon companies over time, and assisted over 200. This work providing funding and support to clean-tech innovators over the past decade plus has resulted in valuable outcomes for the State of Oregon.

Portfolio Company Impact:

VertueLab's portfolio companies (those who have received grants or investments from us) have reported:

- Follow-on funding attracted: Over $180 million
- Oregon jobs created: Over 440
- Revenue earned (over the past four years, since Q1 FY15-16): $75.5 million

Notably, the companies responsible for the lion's share of these outcomes are ones that VertueLab began supporting between 6 and 7 years ago on average. This validates the thesis established by Oregon InC at its start that state innovation investments require long-term commitments to achieve the targeted outcomes.

A few examples of companies thriving after receiving our funding and support:

Energy Storage Systems (ESS) – We provided funding twice to this large-scale energy storage company, including money that was used as part of a required match for a multi-million dollar federal grant. In addition, we introduced ESS to the venture arm of chemical company BASF and the Pangaea Fund in which BASF is a limited partner. That introduction led to a relationship that included being a lead investor in ESS in their last three funding rounds, including the most recent, Series C round in 2019 totaling $30 million dollars from 10 investors including Breakthrough Energy Ventures (the Bill Gates-backed fund focused on climate innovation).

DR Johnson/Cross Laminated Timber - Starting in 2015, we collaborated with a diverse set of partner organizations and state agencies to encourage the development of the first CLT plant in Oregon by DR Johnson (Riddle Laminators) of Riddle, OR, which has grown and added to the employment in a rural community. Our financial support for DR Johnson's CLT product testing and product line development was the first step, followed by a federally-funded study of the market potential for Cross Laminated Timber production in Oregon and SW Washington. We led the multi-stakeholder collaborative study, which has been used to inform Clackamas County's economic development strategy, and the emergence of new producers including Freres Lumber in Lyons and Sauter Timber in Estacada.

Gadusol Labs – Mimicking the biology that marine organisms use to protect themselves from the sun, Oregon State University spinout Gadusol Labs is developing ingredients for natural sunscreens that are safe for the environment, unlike most sunscreen products on the market. We awarded a grant to OSU in 2017 which helped support the spinout of a new company in which we invested in 2018. In addition, our SBIR/STTR Assistance program has helped the company secure federal grant funding for R&D.

All three of these companies have a female founder or chief executive, including one person of color.

VERTUELAB'S CURRENT WORK

The capital gap for early stage hard technology companies remains the primary barrier to traded-sector clean-tech companies achieving scale. Research from Scruggs & Associates has found – and VertueLab's past decade of experience reflects – that startups benefit from support programs and funding being delivered together in a coordinated fashion. Our strategy to address the capital gap, therefore, is to bring more clean tech-friendly capital to Oregon, and to prepare Oregon companies to be more attractive to those investors through mentorship and training, mitigating both technology risk and market barriers.

Bringing additional and new capital to clean tech innovation in Oregon

Many startups and entrepreneurs found their way to VertueLab because it had funding available. Whether or not we funded them, it was often able to offer them other support via a range of programs or connect them to other valuable resources. It is our objective to secure new sources of funding to enable it to directly offer commercialization funding to clean-tech startups in the near future, in part to ensure that companies continue to seek out the organization as a first stop resource. We are currently raising capital for a new VertueLab Climate Impact Fund which will make investments in early clean-tech startups. This funding will backfill funding provided by the State of Oregon prior to the 2017-19 biennium, when state funding was reduced by about 60%.

We also work to support efforts to attract more capital into early stage investing, including supporting other venture fund managers in the region in launching triple (economic, social, and environmental) bottom line clean-tech venture funds as opportunities arise and connecting our portfolio companies to sources of funding. Our annual conference includes an invitation-only event (Ecocapital Connections) making curated connections between clean-tech investors from outside of Oregon with the state's most promising clean-tech startups. This event is financially sustainable by partnering with Prosper Portland.

Improving access to Capital

We increase companies' ability to secure capital by providing them with expert support including the following:

Cascadia CleanTech Accelerator: This program is a collaboration with the CleanTech Alliance, a peer organization based in Seattle. Through the accelerator, we deliver clean tech-specific training in business modeling, customer discovery, manufacturing and sustainability planning to participating companies over the course of 15 weeks. Graduates of the program receive one-on-one mentorship, expert advice, investor and business connections, weekly webinars with expert panelists, and visibility – plus they exit the program with a polished pitch deck and financial projections. Accelerator alumni are eligible to apply for prototype grant funding offered with financial support from the US Economic Development Administration, thanks to matching funds from Oregon InC/Business Oregon.

Entrepreneur in Residence support: We employ seasoned entrepreneurial experts to provide mentoring and coaching to Oregon startups, including pitch coaching to prepare them for meetings with potential investors, customers, and partners.

Grantwriting support: We assist companies in pursuing government funding (from the federal government's SBIR/STTR program or from Business Oregon's Phase 0 commercialization funding) for R&D to advance their technology development. The SBIR/STTR support is provided in part with funding from the US Small Business Administration, thanks to matching funds from Oregon InC.

Funded Internships: We place and fund 2-4 full-time Oregon university interns each summer at Oregon start-up companies to work on high-impact projects. Each project addresses a hurdle, milestone or similar objective that

supports the company's product development and/or overall company growth. The program provides support to resource-constrained clean-tech startups while providing college students with the opportunity to apply their learned skills to advancing clean technologies in an entrepreneurial environment.

Impact Measurement & Management Methodology: Impact investors, the rapidly growing community of funders interested in more than just a financial return, expect to be provided with evidence that their money is having the measurable impact they seek. Our early impact measurement and management coaching of clean-tech startups will equip them to credibly pitch to such investors with a rigorous set of impact forecasts and evidence. Through this work we will help them tap into a newly emerging pool of capital ideally suited to clean tech.

EcoCapital Connections: Over the past 5 years, we have made over 450 curated introductions between highly targeted out of state investors and promising clean-tech companies through its EcoCapital Connections events. In 2019, one out of four of those introductions resulted in investors seeking follow-up with companies curated for them by us.

Catalyzing markets: We use our convening capability to bring public and private entities together to capitalize on unique opportunities to help launch new industries or markets, such as current and past projects with the cross laminated timber, aquaculture, and biochar industries. Oregon InC funding enables us to continue to seek out and engage in preliminary convening and fundraising activities around these types of initiatives. In all cases where we play a convening role, we seek opportunities in which we can be a catalyst to launching an initiative or industry with great potential for economic impact and where the organization doesn't see that happening already.

SRC Budget Note Questions and Answers

It would be helpful to get an understanding of each SRC's revenues by source, to clarify how much the SRC relies on Oregon InC funding and what other revenues they have generated. A question that seems unanswered is whether, in some capacity, any of the SRC's could/would continue operating without the Oregon InC funding, and if so what operations would look like under the reduced capacity.

ONAMI:
In its early years, ONAMI was successful in securing a significant portion of its annual funding through congressional earmarks. With the elimination of earmarks, however, ONAMI has come to be almost 100% reliant on the state for its operational funding. Without state funding it is virtually guaranteed ONAMI will close and the jobs of its two primary staff and its contract staff will be eliminated.

OTRADI:
As an incubator, OTRADI receives revenue from its tenant companies. State funds help subsidize the cost of rent in order to facilitate the ability for promising start-ups to rent laboratory and office space at a below market-rate. For the last two biennia, OTRADI has generated revenue from rent payments of just over $1M per biennium. That is approximately 30-35% of the organization's overall budget with state funding making up the rest. Without the state funding, OTRADI would not be able to subsidize the rent and would likely need to increase the cost to a level that would support OTADI's operational budget. At that point, it is highly unlikely that any of the start-ups would be able to afford even market-rate rent costs and would likely need to find space elsewhere. Companies would also lose the networking and mentoring benefits that are available in the current shared space. Because the OTRADI OBI space is unique in Oregon, most of these companies would likely fail or leave the state. Assuming OTRADI's target start-up companies would be unable to afford the higher rent, OTRADI itself would not have the revenue to remain in existence and would be forced to cancel the leases of its tenant companies and attempt to get out of the 12-year lease they recently signed with the building owner.

VertueLab:
VertueLab has previously pursued non-state revenue mostly in the form of federal and corporate grants. These funds are used to support a limited portion of staff costs; however, the exact amount varies based on how many grants they actually receive. In FY20, state funding accounted for approximately 55% of VertueLab's funding although that lower level was due to a PPP loan and a few larger grants. This fiscal year, they expect the state funds will represent approximately 80% of their revenue, which is closer to what it has been in past biennia. Without state funding VertueLab could increase its efforts to get federal and corporate grants, but some funding opportunities would no longer be available to them as they have used state funding as the required match for federal grants. Even if they did uncover potential new grant opportunities, it is very unlikely they could replace state funding within the necessary timeframe to retain staff. Thus, without state funding virtually all staff positions would likely be eliminated. The remaining activities for the organization would be to wind down the federal and other grant projects to complete their obligations under those agreements or explore options for voiding those agreements.

Also, unless I am missing it, it doesn't seem like ONAMI or VertueLab even addressed the impact of eliminating state support. Instead they have provided more of a status report on their operations, which is helpful but not what was really requested.

Given the discussion above indicating that it is highly likely the three SRCs would cease to exist without state support, the report was written in a way to explain that the impacts are the future loss of all of the services and results described in the budget note response going forward. This means significantly reduced numbers of start-ups, entrepreneurs, jobs, revenue, leveraged funding, etc. in each of the SRCs' industry sectors in the future

because these support resources would be gone. It is difficult to quantify future impacts that would come from future state funding to the SRCs so the report was written in a way to show what wouldn't have happened in Oregon's economy over the past 10+ years if the SRCs didn't exist. It's fair to assume that at least this same level of economic activity would be lost in Oregon for the next 10+ years if the SRCs no longer exist.

Any additional material on what the impacts of eliminating state support would be on innovation in Oregon generally, and on Oregon's material science, bioscience, and clean tech industries specifically, would be appreciated. Would Oregon still be competitive in these sectors without the Oregon InC support? Is Oregon competitive in these sectors with the Oregon InC support?

See responses above. Also, it depends on how you define competitive. It is difficult if not impossible to find a metric that shows exactly how competitive anyone is in these emerging industries. The main reason for that is because the impacts apply across many sectors so the federal government's industry classification codes are not an exact match for some of these industries. Relatedly, it is also because some of the companies supported by the SRCs are so new that federal classification codes don't yet exist. For example, ONAMI supports a number of companies using microchannel devices. These devices may (and have) been ultimately used in air conditioners or medical research or electronics. The companies would fall under the codes for those much larger industries, such as Air-Conditioning and Warm Air Heating Equipment and Commercial and Industrial Refrigeration Equipment Manufacturing or Electronic Computer Manufacturing, which means using that data would be meaningless because the microchannel companies would be dwarfed by established businesses in the traditional aspects of those industries. These newer "sub-sectors" will not get their own codes until they become well established and large enough to need to be broken out from existing industry classifications.

In addition, there is minimal data on the "competitiveness" of Oregon in these industries. To address this issue, Business Oregon creates an innovation index for the state that compares about 20 different indicators for which we can collect and analyze legitimate and comparable data that is available for all 50 states. The last iteration of the index showed Oregon ranked third in terms of innovation activity. That index, however, does not quantify things down to these particular sectors because the data is not available to support that type of analysis. That said, the SRCs' activities have shown the results described in the budget note response. Without those results over the years, Oregon's innovation index would undoubtedly be lower; and the impacts on the SRCs' particular industry sectors would be even more significant given that virtually no one else would be able to replace the services they provide.

Oregon Strategic Investment Program (SIP) Projects based on 2020 Annual Employment and Payroll Reports*

Business firm – Project name (In order of determination by the Oregon Business Development Commission, following county process)	County	2018–19 Taxes paid on project property †	Taxes saved on exempt property †	Special SIP fees paid in 2019 †	Net revenue foregone locally †	Year out of 15-year exemption period †	Total investment by end of 2018 †	Net investment made since 2018	Newly created jobs ‡	Retained jobs ‡	Average wages/ salary (all jobs) ‡	Average wages and benefits (all jobs) ‡	State personal income tax revenue ‡
Intel Corporation – SIP2005	Washington	$2,231,000	$131,902,000	$39,923,000	$70,083,000	9th	$24,984,000,000	$13,640,000	2,482	7,246	$135,725	$155,712	$85,493,000
Georgia-Pacific Consumer Ops. LLC – Wauna Paper Mill–#7	Clatsop	$327,000	$2,451,000	$500,000	$1,544,000	11th	$465,000,000	$31,940,000	54	0	$91,056	$102,174	$278,000
Genentech USA, Inc. – Hillsboro Fill Finish Facility	Washington	$3,435,000	$2,261,000	$2,109,000	-$223,000	9th	$739,000,000	$43,110,000	530	0	$129,135	$140,861	$4,429,000
EDP Renewables NA/Telocaset..., LLCs – Elkhorn Valley	Union	$278,000	$770,000	$193,000	$449,000	11th	$206,000,000	-$530,000	9	0	$67,347	$80,076	$33,000
Avangrid Renewables – Klondike Wind Power III	Sherman	$529,000	$3,682,000	$2,731,000	$340,000	11th	$459,000,000	-$2,790,000	17	0	$81,193	$691,233	$77,000
Portland General Electric Company – Biglow Canyon Windfarm	Sherman	$513,000	$9,865,000	$6,374,000	$1,853,000	11th	$970,000,000	$16,110,000	26	0	$67,435	$97,299	$94,000
Invenergy, LLC – Willow Creek Energy	Gilliam–Morrow	$320,000	$489,000	$146,000	$262,000	10th	$130,000,000	$1,130,000	6	0	$57,212	$67,874	$18,000
Avangrid Renewables – Hay Canyon & Star Point Wind Farms	Sherman	$513,000	$1,915,000	$1,209,000	$388,000	10th	$329,000,000	-$1,660,000	11	0	$70,110	$94,649	$43,000
Avangrid Renewables – Pebble Spgs. & L. Juniper II A-B Wind	Gilliam	$346,000	$2,728,000	$2,129,000	$146,000	10th	$537,000,000	-$2,860,000	19	0	$74,975	$101,217	$77,000
Exelon Corporation – Echo Windfarms	Morrow–Umatilla	$448,000	$419,000	$195,000	$154,000	10th	$108,000,000	–	8	0	$69,291	$91,304	$31,000
Eurus Energy America Corporation – Combine Hills II	Umatilla	$321,000	$425,000	$194,000	$160,000	9th	$137,000,000	$40,000	6	1	$52,559	$58,455	$18,000
NEXTera Energy Resources, LLC – Stateline 3 Wind	Umatilla	$473,000	$328,000	$341,000	-$67,000	9th	$188,000,000	–	4	0	$77,469	$127,135	$18,000
Caithness Corporation – Shepherds Flats–Gilliam County	Gilliam	$308,000	$8,267,000	$3,845,000	$3,050,000	7th	$965,000,000	$1,080,000	43	0	$75,585	$107,330	$176,000
Caithness Corporation – Shepherds Flats–Morrow County	Morrow	$422,000	$3,390,000	$1,695,000	$1,132,000	7th	$278,000,000	$370,000	14	0	$75,585	$107,330	$57,000
Portland General Electric Company – Carty Generating Station	Morrow	$340,000	$6,999,000	$2,224,000	$3,613,000	2nd	$630,000,000	-$117,820,000	26	0	$132,011	$173,616	$225,000
Portland General Electric Company – Port Westward II	Columbia	$322,000	$2,742,000	$1,350,000	$937,000	4th	$303,000,000	$2,810,000	32	0	$129,524	$167,799	$272,000
Intel Corporation – SIP2014–1	Washington	$1,810,000	$33,361,000	$4,650,000	$23,173,000	2nd	$1,686,000,000	$1,268,820,000	1,885	0	$135,725	$155,712	$16,569,000
TOTAL|AVERAGE		**$13,000,000**	**$212,000,000**	**$70,000,000**	**$107,000,000**		**$33.1 billion**	**$1.3 billion**	**5,174**	**7,247**	**$134,378**	**$154,967**	**$108,000,000**

* For purposes of "gain-share" distributions to local governments under 2007 law, rather than verification of a statutory hiring requirement, of which there is none.

† For latest property tax year ending on prior June 30; 15-year exemption is on project property in excess of taxable portion, which begins at $25, $50 or $100 million and rises 3% per year; taxes paid are on taxable portion and possibly other associated property. Foregone revenue adjusted using standard factor for the approximately one-sixth that is shifted to other taxpayers under local levies, as well as subtracting special payments that consist of the statutory community service fee and locally negotiated amounts.

‡ Newly created and retained jobs (full-time equivalent–2,080 hours/year) associated directly with project, as of previous calendar year, excluding (indirect) jobs with or for construction, vendors, suppliers, tangential company operations, or even on-site contractors, other than a general project operator. State tax revenues based on wage data and latest average tax rates by income level from Department of Revenue statistics; does **not** include revenue associated with indirect jobs or any induced/multiplier effect of employee spending.

Source: Business Oregon (Oregon Business Development Department).

April 24, 2020