



## Education and Employment

Community Health Assessment Priority Five: Mason County has a trained and prepared workforce that is participating in a local economy that supports living wage jobs.

Rationale: According to current research, individual education achievement influences health outcomes at many levels. College graduates live at least 5 years longer than a non-high school graduates. Four years of post-high school education are associated with lower health risks: 1.3% for diabetes, 2.2% for heart disease, 5% for overweight, and 12% for smoking. In addition, adult education levels are predictors of infant health outcomes; the more educated the mother, the better the birth outcomes. Parent education levels are also predict their children's success in school. Finally, education levels are significant predictors of the disparities experienced by race/ethnicity in communities, as well as income gap. (1)

*Moving Mason Forward* has adopted a "cradle to career" approach to the education/employment determinant of health, recognizing that a community's economic prosperity starts with the family at the earliest stages of life. A vibrant and sustaining local economy is not only dependent on the preparedness of the local workforce, but also the quality of public school systems to both attract quality employers and contribute to workforce preparedness.

## Moving Mason Forward Goals

### Our children are kindergarten-ready

WaKids is a state-wide assessment of kindergarten-readiness that started in 2011. All of Mason County's 7 public school districts were participating by the 2015-16 school year. WaKids measures children's skill levels in six domains: 1) social-emotional, 2) physical, 3) language, 4) cognitive, 5) literacy, and 6) math. (2)

### **Percent of Children Who Met WaKids Developmental Standards in All Six Domains (2)**

Area	2013-14	2017-18
Mason County	49%	45%
Washington	40%	47%

NOTE: WaKids has been phased in, starting with school districts with state-funded all-day kindergarten. Hood Canal SD started in this first phase, 2011-12, followed by Shelton SD in 2012-13. Mary M. Knight, North Mason and Pioneer SD started in 2013-14, and Grapeview and Southside SD in 2015-16.

External factors affect the opportunities that prepare young children for kindergarten readiness. These factors explain part of the achievement gap that persists through the public school experience. (2) WaKids assesses preschooler's development skills against expected skill development at specific ages. WaKids expects that all preschoolers should be entering kindergarten with skill sets typical of at least a 4 and 5 year old. (2)

## Percent of Children Demonstrating Characteristics of Kindergartener with 4 & 5 year skill sets by Domain by School District, 2016-17 (2)

School District	Socio-Emotional	Physical	Language	Cognitive	Literacy	Math
Grapeview	68%	100%	95%	95%	95%	80%
Hood Canal	91%	97%	100%	97%	100%	89%
Mary M. Knight	67%	50%	58%	42%	83%	67%
North Mason	70%	74%	80%	66%	65%	42%
Pioneer	50%	50%	58%	50%	90%	72%
Shelton	79%	89%	78%	83%	78%	56%
Washington State average	70%	79%	81%	77%	83%	66%

## Academic Outcomes

Research shows that student academic performance at specific grades and in subject areas can be good predictors to on-going student success, as defined as student graduation. Two of these key performance levels are 4th grade reading and 8th grade math. (3)

## Percent of Students Meeting State Standards (Smarter Balance Assessment) in Selected Grades, 2016-17 (4)

School District	4 <sup>th</sup> Grade SBA-Reading	8 <sup>th</sup> Grade SBA-Math
Grapeview	54%	42%
Hood Canal	24%	32%
Mary M. Knight	33%	18%
North Mason	42%	27%
Pioneer	58%	34%
Shelton	41%	40%
Southside	70%	74%*
Washington State average	55%	48%
Healthy People 2020 Goal	36%	37%

NOTE: The Smarter Balanced Assessment was implemented state-wide in 2014-15 academic year. As with any new system, schools need time to adjust curriculum to reflect the focus of new standards. \*Data is for 7<sup>th</sup> grade because 8<sup>th</sup> grade was not available.

## Education and Employment

### Our youth graduate from high school and are career and/or college-ready

High School graduation rates can be understood by two metrics: 1) adjusted 4<sup>th</sup> year cohort that measures the percent of 9<sup>th</sup> grade students who graduate with the class and 2) adjust 5<sup>th</sup> year cohort that measures the graduation rate for students who take longer than the expected 4 years. The former metric is also known as 'on-time graduation,' while the latter is 'extended graduation.' (4)

#### 4 year and 5 year Cohort Graduation Rates by School District (4)

School District	2012 & 2013 Graduating Classes		2016 & 2017 Graduating Classes	
	4 Year Cohort (adjusted)	5 Year Cohort (adjusted)	4 Year Cohort (adjusted)	5 Year Cohort (adjusted)
Mary M. Knight *	100%	83%	79%	94%
North Mason	78%	88%	78%	76%
Shelton	62%	71%	74%	84%
Washington State	77%	79%	79%	82%

NOTE: \*Data is for 2015-2016, no data available for 2016-2017.

The County Health Rankings present data that allow for trend data analysis at the county level. (5)

#### Graduation Rates for Mason County as Measured by County Health Rankings (5)

Area	2010-11	2011-12	2012-13	2013-14	2014-15
County-wide rates	68%	67%	73%	73%	74%
Washington State rates	76%	79%	79%	80%	81%

#### Graduation Rates by At-risk Sub-Populations by School District, 2016-17 (6)

School District	ALL	Male	Low Income	English Language Learner	Homeless	Special Education
North Mason	74%	68%	64%	N/A	61%	60%
Shelton	76%	75%	70%	N/A	54%	57%
Washington State Average	79%	76%	70%	58%	54%	59%

Students who continue with post-secondary education are better prepared for the current and future workforce. Research has found that every year of post-secondary education results in an 11% increase in income over a lifetime. (1)

## Post-high School Graduation Actions by School Districts, 2016 (7)

School District	Number of Graduates	Percent Continuing with College	Designation of College-going Students In-State			
			2-Year Public	4-Year Public	2-Year Private	4-Year Private
North Mason	167	45-49%	55-59%	20-24%	0-5%	0-5%
Shelton	328	36%	55-59%	30-34%	0-2%	3-4%
Washington State	69,163	59%	44%	33%	0-1%	5%

NOTE: Mary M. Knight school district has too small of a graduating class to measure post-high school actions.

## Preparation for College

A high school diploma does not yet ensure that students are prepared for college level work. College entrance exams like the SAT® and ACT® can be good indicators of student readiness for college level coursework; as well receiving Advance Placement (AP®) credit for college level courses taken while in high school.

## SAT® Exams by District, 2016 (8)

School District	SAT Test Takers	Percent of Graduates that took the SAT	Mean Scores		
			Critical Reading	Math	Writing
North Mason	44	26%	508	485	461
Shelton	94	29%	483	488	473
Washington State	43,783	63%	501	506	481

## Advance Placement Exams by District, 2016 (8)

School District	Number of Exam Takers	Number of Exams Taken	AP® Exam Pass Rate
North Mason	13	20	30%
Shelton	85	85	31%
Washington State	-	-	59%

NOTE: A passing score on an AP Exam is a score of 3 or higher on a scale of 5.

Many students need to take remedial math and/or English classes before they can enroll in college-level course work.

## Percent of High School Graduates that Need to Take Pre-College Prep Math and/or English, 2016. (7)

School District	Math	English	Both
North Mason	40-44%	25-29%	20-24%
Shelton	50-54%	35-39%	20-24%
Washington State Average	41%	19%	13%

## Education and Employment

### Our adult workforce is ready and prepared for local employment opportunities

The education level of adults available to participate in the local workforce can help us better understand health within our community. It is known that higher education levels are strongly associated with improved work and economic opportunities, reduced psychosocial stress, and healthier lifestyles. (5)

#### **Percent of 25-44 year old Adults with Some Post-Secondary Education (5)**

Area	2013	2014	2015	2016	2017
Mason County	52%	54%	54%	55%	54%
Washington State	67%	68%	68%	68%	69%

### Our local economy supports living wage jobs

Not only does a community need an educated and trained workforce, but they need to offer employment opportunities that protect a family against economic distress. This is known as self-sufficiency. In public policy, a **living wage** is the minimum income necessary for a worker to meet their basic needs. In 2017, a Mason County family of four comprised of two adults and two children in school required an annual income of \$53,393 to cover basic needs. (9) Living wage jobs support households with sufficient income to cover basic needs and a small amount of discretionary income.

#### Local Wages

#### **Wages and Income, 2016 (10)**

Area	Mason County	Washington	WA Excluding King County
Average annual wage	\$38,272	\$59,073	N/A
Median hourly wage	\$19.28/hr	\$23.91/hr	\$20.68
Per capita personal income	\$36,623	\$51,898	N/A
Poverty rate*	17%	11%	N/A

NOTE: Per capita personal income equals total personal income divided by the resident population.

\*Poverty rate is from 2011-2015.

#### **Median Household Earnings and Difference between Mason County and State Average (11)**

Area	2012	2013	2014	2015 (estimate)	2016 (projection)
Mason County	\$48,804	\$47,142	\$52,598	\$53,633	\$55,824
Washington	\$56,444	\$57,284	\$60,153	\$63,439	\$65,500
% difference between county and state	14%	18%	13%	15%	15%

## Education and Employment

Another indicator of how well employed Mason County residents are doing economically is measured by ALICE. ALICE is an indicator of the portion of the population who are 'working poor,' (**A**sset **L**imited, **I**ncome **C**onstrained and **E**mployed.) The United Ways of Pacific Northwest produced a report (based upon 2014 data) that found that 13% of the Mason County households are living in poverty and an additional 26% are ALICE households. (12) Participation rates in Basic Food, now known as Supplemental Nutrition Assistance Program – SNAP, illustrate the extent of how many households are experiencing financial hardship. (13)

### Adults, 19-64 years, Participation Rate in Public Assistance Programs –SNAP (13)

Area	2012	2013	2014	2015	2016
Mason County	24%	25%	25%	25%	25%
Washington	19%	19%	19%	18%	17%

### Local Employment Opportunities

Historically, Mason County's economy has been based upon natural resources like aquaculture and forest products. The shift from forestry-based economy began in the 1980's. The loss of local employment opportunities in the forestry industry have been offset by new positions with the state prison and increases in aquaculture. Mason County is an important bedroom community to its adjacent counties, Thurston, Kitsap and Pierce. In 2015, 53.8% of earned income came from Mason County residents who worked outside the county. (9)

### Non-farming Employment Trends by Sector (14)

Area	2012	2013	2014	2015	2016	2017
<b>Total Non-farming jobs</b>	<b>13,380</b>	<b>13,520</b>	<b>13,690</b>	<b>13,840</b>	<b>14,270</b>	<b>14,370</b>
Total Private	8,030	8,140	8,230	8,300	8,570	8,650
Goods Producing	2,170	2,200	2,140	2,120	1,660	1,730
Logging, construction	780	700	680	600	750	780
Manufacturing	1,390	1,500	1,460	1,520	910	950
Service Providing	11,210	11,320	11,580	11,720	12,610	12,640
Education and Health	1,340	1,320	1,280	1,210	1,120	1,180
Retail Trade	1,460	1,600	1,640	1,820	1,920	1,910
Leisure & Hospitality	1,110	1,130	1,120	1,200	1,250	1,200
Information & Financial	520	520	540	520	480	450
Government	5,350	5,580	5,460	5,540	5,700	5,720

NOTE: Data is from November of each year and is not seasonally adjusted.

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## Mason County's Largest Employers

Over the past five years, there have been some major changes in the local economy. Wal-mart, once one of the largest employers in the county, with over 500 employees in 2006, has reduced its workforce by over half in the past ten years.

### Leading Local Employers based on Total Number of Full-time and Part-time Employees, 2010 and 2014 (15)

Employer	Sector	Number of Permanent Employees	
		2010	2014
Little Creek Casino Hotel	Tourism	720	800
WA Corrections Center	Government- state	626	640
Mason General Hospital	Medical	542	625
Shelton School District	Government- education	641	624
Taylor Shellfish	Aquiculture	325	500
Mason County	Government – local	360	325
Squaxin Island Tribe	Government – tribal	260	268
North Mason School District	Government – education	351	259
Olympic Panel Products	Manufacturing	255	220
Wal-mart	Retail	365	215
Simpson Timber Company	Manufacturing	210	0

This figure compares labor force participation of all adults between 16 and 75 years of age in Mason County and Washington State.

### Labor Force Participation by Age, 2012-2016 (16)

Age Group	Mason	Washington
16-19 years	30%	37%
20-24 years	71%	76%
25-29 years	75%	82%
30-34 years	69%	81%
35-44 years	77%	82%
45-54 years	70%	80%
55-59 years	58%	73%
60-64 years	40%	56%
65-74 years	17%	24%
75 + years	3%	5%

# Data Sources for Education and Employment

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- (15) 2015 Mason County "Economic Vitality Index." Economic Development Council of Mason County.  
<http://www.choosemason.com/wp-content/uploads/2014/10/2016-EVI-booklet.pdf>



(16) Employment Status, 2012-2016 American Community Survey 5-Year Estimates

[https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS\\_16\\_5YR\\_S2301&prodType=table](https://factfinder.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_16_5YR_S2301&prodType=table)

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