

Return on Investment of New Mexico SUN PATH Program

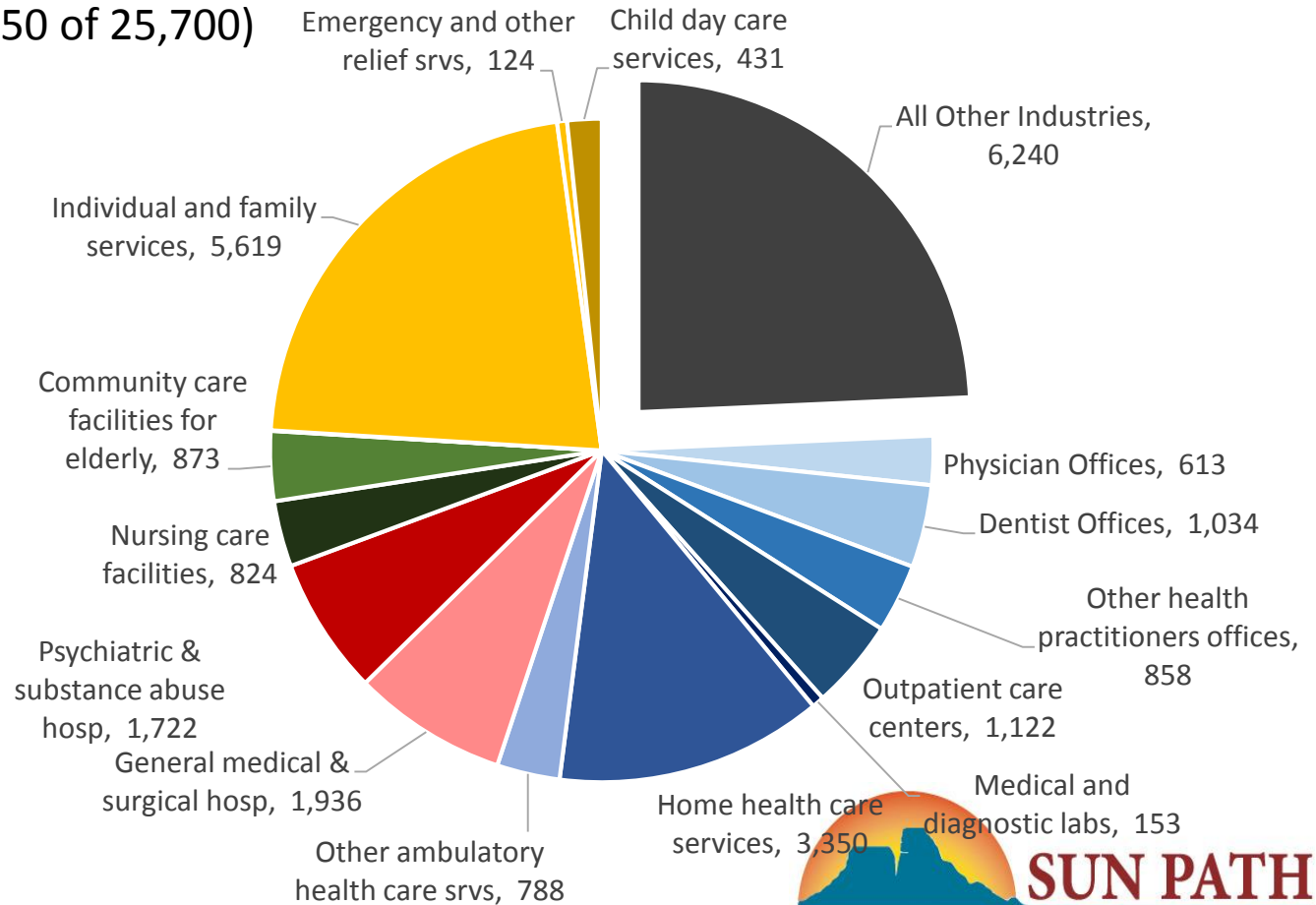
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Healthcare Sector in New Mexico

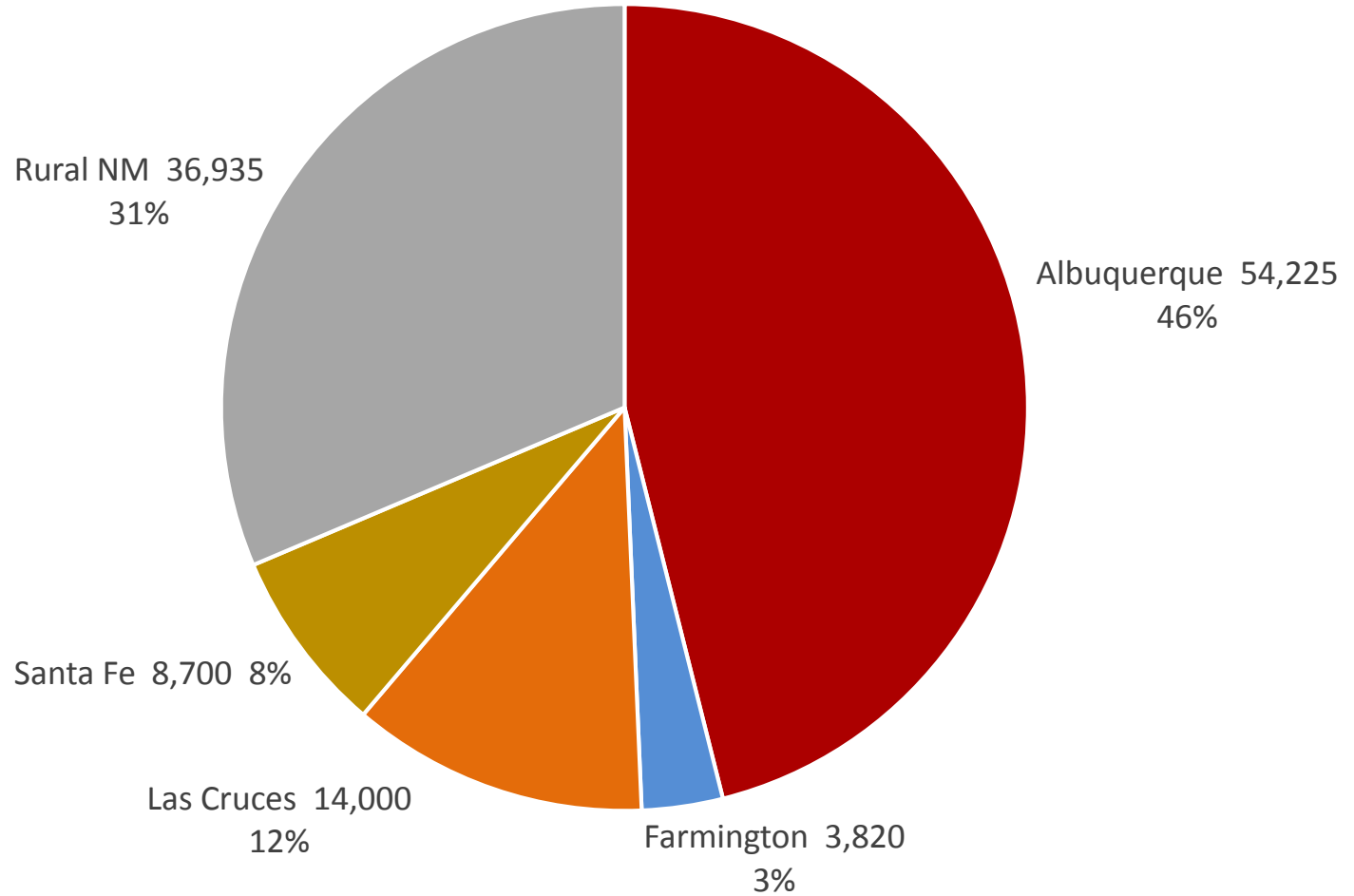


Net Job gains, 2010-2016

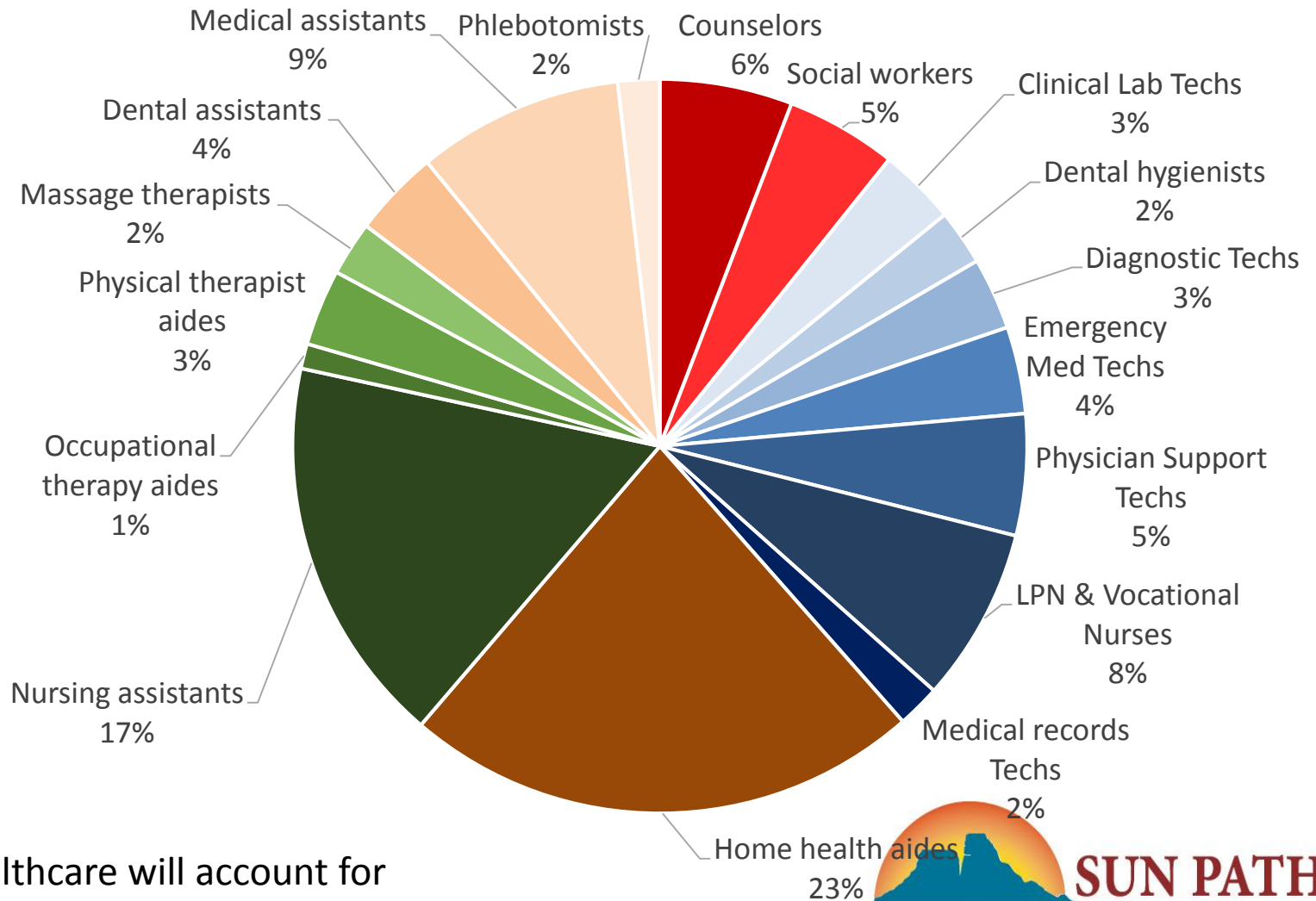
Since 2016, 66% of job gains in New Mexico have been in Health Care & Social Assistance (16,950 of 25,700)



Healthcare employment by region, 2016



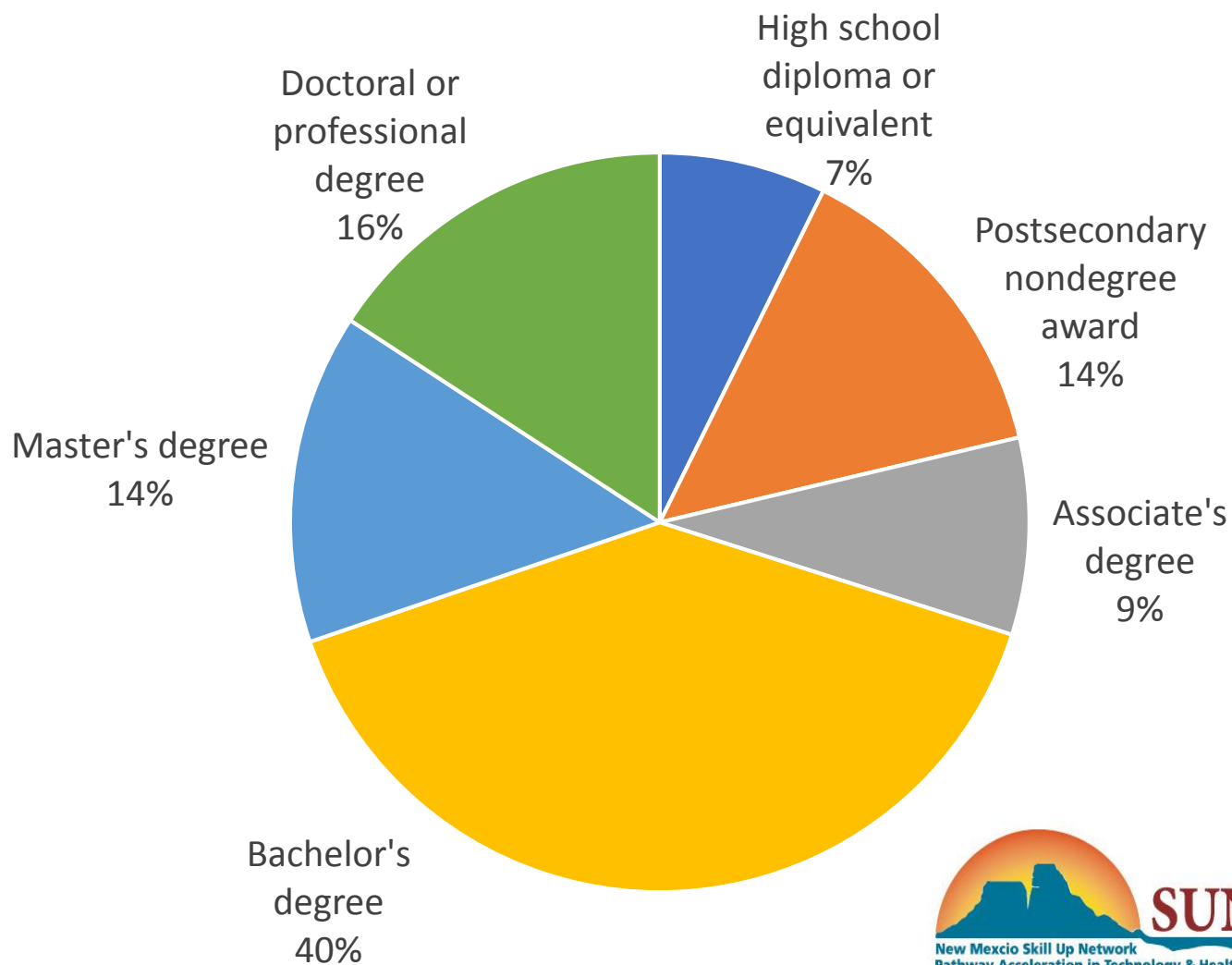
Projected gains in Healthcare and Social Service Occupations, United States, 2014-2024



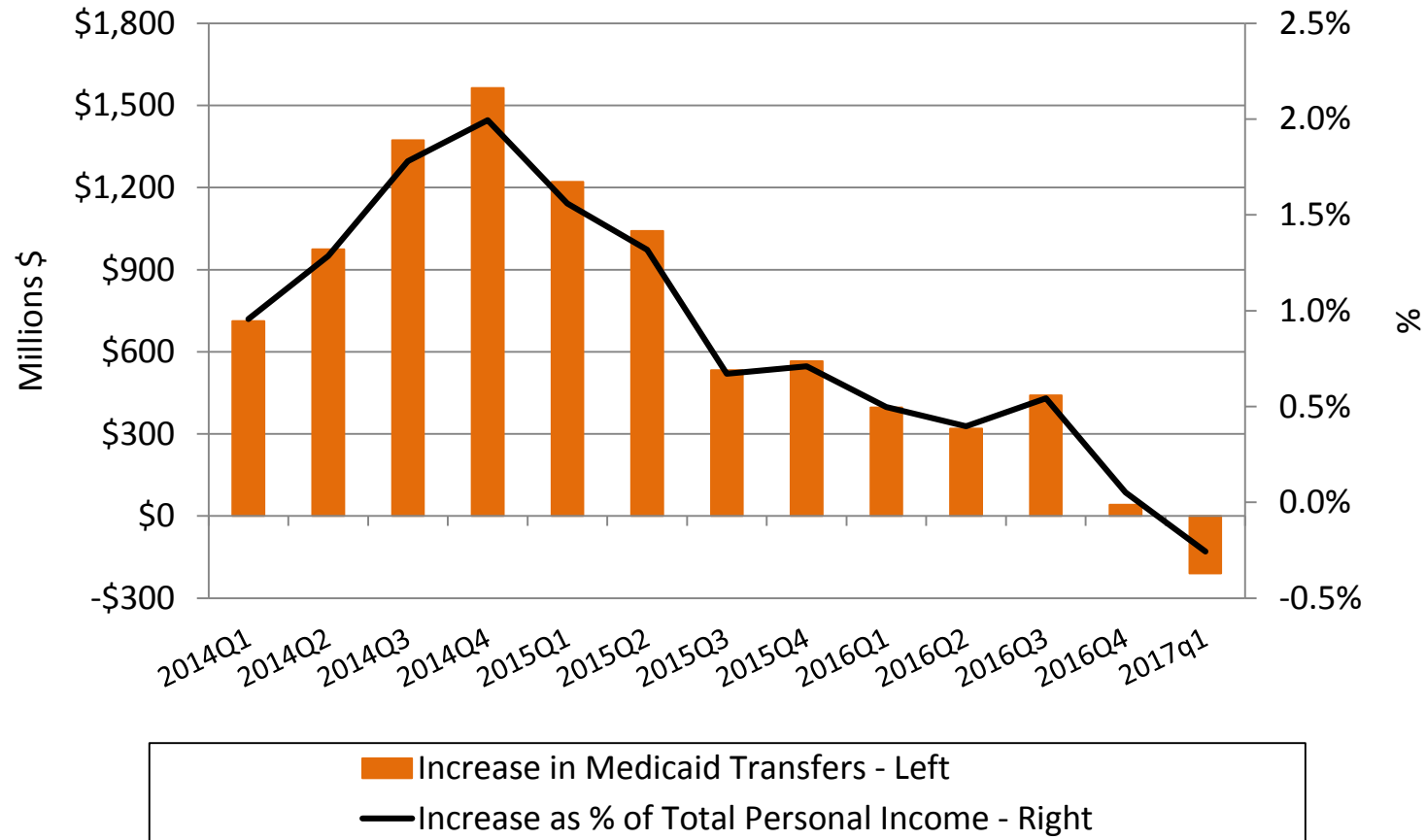
In total, healthcare will account for 26.5% of total employment growth.



Projected gains in Healthcare and Social Service Occupations in the United States, 2014-2024, by Educational Requirements



Medicaid transfers to New Mexico, 2014-2017Q1



Following a sharp increase following the implementation of ACA, growth of Medicaid transfers into New Mexico has slowed.

Main Highlights of ROI Analysis

- 1,609 Additional Employment in New Mexico
- Average Annual Earnings: \$25,992
- Average Increased Annual Earnings: \$7,985
- Total Increased Earnings: \$132 million
- Total Costs: \$41 million
- Return on Investment: 2.22
- Economic Impacts of SUN PATH's \$15M → \$27 million economic output, 68 jobs and \$12.1 million income through multipliers effect

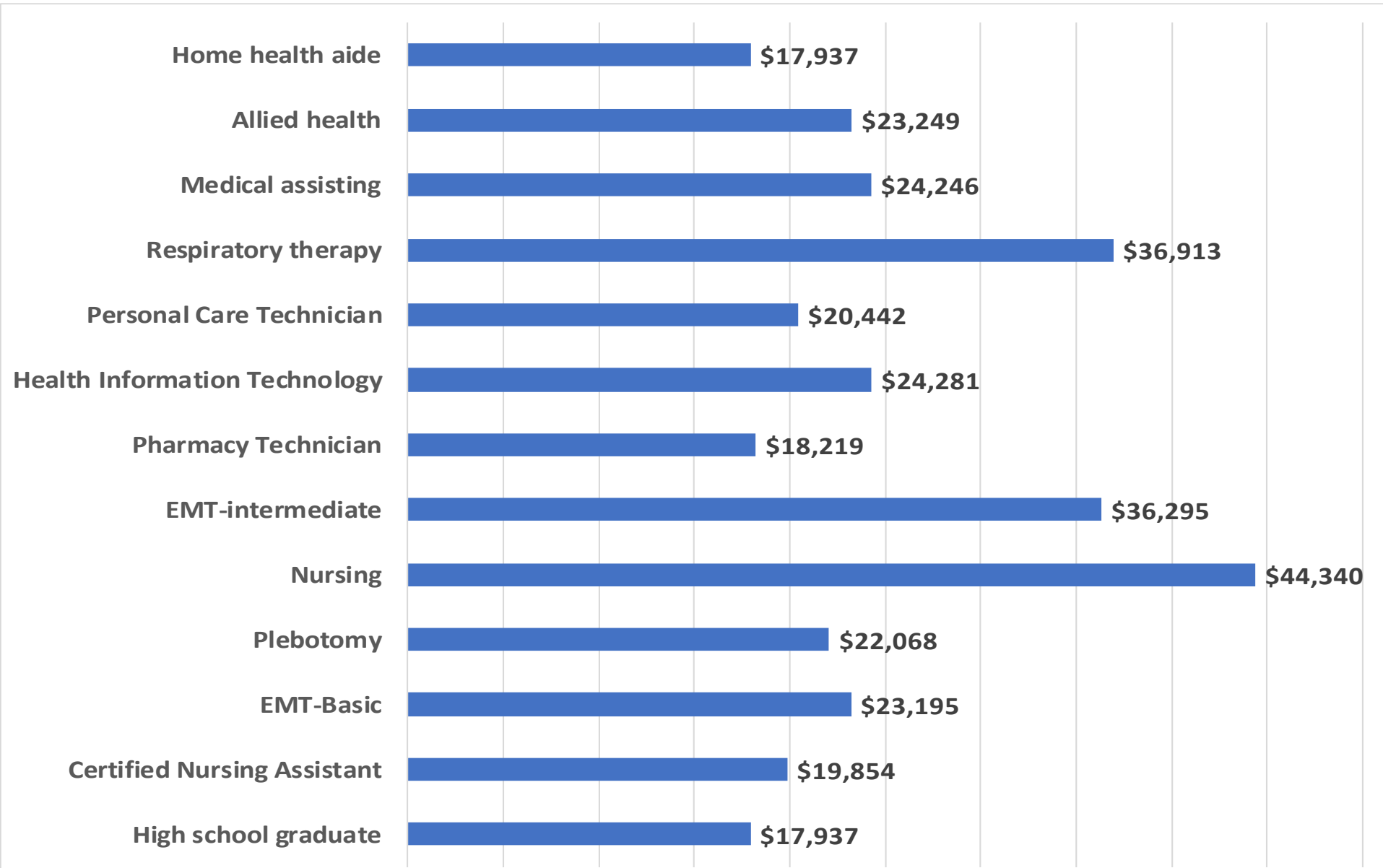
Definition

$$\textit{Return of Investment} = \frac{\textit{Total Benefits} - \textit{Total Costs}}{\textit{Total Cost}}$$

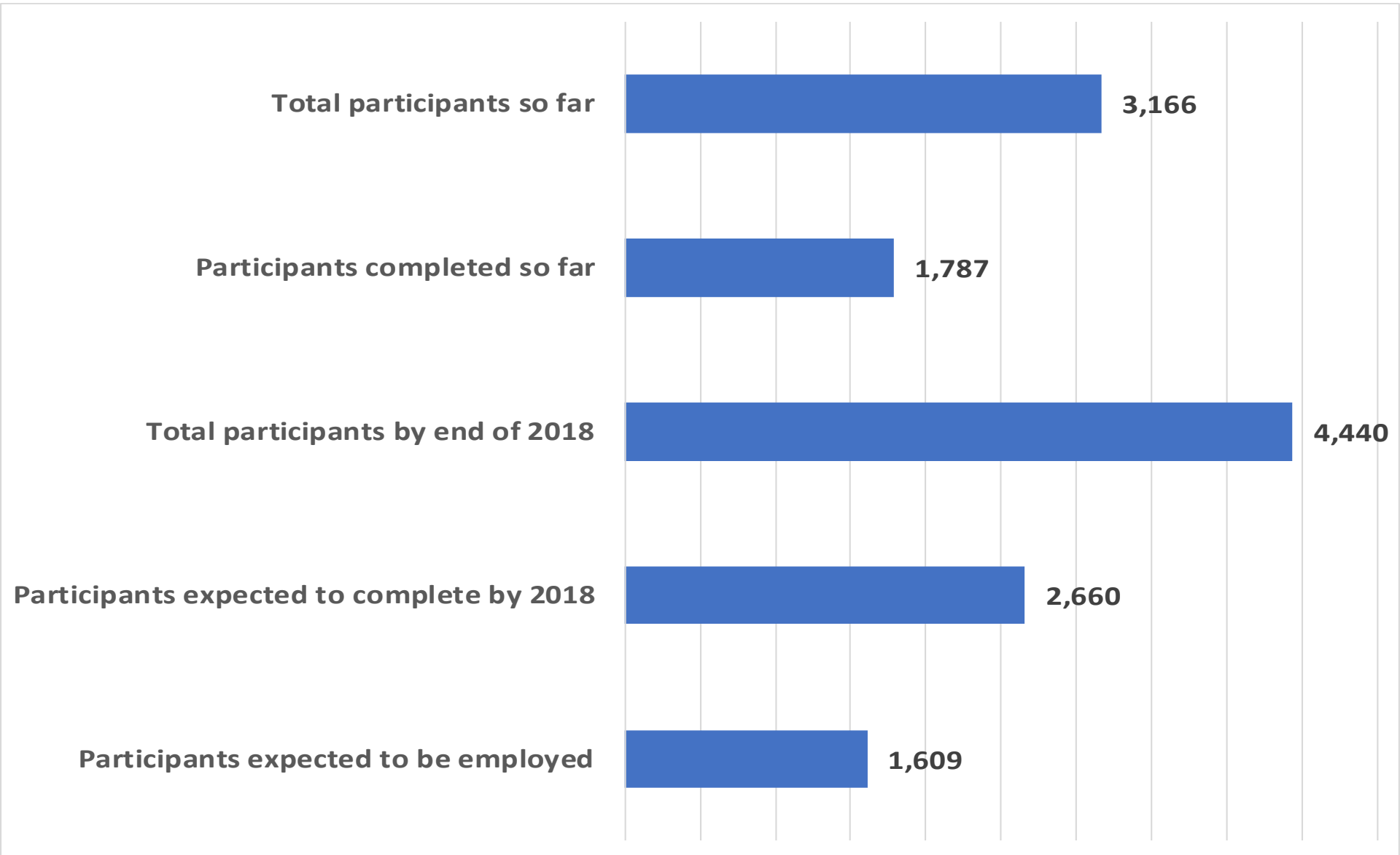
Total Benefits:

- Increased earnings of participants after high school graduation
- Average earnings of a typical high school graduate: \$17,937

Earnings by Certificate



SUN PATH Program Participants



Employment Projection

Certificate program	2017	2018	2019	2020
AH-allied health	7	11	15	15
AH-CNA	41	108	179	179
AH-ekg technician	0	0	1	1
AH-home health aide	7	13	23	23
AH-medical assisting	13	41	66	66
AH-medical laboratory technician	5	5	7	7
AH-nurses aide	1	9	14	14
AH-nursing	57	115	181	181
AH-nursing assistant	67	145	238	238
AH-nursing assisting	4	35	58	58
AH-Occupational Therapy Assistant	0	12	19	19
AH-personal care attendant	0	1	2	2
AH-personal care technician	7	12	28	28
AH-pharmacy technician	7	15	37	37
AH-phlebotomist technician	5	19	32	32
AH-phlebotomy	16	54	99	99
AH-Physical Therapy Assistant	5	6	9	9
AH-pre-nursing	3	14	21	21
AH-radiographic technology	5	10	14	14
AH-radiologic technology	3	3	5	5
AH-respiratory therapy	11	14	25	25
AH-surgical technician	2	5	9	9
EMT-community emt	0	0	0	0
EMT-community health worker	4	15	30	30
EMT-community paramedic	0	0	1	1
EMT-emt	8	31	52	52
EMT-emt-basic	57	175	299	299
EMT-emt-intermediate	5	33	58	58
EMT-first responder prehospital professional	3	3	3	3
EMT-paramedic	5	22	29	29
HIT-Electronic Health Information	0	1	4	4
HIT-hit	13	24	35	35
HIT-medical coding	5	8	13	13
IT:cyber security certificate	0	1	3	3
Total	366	960	1,609	1,609

Certificate program	Increased annual earnings (\$)	Increased earnings (in thousand dollars)				Cumulative Total
		2017	2018	2019	2020 to 2028	
AH-allied health	\$5,313	\$37.2	\$58.4	\$79.7	\$717	\$893
AH-C N A	\$1,917	\$78.6	\$207.1	\$343.2	\$3,089	\$3,718
AH-ekg technician	\$282	\$0.0	\$0.0	\$0.3	\$3	\$3
AH-home health aide	\$280	\$2.0	\$3.6	\$6.4	\$58	\$70
AH-medical assisting	\$6,309	\$82.0	\$258.7	\$416.4	\$3,748	\$4,505
AH-medical laboratory technician	\$9,943	\$49.7	\$49.7	\$69.6	\$626	\$795
AH-nurses aide	\$385	\$0.4	\$3.5	\$5.4	\$48	\$58
AH-nursing	\$26,403	\$1,505.0	\$3,036.4	\$4,779.0	\$43,011	\$52,331
AH-nursing assistant	\$1,917	\$128.5	\$278.0	\$456.3	\$4,107	\$4,969
AH-nursing assisting	\$1,917	\$7.7	\$67.1	\$111.2	\$1,001	\$1,187
AH-Occupational Therapy Assistant	\$18,976	\$0.0	\$227.7	\$360.5	\$3,245	\$3,833
AH-personal care attendant	\$2,505	\$0.0	\$2.5	\$5.0	\$45	\$53
AH-personal care technician	\$2,505	\$17.5	\$30.1	\$70.1	\$631	\$749
AH-pharmacy technician	\$282	\$2.0	\$4.2	\$10.4	\$94	\$111
AH-phlebotomist technician	\$4,132	\$20.7	\$78.5	\$132.2	\$1,190	\$1,421
AH-phlebotomy	\$4,132	\$66.1	\$223.1	\$409.0	\$3,681	\$4,380
AH -Physical Therapy Assistant	\$18,976	\$94.9	\$113.9	\$170.8	\$1,537	\$1,917
AH-pre-nursing	\$8,966	\$26.9	\$125.5	\$188.3	\$1,695	\$2,035
AH-radiographic technology	\$6,309	\$31.5	\$63.1	\$88.3	\$795	\$978
AH-radiologic technology	\$6,309	\$18.9	\$18.9	\$31.5	\$284	\$353
AH-respiratory therapy	\$18,976	\$208.7	\$265.7	\$474.4	\$4,270	\$5,218
AH-surgical technician	\$16,226	\$32.5	\$81.1	\$146.0	\$1,314	\$1,574
EMT-community emt	\$5,259	\$0.0	\$0.0	\$0.0	\$0	\$0
EMT-community health worker	\$6,309	\$25.2	\$94.6	\$189.3	\$1,704	\$2,013
EMT-community paramedic	\$5,259	\$0.0	\$0.0	\$5.3	\$47	\$53
EMT-emt	\$5,259	\$42.1	\$163.0	\$273.4	\$2,461	\$2,940
EMT-emt-basic	\$5,259	\$299.7	\$920.3	\$1,572.3	\$14,151	\$16,943
EMT-emt-intermediate	\$18,358	\$91.8	\$605.8	\$1,064.8	\$9,583	\$11,345
EMT-first responder prehospital professional	\$14,414	\$43.2	\$43.2	\$43.2	\$389	\$519
EMT-paramedic	\$5,259	\$26.3	\$115.7	\$152.5	\$1,372	\$1,667
HIT-Electronic Health Information	\$15,236	\$0.0	\$15.2	\$60.9	\$549	\$625
HIT-hit	\$6,344	\$82.5	\$152.3	\$222.1	\$1,998	\$2,455
HIT-medical coding	\$15,236	\$76.2	\$121.9	\$198.1	\$1,783	\$2,179
IT:cyber security certificate	\$6,344	\$0.0	\$6.3	\$19.0	\$171	\$197
Total		\$3,097.7	\$7,435.2	\$12,155.2	\$109,396.8	\$132,085.0

Estimated Benefits

- Average Increased Earnings: \$7,985
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- Increased Earnings in 2017: \$3.1 M
 - Increased Earnings in 2018: \$7.4 M
 - Increased Earnings in 2019: \$12.1 M
 - Increased Earnings in 2020 to 2028: \$109.4 M
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- **Total Increased Earnings: \$132.1 M**

Estimated Costs: \$41 million

- \$15 million: SUN PATH expenditures
- \$20 million: Students' opportunity costs and tuition and fees
- \$8.5 million: faculty and staff salary

ROI=2.22

$$ROI = \frac{\$132.085 \text{ million} - \$41 \text{ million}}{\$41 \text{ million}}$$

$$= \frac{\$91.085 \text{ million}}{\$41 \text{ million}} = 2.22$$

- Every \$1 invested in the SUN PATH certificate program, \$2.22 would be generated in New Mexico's economy

Assumptions and limitations

- Half-life of skills: 10 years
- Increased earnings is results of many factors
- Discount rate of future earning equals future earnings growth
- Opportunity cost of a student for 7 months is \$10,463
- Average tuition and fee per student is: \$2,024
- No accounting of income support program such as unemployment insurance, TANF, food stamp, Medicaid etc.
- No accounting of externalities of employment: better personal/family health, crime reduction, increased social capital, etc.

Economic Impact of SUN PATH Expenditures (\$15M)

Impact Type	Employment*	Labor Income	Output
Direct	45	\$8.8M	\$15M
Indirect	8	\$1.2M	\$5.6M
Induced	14	\$2.1M	\$7.3M
Total	68	\$12.1M	\$27.5M

Source: BBER estimation using New Mexico IMPLAN model 3.1

*Employment numbers represent an average employment for 4 years