# THE ROADMAP

## A Plan to Increase Educational Attainment in Washington

2013

# About the Council

The Washington Student Achievement Council provides strategic planning, oversight, and advocacy to support increased student success and higher levels of educational attainment in Washington.

Major functions:

- Developing a ten-year Roadmap for higher education, including recommendations for initiatives and resources needed to increase educational attainment.
- Improving student success by setting minimum college admission standards and identifying ways to help students better transition through all phases of education.
- Ensuring the quality of state financial aid programs and services that support educational access and affordability.
- Providing college savings opportunities through the Guaranteed Education Tuition (GET) program.
- Preparing underrepresented middle and high school students for postsecondary education through early outreach and success programs such as College Bound and GEAR UP.
- Protecting education consumers by authorizing out-of-state institutions to operate in Washington and monitoring program quality and finances.
- Representing the broad public interest above the interests of the individual institutions of higher education.

The nine-member Council consists of five citizens (including a current student) and one representative from each of the state's four major educational sectors:

1. Independent, nonprofit higher education institutions, appointed by the Independent Colleges of Washington.
2. Four-year institutions of higher education, appointed by the Council of Presidents.
3. Community and technical colleges, selected by the State Board for Community and Technical Colleges.
4. K-12 institutions, selected by the Superintendent of Public Instructions, in consultation with the State Board of Education and the Department of Early Learning.

Agency staff, led by Executive Director Gene Sharratt, support the work of the Council, performing assigned functions and managing student financial aid programs.

# The Washington Student Achievement Council is pleased to share the state's ten-year Roadmap to increase educational attainment for Washingtonians.

The 2013 Roadmap provides a framework to advance the Council's vision to inspire and foster excellence in educational attainment. This purpose is echoed in our founding statute and demonstrated in the Council's work with strategic planning, oversight, and advocacy to improve educational outcomes for all students.

**By working with our educational partners, students, and stakeholders, and through our research of best practices in other states, we have made great strides in developing a Roadmap to address the significant challenges facing our students, institutions, employers, and taxpayers.**

- Too many Washingtonians—especially persons of color, individuals from low-income families, English Language Learners, and those with disabilities—do not participate in postsecondary education. As a result we rank low nationally in the percentage of Washingtonians enrolled in postsecondary education.
- Washington faces underlying access and capacity challenges as more students enroll in high-cost programs that prepare them for high-demand jobs.
- More than 30,000 eligible students are unable to receive the State Need Grant because the program is underfunded.
- Student loan debt has increased for students at our public and private institutions.

**Nonetheless, Washington's current education system provides numerous strengths on which we will build to address these challenges.**

- By the 2014-15 school year, there will be more than 10,000 enrollment slots available through the Early Childhood Education Assistance Program.
- The state is required by statute (RCW 28A.150.315) to provide all-day kindergarten for all Washington students enrolled in public schools by the 2017-18 school year.
- Our public K-12 schools serve more than 1 million students annually and employ more than 53,000 teachers.
- The State Need Grant, the College Bound Scholarship, and other state need-based programs have allowed thousands of Washingtonians to attend a postsecondary institution.
- Washington ranks first in the nation in the level of need-based student financial aid per enrolled undergraduate student.
- Our public and private non-profit baccalaureate institutions have student graduation rates that are among the highest in the nation.
- Each year, our community and technical colleges prepare nearly 500,000 Washingtonians with the skills and knowledge necessary for careers or further education at public and private baccalaureate institutions.
- We have more than 300 private career schools that provide training in a diverse array of fields to support employer and community needs for skilled workers.

The Roadmap's actions leverage Washington's significant strengths, amplify access to educational opportunities, and increase support for all students. The Roadmap will guide our work in the effort to meet two overarching goals:
a) All adults in Washington will have a high school diploma or equivalent.
b) At least 70 percent of Washington adults will have a postsecondary credential. Further, the 2013 Roadmap outlines twelve specific strategies to leverage and expand on the work of the state's education agencies, institutions, and community partners. Implementation of the Roadmap will result in a more highly educated population for Washington's communities and economies.

**Overarching goals:**
**a) All adults in Washington will have a high school diploma or equivalent.**
**b) At least 70 percent of Washington adults will have a postsecondary credential.**

The Council also recognizes the existing efforts of the other state education agencies, including the Department of Early Learning, the Office of the Superintendent of Public Instruction, the State Board of Education, the Professional Educator Standards Board, the State Board for Community and Technical Colleges, the Workforce Training and Education Coordinating Board, the Education Research and Data Center, and numerous other organizations and stakeholders. These groups all share the same goal of increasing the educational attainment of Washingtonians.

Our state's leaders will help make improvements that are essential to our students. We are off to a good start—the 2013-15 operating budget reflects increased funding for postsecondary education and K-12 schools and also provide relief from tuition increases. However, we recognize that the realities of our economy, a growing population, and changing demographic patterns require new levels of collaboration, integration, focus, and investments.

Accomplishing these educational attainment goals is possible through dedicated and coordinated efforts. The Washington Student Achievement Council looks forward to providing collaborative leadership on this journey to providing every Washingtonian with a world-class education.

Sincerely,

Maud Daudon, Chair
Scott Brittain
Paul Francis

Karen Lee, Vice Chair
Marty Brown
Rai Nauman Mumtaz

Ray Lawton, Secretary
Jeff Charbonneau
Dr. Susana Reyes

# About this Report

Under RCW 28B.77.020, the Washington Student Achievement Council is charged with setting educational attainment goals to meet the needs of Washington's residents and its workforce, along with developing a Ten-year Roadmap to identify key strategies for meeting those goals. The Ten-Year Roadmap is complemented by a short-term Strategic Action Plan submitted in December of even-numbered years that makes budget and policy recommendations for implementing the strategies identified in the Roadmap.

# Contact Information

Gene Sharratt, Ph.D.
Executive Director
Washington Student Achievement Council
360.753.7800
genes@wsac.wa.gov

Christy England-Siegerdt, Ph.D.
Director of Research and Planning
Policy, Planning & Research Division
Washington Student Achievement Council
360.753.7864
christye@wsac.wa.gov

# Table of Contents

**Executive Summary** ..... 1

**Summary of Ensure Access Actions** ..... 4

Ensure cost is not a barrier for low-income students ..... 6

Make college affordable ..... 8

Ensure all high school graduates are career and college ready ..... 10

Streamline and expand dual-credit and dual-enrollment programs ..... 12

Increase support for all current and prospective students ..... 14

**Summary of Enhance Learning Actions** ..... 16

Align postsecondary programs with employment opportunities ..... 18

Provide greater access to work-based learning opportunities ..... 20

Encourage adults to earn a postsecondary credential ..... 23

Leverage technology to improve student outcomes ..... 24

**Summary of Prepare for Future Challenges Actions** ..... 26

Respond to student, employer, and community needs ..... 28

Increase awareness of postsecondary opportunities ..... 30

Help students and families save for postsecondary education ..... 32

**Looking Ahead** ..... 34

**Appendix ...** ..... 37

**Sources** ..... 38

# Executive Summary

**The educational attainment of Washingtonians must increase—not only for the benefit of the individual but for the well-being of the state as a whole. Without substantive changes, Washington's economy will not improve—nor will the quality of life for many Washingtonians. While other states are recovering from the recent recession, Washington continues to lag behind in that recovery. We must take action now to revitalize our state. The Washington Student Achievement Council believes that the most direct route to prosperity is through education. The Roadmap represents our first step on that journey.**

---

Increasing educational attainment is vital to the well-being of Washingtonians and critical to the health of the state's economy. Attainment increases when more students have access to early learning and pre-kindergarten programs and arrive at kindergarten ready to learn, go on to graduate from high school, and then earn a postsecondary credential. Attainment also increases when adults—many of whom have families and full-time employment—access postsecondary education to complete a credential to improve their career prospects.

We know that a well-educated population generates more tax revenue and requires fewer social services. Education opens doors to gainful employment, higher wages, increased job benefits, improved physical health, and increased civic engagement. Educated workers capable of competing for high-demand jobs in today's global economy sustain existing employers and attract new businesses—directly contributing to the state's economic growth and vitality.

## Challenges

As we anticipate the future educational needs of our state, we cannot ignore the primary challenges confronting Washington's citizenry and economy: the need to provide educational opportunities to an increasingly diverse population, while simultaneously responding to growing demand for a well-educated workforce in an ever-changing economy.

- **The demographic imperative.** The state's changing demographics brings unique opportunities and challenges. Most of Washington's future population growth is expected to come from groups that historically have been less likely to participate in and complete postsecondary programs. Subject to a lingering opportunity gap in our state, these groups are often collectively referred to as "underrepresented" in postsecondary education. Since 2000, Washington's—and the nation's—population growth has been almost entirely due to increases in underrepresented populations. For example, Washington's Hispanic population has grown more than 70 percent since 2000.[1]

- **The economic imperative.** Employers are expressing increasing concern over difficulties finding Washington employees with the necessary skills to fill critical job openings. By 2016, nearly three-fourths of available jobs will require at least a postsecondary credential.[2] However, only about 50 percent of the current adult population in Washington has completed a postsecondary certificate, apprenticeship, or degree.[3] If this gap persists, companies will either have to import talent or export operations.[4]

## Educational Attainment Goals

It is with a sense of urgency that the Washington Student Achievement Council, in collaboration with policymakers, educational partners, and stakeholders from across the state, offers this ten-year plan for increasing educational attainment. We begin this Roadmap with two state-level goals for 2023.

- **All adults in Washington will have a high school diploma or equivalent.**
- **At least 70 percent of Washington adults will have a postsecondary credential.**

Currently, only 89 percent of adults in Washington have a high school diploma or equivalent, and just less than 50 percent of these adults have a postsecondary credential.[5] Increasing these numbers is a long-term endeavor. For instance, the impact of providing additional support and information to this year's incoming 9th graders will not be seen until they graduate from high school in 2018. It will be later still, beginning in 2019, when these same students have had time to earn at least a postsecondary certificate—and longer yet to earn a degree.

**The Council will monitor progress toward the goals annually to evaluate their long-term impacts. The following will be used as baselines against which progress will be measured:**

- Increase the number and percentage of Washingtonians completing a high school diploma or equivalent.
  - 2012 four-year high school graduation rate[6]: 77.2 percent
  - 2012 alternative high school diplomas, General Education Development, or equivalent: 15,261[7]
- Increase the percentage of the population enrolled in a postsecondary certificate, apprenticeship, or degree program.[8]
  - 2011 undergraduate participation rate[a]: 17.7 percent
  - 2011 graduate participation rate[b]: 5.5 percent
- Increase the number of postsecondary certificates, apprenticeships, and degrees awarded annually.[9]
  - 2012 certificates and apprenticeships[c]: 15,669
  - 2012 associate degrees: 27,309
  - 2012 bachelor's degrees: 32,376
  - 2012 graduate and professional degrees: 12,155

Monitoring these metrics alone will not necessarily help reach the goals or meet the state's economic needs. Growth must correspond to the needs of the state so that students are prepared to participate in, and contribute to, the state's dynamic economy. To ensure alignment between postsecondary programs and the workplace the Council is committed to collaborating with other educational partners to conduct supplemental analyses to assess the needs of students, employers, and communities.

## Strategies for Increasing Educational Attainment

While acknowledging the economic and demographic challenges, the Roadmap provides multiple strategies to address them successfully. Achieving the educational attainment goals by 2023 will require focused strategies around three primary objectives: Ensure Access, Enhance Learning, and Prepare for Future Challenges. The Council believes these goals for 2023 can be accomplished through twelve action steps. The actions are listed in order by priority within each of the three objectives.

---

[a]Number of undergraduate students enrolled at all public and private institutions in Washington divided by the population age 17-44 with less than a Bachelor's degree.

[b]Number of graduate students enrolled at all public and private institutions in Washington divided by the population age 25-44 with a Bachelor's degree or higher.

[c]This number includes long and short certificates. For short certificates, the student must have earned 45 or more college-level credits.

**Ensure Access**

- Ensure cost is not a barrier for low-income students.
- Make college affordable.
- Ensure all high school graduates are career and college ready.
- Streamline and expand dual credit and dual enrollment programs.
- Increase support for all current and prospective students.

**Enhance Learning**

- Align postsecondary programs with employment opportunities.
- Provide greater access to work-based learning opportunities.
- Encourage adults to earn a postsecondary credential.
- Leverage technology to improve student outcomes.

**Prepare for Future Challenges**

- Respond to student, employer, and community needs.
- Increase awareness of postsecondary opportunities.
- Help students and families save for postsecondary education.

With so much at stake, powerful change necessitates a commitment to strong partnerships. Successful implementation of the Roadmap actions will require widespread support, collaboration, and engagement. The Council recognizes that numerous policymakers, educational partners, and stakeholders from across the state are already actively working to increase the educational attainment of Washingtonians. The Roadmap actions are designed to build on existing best practices and expand promising initiatives currently under way.

## Next Steps

The Council, our educational partners, and our state's leaders are determined to work toward a future of growth and prosperity. Widespread support, collaboration, and action are required to realize that vision. Increasing educational attainment is the shared goal that will drive our collective actions.

While each of the Roadmap actions is critical to increasing educational attainment, it is neither feasible nor practical to initiate all actions simultaneously.

The top 2013 Roadmap priority is to ensure cost is not a barrier for low-income students. To this end we will advocate for full funding of the College Bound Scholarship and the State Need Grant program. We will also move to develop a funding policy to better guide legislative appropriations to postsecondary institutions.

**In addition, work on several priority initiatives is under way. As a result, we anticipate increases in the following:**

- The number of career- and college-ready graduates.
- The number of returning adults seeking a postsecondary credential.
- Programs designed to meet student, employer, and community needs.
- Access to work-based learning opportunities.
- Awareness of postsecondary opportunities.

We will prioritize the remaining Roadmap actions during the development of the 2014 Strategic Action Plan, which will outline policy and funding needs for the 2015-17 biennium.

As a further demonstration of the Council's commitment, progress toward the educational attainment goals and the implementation of the actions outlined in this plan will be actively monitored and regularly reported. The Council will provide ongoing, real-time updates via the web and via regular reports to the Governor and the Legislature. In 2015, the Council will revisit the goals, objectives, and actions in this plan—in consultation with educational partners and stakeholders—making any necessary course corrections to ensure the Roadmap actions are increasing educational attainment for Washingtonians.

The state's 2013 Roadmap marks the beginning of a journey. This is not a static document, but rather a signal of the Council's commitment to our partners and the important work ahead.

Summary of

# Ensure Access

## Ensure cost is not a barrier for low-income students.

**Provide funding for all students eligible for the College Bound Scholarship in Fiscal Year 2014-15 and commit to full funding of all eligible State Need Grant students.**

## Make college affordable.

**Identify and recommend a state funding policy for postsecondary education to guide legislative appropriations to public postsecondary education institutions and state financial aid programs as well as decisions about public postsecondary institution tuition.**

## Ensure all high school graduates are career and college ready.

**Support implementation of the Common Core State Standards (CCSS) and the Smarter Balanced Assessment (SBAC), and identify effective strategies to reduce the need for pre-college level courses.**

## Streamline and expand dual-credit and dual-enrollment programs.

**Streamline and expand dual-credit and dual-enrollment programs to create a statewide dual-credit system available to all high school students.**

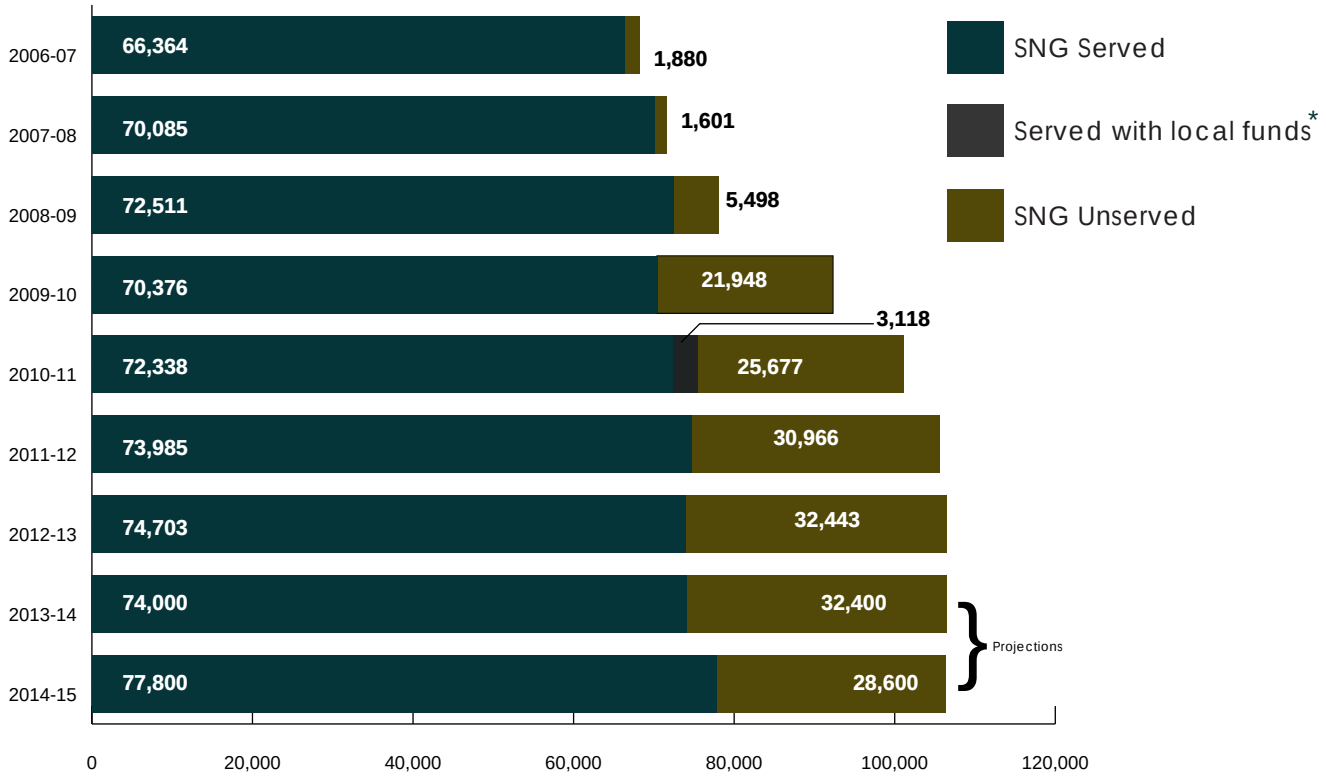
## Increase support for all current and prospective students.

**Provide increased support and resources to ensure the success of current and prospective students at all levels.**

# Ensure cost is not a barrier for low-income students

Since the recession began, unprecedented numbers of low-income students have enrolled in Washington's postsecondary institutions. Despite the Legislature's long-standing commitment to provide opportunities for these students—primarily through the State Need Grant (SNG) and College Bound Scholarship—state funding is no longer sufficient to meet demand. Since 2009-10 more than 30,000 eligible students have not received the SNG grant each year due to lack of funds.[10] Similarly, legislative appropriations for the College Bound Scholarship will not fully fund all eligible students expected to enroll in fiscal Year 2014-15.

**State Need Grant Eligible Students**
**2006-07 through 2014-15**




** Public Institutions Only*
*Source: Washington Student Achievement Council State Need Grant Final Interim Report*

While rising tuition affects all students, those from low-income families are the most vulnerable. They are less likely to enroll and more likely to drop out if they cannot pay for their expenses.[11] Some may choose to work more, which can have an adverse effect on their academic success. Some may borrow more, which impacts their long-term economic stability. Students who do receive annual State Need Grant funds persist, enroll full-time each term, and attend the entire academic year at higher rates than eligible students who do not receive the grant.[12]

## ACTION: Provide funding for all students eligible for the College Bound Scholarship in Fiscal Year 2014-15 and commit to full funding of all eligible State Need Grant students.

The Council will advocate for sufficient financial aid to preserve access and opportunities for low-income students in Washington. Ensuring all eligible students receive this funding enables them to stay focused and complete their education in a timely manner. This issue is also a priority for the Governor in Results Washington.[13]

In light of the state's current economic situation, it is unlikely that adequate funding will be available for all eligible students in the short term. Therefore, the Council recommends the state's budget for fiscal year 2014-15 include:

- An additional $12 million for the College Bound Scholarship to serve all eligible students. About 8,000 students are expected to be eligible for the scholarship in fiscal year 2014-2015.
- An additional $16 million to fund an additional 3,800 State Need Grant students.[d]

### Expected Results

- The Legislature appropriates $12 million to fully fund the College Bound Scholarship in fiscal year 2014-15.
- The Legislature appropriates $16 million in fiscal year 2014-15 to fund an additional 3,800 State Need Grant students.
- Increases in the following:
  - The percentage of eligible students served by State Need Grant to 100 percent.
  - The postsecondary retention and graduation rates of low-income students.

---

[d]These estimates assume tuition and student demand do not increase and no changes are made to the State Need Grant program.

# Make college affordable

Washington does not currently have a statutory postsecondary education funding policy. Without a specific goal or objective, the state's appropriations to public postsecondary institutions and financial aid programs are vulnerable to cuts when state revenue declines. The best example of this volatility came during the recent recession when state funding for the six public baccalaureate institutions was reduced by 40 percent,[14] necessitating unprecedented tuition increases. At the same time, student demand for postsecondary education increased. These factors combined to strain the ability of the state's primary financial aid program—State Need Grant—to serve all eligible students. Since 2009-10 more than 30,000 eligible students have not received the grant each year due to lack of available funds.[15]

In 2013 the Legislature and the Governor recognized this problem, and for the first time in more than 25 years, froze resident undergraduate tuition at Washington's public four- and two-year postsecondary institutions. However, without additional state funds, this is not sustainable.

**ACTION: Identify and recommend a state funding policy for postsecondary education to guide legislative appropriations to public postsecondary education institutions and state financial aid programs as well as decisions about public postsecondary institution tuition.**

The Council will take the lead in developing a responsible, comprehensive policy that is predictable for individuals and families, maintains funding and flexibility for public postsecondary institutions, and clarifies the state's role in increasing the educational attainment of Washingtonians. Through a collaborative process involving legislators, postsecondary institutions, and other stakeholders, the Council will identify a funding policy to guide investments in postsecondary education during both lean and robust economic times.

A responsible policy does not focus only on increasing funds for postsecondary institutions, nor does it dictate business practices. Rather, the policy should encourage postsecondary institutions to continue implementing strategies to increase efficiencies and to develop innovative options for delivering instruction at a lower cost. A responsible policy will provide postsecondary institutions with the stability and predictability needed to manage their finances, eliminating the need for tuition to become the primary vehicle for balancing institutional budgets. The policy should also ensure that the cost of attendance is affordable for students and their families. Stabilizing funding for public postsecondary institutions and state financial aid programs will allow individuals and families to plan and save for postsecondary education without worrying about drastic increases in cost.

### Expected Results

- The Council will develop and propose a funding policy to the Legislature and the Governor.
- The Legislature will adopt the policy.
- Appropriations will stabilize for public colleges and universities.
- Tuition will stabilize at public institutions.

# Ensure all high school graduates are career and college ready

A gap exists between high school curriculum, graduation requirements, and the skills and knowledge required to succeed in postsecondary education. This gap results in too many recent high school graduates enrolling in pre-college level courses.[16] Nearly three-fifths of students entering a community college after graduating from high school enroll in at least one pre-college level course. Students who start in pre-college level courses must take more courses to complete a degree, which requires more money and time.

This problem is further compounded by the inconsistent use of assessments to determine students' knowledge and abilities. The same score on the same placement exam may result in students at one institution being placed into pre-college level courses, while students at another institution are placed at college level. As the number of pre-college courses that students are required to take increases, the likelihood students will complete a credential decreases.[17]

**ACTION: Support implementation of the Common Core State Standards and the Smarter Balanced Assessment, and identify effective strategies to reduce the need for pre-college level courses.**

The Council will continue to play an active role in the implementation of Common Core State Standards (CCSS) and the Smarter Balanced Assessment Consortium (SBAC). Working with key partners, the Council will identify programs and practices that increase students' skills and knowledge and ensure success. The Improving Student Learning at Scale Collaborative grant and the Core to College project are examples of current work towards the following objectives:

- The 11th grade SBAC assessment is used to inform students' 12th grade coursework.
  - Students with exceptional scores will be encouraged to enroll in dual-credit or other rigorous courses and receive exemptions from pre-college level coursework at all postsecondary institutions in Washington.
  - Students who do not meet the minimum scores will have access to transition courses during the 12th grade to help them achieve college and career readiness.
- Students who have been out of high school for a year or more and are planning to enroll in a postsecondary institution will have access to a variety of supports known to improve academic readiness and success. These may include:
  - Improved pre-test advising.
  - Using alternative measures of readiness.
  - Refresher courses prior to testing.
  - Assessments that diagnose specific needs.
  - Alternative methods for delivering pre-college content.

The Council will also continue to support improvements to preparation programs and to professional development for educators and administrators. Educators and administrators must have the necessary tools and training to close the opportunity gap by engaging families and communities in helping students meet higher standards and by providing high-quality advising.

In addition, the Council will collaborate with key partners to explore the feasibility of a competitive grant program designed to support implementation of CCSS and SBAC and that reduces the need for pre-college assessment.

### Expected Results

- The 11th grade SBAC assessment will inform students' selection of courses in the 12th grade and eventual placement into college-level coursework at all postsecondary institutions.
- Reductions in the following:
    - The number of placement tests administered.
    - The need for pre-college coursework.
- Accelerated progress for students who do enroll in pre-college level courses at postsecondary institutions.

# Streamline and expand dual-credit and dual-enrollment programs

Washington's high school students have a variety of options for earning postsecondary credit while enrolled in high school, but the differences between the options are confusing, and not all options are available to all high school students statewide. These programs, collectively referred to as dual-enrollment or dual-credit programs, are comparable in rigor to regular college-level courses and allow students the opportunity to earn and apply credits toward postsecondary degree requirements. One of the primary benefits of these programs is that they can significantly reduce the time required to complete a postsecondary degree.

Six major programs are available to Washington's high school students. Three programs—Running Start, College in the High School, and Tech Prep—are taught by postsecondary or K-12 faculty, with curriculum approved by a postsecondary institution. Students generally earn credit based on successful completion of course assignments and assessments. The remaining three programs are national or international models—Advanced Placement, International Baccalaureate, and Cambridge—and are taught by high school teachers. Credit is awarded upon completion of coursework and successful completion of a fee-based standardized assessment.

These programs have different application processes, fee structures, assessments, and approaches to applying credit toward postsecondary degree requirements. Additionally, despite recent increases in the number of programs and participating schools, these programs are not equally available to all students across the state.[18] Lack of access may be due to geographic location, low student demand, cost to the students, or cost to the schools. The result is a confusing array of options and an uneven distribution of opportunities.

## ACTION: Streamline and expand dual-credit and dual-enrollment programs to create a statewide dual-credit system available to all high school students.

The Council will convene a statewide workgroup to review existing programs and develop a coordinated and streamlined dual-enrollment/dual-credit system. This new coordinated system should meet the following criteria:

- Provide clear information about each option in ways that empower high school students to choose the option best suited to their goals and schedules.
- Provide low-cost options for high school students and their families.
- Ensure adequate funding for high schools and postsecondary institutions to maintain high-quality options.
- Increase the availability of all options to more high school students.
- Streamline processes for obtaining postsecondary credit.

Legislation may be recommended or required to develop a streamlined dual-enrollment/dual-credit system for all high school students.

### Expected Results

- A statewide dual-enrollment/dual-credit system is available to all high school students.
- Increases in the following:
    - The availability of dual-credit programs in high schools.
    - The number of high school students accessing dual-credit programs, particularly the numbers of low-income students and non-white high school students.
    - The number of postsecondary credits earned while in high school.
- Reductions in the time students take to complete a postsecondary credential.

# Increase support for all current and prospective students

All Washingtonians need access to education that prepares them to transition to elementary, middle, high school, postsecondary, career, and lifelong learning opportunities. Meeting that goal will require renewed focus, as these transition points are the weakest links in our education system and the times when students are at the highest risk of dropping out. Among the most critical transition points is the transition from high school to postsecondary education.

- Approximately 14 percent of 9th graders do not complete high school within four years. Underrepresented and low-income students drop out at rates of between 25 and 35 percent.[19]
- Only 65 percent of 2008-09 high school graduates continued on to postsecondary education within one year of graduation. Underrepresented and low-income graduates continued on at rates of between 47 and 51 percent.[20]

The issue of access is especially acute within underrepresented populations. When individuals from traditionally underrepresented populations do enroll in postsecondary education, they do not always experience the same levels of success as other students. For instance, underrepresented students graduate from Washington's public and private four-year institutions at rates of between 54 and 60 percent, which is below the overall graduation rates of White and Asian students, who graduate at rates of 69 and 73 percent respectively.[21]

Numerous school and community-based programs provide information and services for students to ensure they have the necessary skills and resources to support them through educational transitions. However, these critical services are not equally available to all potential or current students. There are geographic, cultural, and economic disparities among students, and not all services are well suited to individuals from underrepresented populations or to returning adult students. Some individuals, such as students with disabilities, face unique challenges that require expanded and specialized services.

## ACTION: Provide increased support and resources to ensure the success of current and prospective students at all levels.

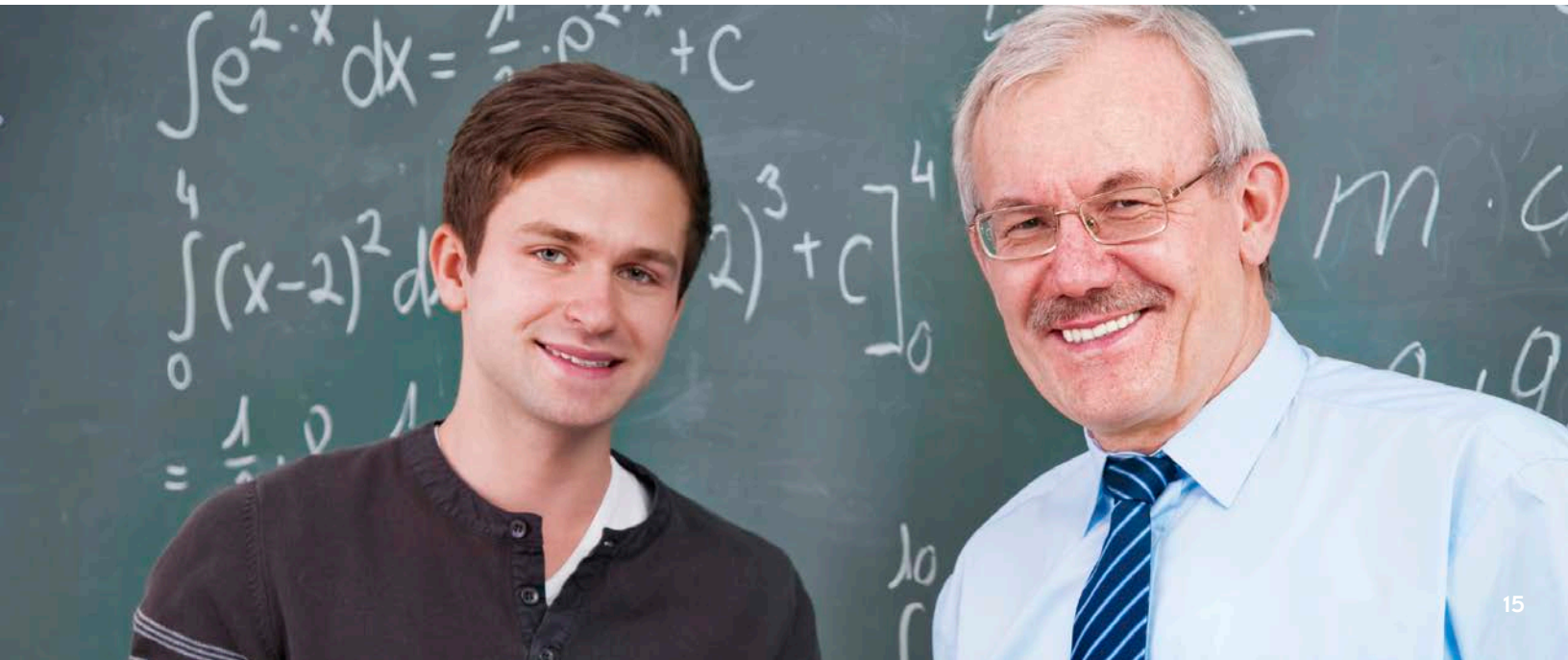
The Council will collaborate with educational and community partners to identify and promote strategies, including those listed below, to ensure all Washington students have access to services that support successful transitions.

- Effective High School and Beyond Plans for 8th graders.
- Graduation specialists for high school seniors.
- Mentoring and sponsorship programs for underrepresented and at-risk students such as foster youth, first-generation, people of color, or disabled students.
- More training for advisors, counselors, and mentors at all levels, and improved access to quality information about career requirements and postsecondary opportunities.
- Designated support staff at postsecondary institutions for underrepresented and at-risk students, such as foster youth, first-generation, people of color, or disabled students.
- An online postsecondary advising system to support students, parents, and advisors at all transition points.

The Council and partners will identify successful in-state strategies, along with best practices from other states. In addition, the Council and others will evaluate effective funding models that are independent of state or institutional funding.

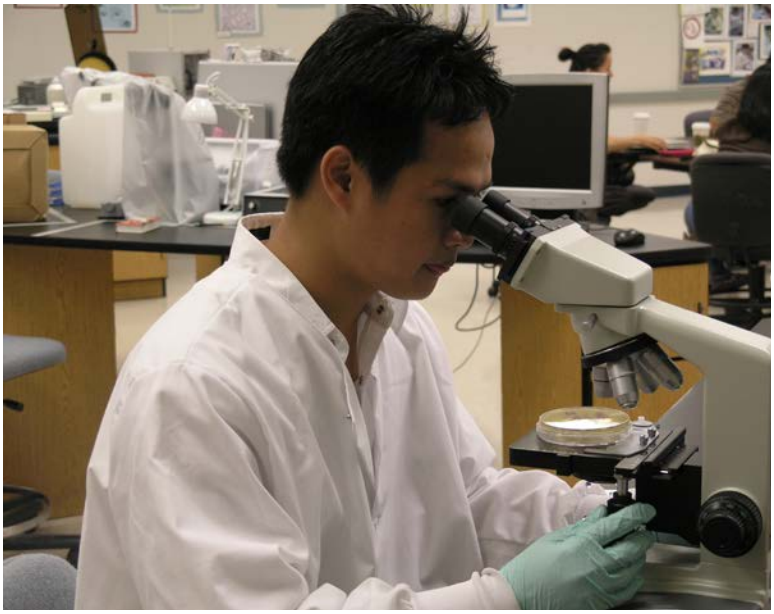
### Expected Results

- Improved access to student support by increasing the numbers of counseling, advising, and mentoring resources at all levels, including middle school, high school, and postsecondary institutions.
- Increases in the following:
    - Training and resources for counselors, advisors, and mentors at all levels.
    - The percentage of high school graduates who enroll in postsecondary education or training.
    - The sharing of effective student support strategies among postsecondary institutions.



Summary of

# Enhance Learning



## Align postsecondary programs with employment opportunities.

**Improve coordination of existing employer feedback mechanisms to postsecondary institutions, and encourage innovative approaches to close existing workforce skill gaps in Washington's dynamic economy.**

## Provide greater access to work-based learning opportunities.

**Increase investments in the State Work Study program and create an online clearinghouse of all work-based learning opportunities.**

## Encourage adults to earn a postsecondary credential.

**Provide tailored information regarding continuing education and provide support to adults, especially those with some postsecondary credits but no credential.**

## Leverage technology to improve student outcomes.

**Create a statewide educational technology consortium to enhance student learning.**

# Align postsecondary programs with employment opportunities

Employers are expressing increasing concern over difficulties finding Washington residents with the skills necessary to fill select types of job openings, particularly in the fields of science, technology, engineering, math, and healthcare.[22] Though Washington's postsecondary institutions are awarding increasing numbers of degrees in many of these areas, the increases are not coming quickly enough to meet employers' needs.[23] If the gaps between workforce skills and employer needs persist, Washington's economic development may be hindered by companies relocating all or part of their operations to other states or countries where qualified employees are available. Employers also report difficulty finding applicants with critical skills such as written and oral communication, critical thinking and analytical reasoning, complex problem solving and analysis, and teamwork—skills all employees need to be successful in the workplace regardless of their position or career path.[24]

Washington currently lacks a coordinated mechanism for collecting employers' input on the alignment of postsecondary education with workforce and skill needs and conveying that information to postsecondary institutions. While a number of resources are currently available to provide information on employer needs, most are not clearly linked to education and training programs, making it difficult to provide actionable information to postsecondary institutions.

**ACTION: Improve coordination of existing employer feedback mechanisms to postsecondary institutions, and encourage innovative approaches to close existing workforce skill gaps in Washington's dynamic economy.**

The Council will convene a statewide workgroup to review existing employer feedback mechanisms in an effort to better align these resources. This will ensure postsecondary institutions have the information needed to respond proactively to employer and workforce skill needs. The workgroup—composed of a broad coalition of public and private institutions, employers, agencies, and other stakeholders—will do the following:

- Recommend ways to align and enhance existing employer feedback mechanisms to ensure they can be used by all Washington postsecondary institutions—public, private, two-year, and four-year—to respond to employer needs.
- Recommend innovative approaches for responding to employer and workforce skill needs.
- Recommend ways postsecondary institutions should account for how they respond to employer needs.
- Develop a competitive grant program to encourage institutions to develop innovative, low-cost approaches to providing students with the foundational intellectual and career skills that employers seek and students need to be competitive and successful in the workplace.

### Expected Results

- Increases in the following:
    - Postsecondary institutions' responsiveness to employer feedback.
    - Employer satisfaction with postsecondary graduates entering the workforce.
- Reductions in the gap between the numbers of qualified Washington residents and the number of jobs unfilled.

# Provide greater access to work-based learning opportunities

Work-based learning is a highly effective way for students to apply classroom learning to real work environments and refine the skills they will need to succeed after graduation. Yet, opportunities for students to participate in work-based learning and other contextualized learning experiences are limited and often difficult for students to identify.

Two primary factors are responsible for the current limitations. First, funding for the State Work Study (SWS) program is at an all-time low.[25] The program was funded at $22 million annually at its peak, but is currently only funded at $8 million annually. This program helps undergraduate and graduate students earn money for postsecondary education while gaining work experience in jobs related to their academic and career goals. However, during the recession, budget cuts resulted in the program dropping from a long-standing record of serving 1 in 12 needy students to serving only 1 in 30.[26]

A second factor is the lack of a centralized mechanism for efficiently matching students with employers offering work-based learning opportunities (e.g., State Work Study, internships). Experience in the workplace increases students' career readiness and employability. At the same time, employers benefit from reduced costs and access to well-educated and motivated employees who help them operate more productively and profitably. The Council will work with the Legislature and others to secure reinvestments in the SWS program to increase

**ACTION: Increase investments in the State Work Study program and create an online clearinghouse of all work-based learning opportunities.**

the numbers of students who obtain relevant work experience while completing a postsecondary credential. Additional funding for SWS will enable more students to gain that experience and will provide employers with a larger and better-qualified pool of employees.

The Council will also collaborate with the Workforce Training and Education Coordinating Board, Washington STEM, Campus Compact, educational partners, and others to explore the feasibility of developing an online clearinghouse of work-based learning opportunities, including SWS jobs, internships, and other types of opportunities. This resource will facilitate the efficient matching of students with employers and increase the number of students who are better prepared for the workforce.

### Expected Results

- Increases in the following:
  - The number of students with relevant work experience upon completion of a postsecondary credential.
  - The number of students employed within 12 months of completing a credential.
  - The number of employers participating in the State Work Study program.
  - The number of employers providing experiential learning opportunities, such as internships.
- Reductions in the number of students borrowing and the amounts borrowed to pay for tuition, books, other educational expenses, and living expenses.

# Encourage adults to earn a post-secondary credential

In Washington, more than 450,000 adults between the ages of 17 and 54 have completed some postsecondary education but have not completed a certificate or degree. Many of these same adults also do not earn a living wage.[27] For a variety of reasons, these individuals did not finish the degree or certificate programs they started and are no longer enrolled. Some may only have completed a few postsecondary courses while others may be very close to completing a credential that could lead to a higher-paying job.

Adults returning to postsecondary education have needs that differ from the needs of younger, more traditional students. Yet at the same time, they are not a uniform group. They come from varied life experiences and face a range of barriers that may include unemployment, underemployment, family obligations, health issues, and prior negative experiences in the educational system. Adults are also more likely to attend postsecondary institutions part-time while working full-time, a challenging circumstance that has been shown to be a risk factor for academic success.[28] However, because they have some postsecondary experience—yet make less than a living wage—these adults have the most to gain from completing a postsecondary credential. With the proper support and guidance, many of these adults could realize their potential and improve their quality of life, while making greater contributions to Washington's economy.

**ACTION: Provide tailored information regarding continuing education and provide support to adults, especially those with some postsecondary credits but no credential.**

The Council will collaborate with key public and private partners to identify and support strategies that address the unique circumstances of adults, particularly those with some postsecondary education but no credential. These adults need targeted information and support to help them re-enroll in postsecondary education, followed by specialized support services to ensure they successfully complete a credential. Effective types of strategies for reaching and serving returning adults include the following:[29]

- Targeted messaging to provide information and encouragement to returning adult students.
- Individualized advising and career-planning guidance during the postsecondary enrollment process, including assistance with completing enrollment and financial aid applications, transferring of credits from other postsecondary institutions, and awarding credit for prior learning that may have occurred on the job or in the military.
- Data tools and best practices for contacting, advising, and counseling adult students.

### Expected Results

- Reductions in the number of low-income adults who have earned some credits but have not completed a postsecondary credential.
- Increases in the following:
  - The number of adults in Washington with a postsecondary credential.
  - The number of adults earning a living wage.

# Leverage technology to improve student outcomes

Limited state-level coordination, collaboration, or planning for the use of technology in teaching and learning at Washington's preschools, K-12 schools, and postsecondary institutions impairs the state's ability to realize technology's full educational potential. While some schools and postsecondary institutions participate in regional or national efforts, there is no unifying entity that facilitates and coordinates efforts across all educational levels, including public schools, private schools, and postsecondary institutions. Washington is known as a technological innovation hub, yet technology is not used consistently for the benefit of all students.

The fundamental responsibility of educators is to focus on student learning and students' educational experiences—technology can enhance these experiences if implemented effectively. Moreover, students across the educational spectrum need exposure to technology in order to thrive. Schools, postsecondary institutions, and state agencies realize this and are making strong efforts to optimize the educational use of technology. However, lack of statewide coordination increases the likelihood of duplicated efforts and missed opportunities to share best practices or leverage buying power. This diminishes technology's value as a tool for increasing educational attainment.

## ACTION: Create a statewide educational technology consortium to enhance student learning.

The Council will convene an educational technology consortium comprised of public- and private-sector educators, librarians, administrators, and instructional technology specialists, with representation from early learning, K-12, postsecondary institutions, employers, and other partners. The Council will charge the consortium with developing a plan for leveraging technology in ways that enhance student learning and improve learning outcomes grounded in the principles outlined by the Technology Roadmap Workgroup.[e] The consortium's plan should include strategies for addressing or accomplishing the following:

- Increasing the use of technology to deliver workplace-based programs, share open educational resources, and capitalize on the work of other regional and national efforts.
- Identifying opportunities to share information through websites, conferences, and other venues.
- Providing access to training opportunities for educators, facilitating professional learning communities, and mentoring.
- Developing a voluntary compact to enhance purchasing options by leveraging buying power and securing statewide licensing for educational materials and technologies.
- Establishing competitive grant and award programs to encourage innovation, the adoption of educational technology at all levels and in all sectors, and the identification of effective practices.

### Expected Results

- The consortium submits a plan for leveraging technology to the Council.

---

[e]See page 3 of the *Ten-Year Roadmap Policy Options Report: Capturing the Potential of Technology*, available at www.wsac.wa.gov/Roadmap

Summary of

# Prepare for Future Challenges

## Respond to student, employer, and community needs.

**Align system-wide programmatic, physical, and technological capacity with student, employer, and community needs.**

## Increase awareness of postsecondary opportunities.

**Ensure all Washingtonians have access to a coordinated one-stop shop for information about postsecondary education opportunities and career requirements, as well as assistance with completing applications for enrollment and financial aid.**

## Help students and families save for postsecondary education.

**Develop a savings incentive program model.**

# Respond to student, employer, and community needs

Successful implementation of the Roadmap strategies will lead to increased efficiencies as more students transition from one level to the next. A growing population and improved college-going and retention rates will increase enrollments and require an expansion of capacity through new facilities, technology, and programs. Capacity demands can be partly alleviated through increased use of dual-credit coursework, competency-based assessment, and targeted coursework during 12th grade. Additional options to improve efficiency and effectiveness within existing resources should be considered before new resources are added. Meeting the state's goals and responding to student, employer, and community needs will require increased flexibility and responsiveness from all of Washington's postsecondary institutions as well as adequate state support.

## ACTION: Align system-wide programmatic, physical, and technological capacity with student, employer, and community needs.

The Council will collaborate with partner agencies and postsecondary institutions to develop a process for assessing institutional capacity in response to student, employer, and community needs. The process will be consistent with the Council's statutory responsibility relative to system design,[30] and the assessment will include the following components:

- A forecasting model to assess the comparative impacts of the 2013 Roadmap strategies on student demand.
- A process to assess the postsecondary education needs of students, employers, and communities.
- An assessment of public and private institutions' programmatic, physical, and technological capacity to provide lifelong educational opportunities for all Washingtonians.
- Identification of best practices for improving effectiveness and efficiency within existing resources.
- A comprehensive assessment of the state's overall return on investment in postsecondary education.

The Council will also support the elimination of duplicative or inefficient state regulatory requirements so that institutions can remain focused on core educational and academic functions.

### Expected Results

- Increases in the following:
  - The programmatic, physical, technological, and financial capacity of postsecondary institutions.
  - Responsiveness to changes in student and employer needs.
  - The state's return on investment in postsecondary institutions.

# Increase awareness of postsecondary opportunities

Individuals who are first-generation college students or who are from low-income families struggle the most in finding timely, relevant, and accurate information about postsecondary education opportunities and career requirements.[31, 32] Appropriate resources for other individuals like veterans, adults new to postsecondary education, adults returning to postsecondary education, English Language Learners, or students with disabilities can also be particularly difficult to find. Individuals lacking in financial literacy struggle to develop a plan that would enable them to pay for postsecondary education. For many of these individuals, completing an application for admission or financial aid can be daunting. Current and potential students who do not have adequate information about academic preparation, postsecondary education and training costs, financial aid options, or how to complete the necessary applications are less likely to attempt, persist, and complete a postsecondary education.[33, 34]

Unlike other states such as Illinois and Texas, Washington does not have a unified access point for authoritative and comprehensive information about postsecondary education opportunities and career requirements. While many programs and websites provide information, content varies in thoroughness and relevance, and some individuals may lack the ability or experience to determine accuracy and reliability. In addition, in-person support services to help prospective students find information and complete applications are not available in all regions of the state or to all individuals who may benefit from them.

**ACTION: Ensure all Washingtonians have access to a coordinated one-stop shop for information about postsecondary education opportunities and career requirements, as well as assistance with completing applications for enrollment and financial aid.**

The Council will collaborate with a variety of education and community partners to increase coordination of information about postsecondary education and training. The Ready, Set, Grad website—the state's new comprehensive website for information about Washington's public and private postsecondary education opportunities, access, and funding—will be continually updated and refined. The site will be inclusive and supportive of all students, regardless of socioeconomic or cultural background. Related content will also be communicated via social media and online platforms to ensure information is easily accessed by target audiences. Ready, Set, Grad will also be equipped with the functionality to translate the site content into more than 60 languages by mid-2014.

The Council will also launch a collaborative statewide campaign to help current and prospective students complete admissions and financial aid applications. Early awareness programs for students—beginning no later than the 5th grade—will be explored during the development of this campaign.

### Expected Results

- The Ready, Set, Grad website becomes a coordinated, comprehensive website for information about postsecondary education opportunities, access, and funding.
- Improved availability and quality of information about postsecondary education opportunities and career requirements.
- More students—particularly those who are first-generation college students, from low-income families, or who are from historically underrepresented groups—are able to successfully navigate postsecondary education using timely and accurate information.

# Help students and families save for postsecondary education

Many Washington students and families cannot save enough money to cover postsecondary educational expenses, nor do they see the benefit of a savings plan. Since the 2000-01 academic year, tuition growth has averaged 8.5 percent annually across all public institutions. At the same time, the inflation rate has averaged only 2.4 percent annually and per capita personal income has increased only 4.3 percent annually on average.[35] Although 153,000 families or individuals have opened prepaid tuition plans through the Guaranteed Education Tuition (GET) program, many Washington families still face challenges when saving for postsecondary education. In fact, middle-income families can now only afford to pay approximately 27 percent of postsecondary education expenses, down from 37 percent just three years ago.[36] Since most of Washington's financial aid programs serve students from low-income families, middle-income families without savings face a considerable financial burden.

Several states have developed savings incentive programs using their 529 plans as a vehicle while others have incentive or matching programs independent of their 529 plans.[37] The incentives, match rates, and eligibility criteria vary by state and program.

## ACTION: Develop a savings incentive program model.

The Council will collaborate with key stakeholders to evaluate the role of savings and develop a savings model for all Washington students and families. The model should include incentives that encourage students and families to save for postsecondary education. Regular savings, even in small amounts, add up over time. Children and teenagers with their own college savings accounts are more likely to enroll in postsecondary education, and even low-income families will save if provided an incentive.[38]

### Expected Results

- Increases in the following:
  - The percentage of incoming freshmen who have individual or family savings available to cover the cost of postsecondary education.
  - The postsecondary participation rates of high school graduates.

# Looking Ahead

## During the next two years, the Council will engage in a variety of activities to ensure the 2013 Roadmap is put into action.

### Implementing the State's Roadmap

Implementation of the Roadmap is under way. The Council has already requested funding for the State Need Grant and the College Bound Scholarship for FY 2015 to meet the financial needs of low-income students. The Council – along with our many partners—is also currently engaged in efforts that support the implementation of the following action items: ensure all high school graduates are career and college ready; encourage adults to earn a postsecondary credential; respond to student, employer, and community needs; provide greater access to work-based learning opportunities; encourage adults to earn a postsecondary credential; and increase awareness of postsecondary opportunities. In early 2014, the Council will begin leading an effort to develop a state funding policy for postsecondary education to help make postsecondary education affordable. The remaining Roadmap actions will be prioritized during the development of the 2014 Strategic Action Plan, which will also outline policy and funding needs for the 2015-17 biennium.

### Monitoring Progress

The Council is committed to monitoring progress towards the educational attainment goals and to tracking the implementation of each action item. The educational attainment goals—all adults in Washington will have a high school diploma or equivalent and at least 70 percent of Washington adults will have a postsecondary credential by the year 2023—will be assessed annually using the following metrics:

- The number and percentage of adults in Washington completing a high school diploma or equivalent.
- The percentage of the adult population enrolled in a postsecondary certificate, apprenticeship, or degree program.
- The number of postsecondary certificates, apprenticeships, and degrees awarded annually.

For the twelve action items, the Council will collaborate with the appropriate partners to develop implementation plans and identify progress measures. To assess the improvement of participation and success for underrepresented groups, the Council will disaggregate data to the greatest extent possible. A website will be established to provide ongoing, real-time updates. The Council will also submit written progress reports to the Legislature.

### Updating the State's Roadmap

Beginning in early 2015, the Council will revisit the goals, objectives, and actions in this Roadmap report, making necessary adjustments in response to changing circumstances. As part of that update, the Council will consider the needs of Washingtonians not addressed directly by the twelve actions in the state's 2013 Roadmap—particularly adults without high school diplomas and adults with limited English-speaking abilities. The state's 2015 Roadmap will be submitted to the Governor and the Legislature no later than December 1, 2015.

### Conclusion

The state's ten-year Roadmap outlines actions necessary to achieve two goals for increasing educational attainment of Washingtonians by 2023:

**a) All adults in Washington will have a high school diploma or equivalent.**
**b) At least 70 percent of Washington adults will have a postsecondary credential.**

These goals are based on the shared belief that increasing educational attainment is critical to the well-being of all Washingtonians and to maintaining and improving the state's economy. The state's Roadmap is the first step toward achieving these goals. Real success will require determination, innovative thinking, and ongoing support from a wide range of partners and stakeholders. The Washington Student Achievement Council is committed to working with policymakers, all sectors of the educational community, businesses, community organizations, and other stakeholders to increase educational attainment in the state. The Council is confident that this is the right time and the right place to achieve these goals—and that these goals can be accomplished by working together.

Two goals for increasing educational attainment of Washingtonians by 2023:

a) All adults in Washington will have a high school diploma or equivalent.

b) At least 70 percent of Washington adults will have a postsecondary credential.

# Appendix

## Developing the 2013 Roadmap

The Washington Student Achievement Council is required by statute (RCW 28B.77.020) to develop "a ten-year plan that serves as a roadmap." In developing the plan, the Council is required to collaborate with education agencies, institutions from all education sectors, stakeholders, and the Legislature. The plan is due to the Governor and the Legislature by December 1 of odd-numbered years.

In January 2013, the Council began developing the Roadmap by enlisting the help of a consultant to conduct a listening tour through ten Washington communities: Bellingham, Cheney, Ellensburg, Olympia, Pullman, Richland, Seattle, Spokane, Vancouver, and Walla Walla. A broad cross-section of educational stakeholders was invited to attend. As part of this process, the Council engaged in rich conversations with educators, education administrators, students, education advocates, legislators, and community leaders from around the state.

At the same time, the Council established nine workgroups to address the five challenge areas outlined in "Critical Crossroads: A Call for Action," the 2012 Strategic Action Plan:

1. Readiness
2. Affordability
3. Institutional Capacity and Student Success
4. Capturing the Potential of Technology
5. Stable and Accountable Funding

The workgroups were composed of Washington Student Achievement Council members, Council staff, and a wide range of stakeholders and policymakers. Each group provided the Council with a background paper describing the key issues. After these issue briefings were presented to the Council, the workgroups then developed policy options for the Council to consider as 2013 Roadmap actions. The workgroup recommendations formed the foundation for the strategies in the 2013 Roadmap. To review the issue briefs and policy options, please visit http://www.wsac.wa.gov/Roadmap.

# Sources


[1]Longanecker, D. (2012). *Knocking at the college door.* Retrieved from http://www.wiche.edu/info/knocking-8th/profile/wa.pdf

[2]Washington Student Achievement Council, Washington State Board for Community and Technical Colleges, & Workforce Training and Education Coordinating Board (Forthcoming). *A skilled and educated workforce.* Olympia, WA: Washington Student Achievement Council.

[3]Washington Student Achievement Council Staff Analysis of 2009-2011 American Community Survey 3-year PUMS data file. [Data sets].

[4]Washington Roundtable & The Boston Consulting Group. (2013). *Great jobs within our reach: Solving the problem of Washington state's growing job skills gap.* Retrieved from http://www.pacmtn.org/Impact/reports/documents/BCGWRTGreatJobsWithinOurStateMarch2013.pdf

[5]Degree attainment estimate is based on Washington Student Achievement Council Staff Analysis of 2009- 2011 American Community Survey 3-year PUMS data file [Data sets]. Certificate attainment estimate is based on the Georgetown University Center on Education and the Workforce *Certificates: Gateway to gainful employment and college degrees* [Data sets for Washington residents ages 24 to 44].

[6]Office of the Superintendent of Public Instruction. (March 2013). *Graduation and dropout statistics annual report 2011-12.* Retrieved from http://www.k12.wa.us/dataadmin/pubdocs/GradDropout/11-12/GradandDropOutStats2011-12.pdf

[7]Provided by staff from the State Board for Community and Technical Colleges, November 2013.

[8]Washington Student Achievement Council Staff Analysis of 2009-2011 American Community Survey 3-year PUMS data file and enrollment data from the Integrated Postsecondary Education Data System. [Data sets].

[9]Washington Student Achievement Council, Washington State Board for Community and Technical Colleges, & Workforce Training and Education Coordinating Board (Forthcoming). *A skilled and educated workforce.* Olympia, WA: Washington Student Achievement Council.

[10]Washington Student Achievement Council. *State Need Grant Final Interim Reports, 2009-10 to 2012-13.* [Data sets].

[11]Corrigan, M. E. (2003). Beyond access: Persistence challenges and the diversity of low-income students. *New Directions for Higher Education*, 25–34.

[12]Washington Student Achievement Council. *State Need Grant Final Interim Reports, 2009-10 to 2012-13.* [Data sets].

[13]Office of the Governor. (October 2013). Results Washington: World-class education draft outcomes. Retrieved from http://www.results.wa.gov/whatWeDo/measureResults/documents/educationGoalMap.pdf

[14]Legislative Audit and Review Committee. (2013). *Statewide expenditure history – operating and capital: Total budgeted.* [Data file]. Retrieved from http://fiscal.wa.gov/SpendHist.aspx

[15]Washington Student Achievement Council. *State Need Grant Final Interim Reports, 2009-10 to 2012-13.* [Data sets].

[16]State Board for Community and Technical Colleges. (December 2012). *Role of pre-college (developmental and remedial) education: 2009-10 public high school graduates who enroll in Washington community and technical colleges in 2010-11.* Retrieved from www.sbctc.edu/college/education/12-2RoleofPre-CollegeEduc.pdf

[17]Burley, A., Cejda, B., & Butner, B. (2001). Dropout and stopout patterns among developmental education students in Texas community colleges. *Community College Journal of Research and Practice,* 25(10), 767-782.

[18]Office of the Superintendent of Public Instruction. (December 2012). *Dual credit programs 2012.* Retrieved from http://www.k12.wa.us/LegisGov/2013documents/DualCreditPrograms.pdf

[19]Office of the Superintendent of Public Instruction. (March 2013). *Graduation and dropout statistics annual report 2011-12.* Retrieved from http://www.k12.wa.us/dataadmin/pubdocs/GradDropout/11-12/GradandDropOutStats2011-12.pdf

[20]Education Research and Data Center. (December 2010). *Participation in postsecondary education: Washington state high school graduates, 2008-09.* (Research brief 2010-05). Retrieved from http://www.erdc.wa.gov/briefs/pdf/201005.pdf

[21]Washington Student Achievement Council Staff Analysis of 2011 6-year graduation rate data from the Integrated Postsecondary Education Data System. [Data sets].

[22]Washington Roundtable & The Boston Consulting Group. (2013). *Great jobs within our reach: Solving the problem of Washington state's growing job skills gap.* Retrieved from http://www.pacmtn.org/Impact/reports/documents/BCGWRTGreatJobsWithinOurStateMarch2013.pdf

[23]Washington Student Achievement Council, Washington State Board for Community and Technical Colleges, & Workforce Training and Education Coordinating Board (Forthcoming). *A skilled and educated workforce.* Olympia, WA: Washington Student Achievement Council.

[24]Hart Research Associates. (2010). *Raising the bar: Employers' views on college learning in the wake of the economic downturn. A survey among employers conducted on behalf of: The Association of American Colleges and Universities.* Retrieved from http://www.aacu.org/leap/documents/2009_EmployerSurvey.pdf

[25]Hart Research Associates. (2010). *Raising the bar: Employers' views on college learning in the wake of the economic downturn. A survey among employers conducted on behalf of: The Association of American Colleges and Universities.* Retrieved from http://www.aacu.org/leap/documents/2009_EmployerSurvey.pdf

[26]Washington Student Achievement Council. *Annual Unit Record Reports.* [Data sets].

[27]Washington Student Achievement Council Staff Analysis of 2007-2011 American Community Survey 5-year PUMS data file. [Data sets].

[28]Berkner, L. & Choy, S. (2008). *Descriptive summary of 2003–04 beginning postsecondary students: Three years later.* Washington, DC: U.S. Department of Education National Center for Education Statistics, Institute of Education Sciences.

[29]Erisman, W. & Steele, P. (October 2012). *From contact to completion: Supporting returning adult students in obtaining a college credential.* Retrieved from http://adultcollegecompletion.org/sites/files/documents/higherEdInsightBrief.pdf

[30]RCW 28B.77.080. Retrieved from http://apps.leg.wa.gov/RCW/default.aspx?cite=28B.77.080

[31]Engle, J. (2007). *Postsecondary access and success for first-generation college students.* Retrieved from http://www.aft.org/pdfs/highered/academic/january07/Engle.pdf

[32]Engle, J., Bermeo, A., & O'Brien, C. (December 2006). *Straight from the source: What works for first-generation college students.* Retrieved from http://www.pellinstitute.org/downloads/publications-Straight_from_the_Source.pdf

[33]Engle, J. (2007). *Postsecondary access and success for first-generation college students.* Retrieved from http://www.aft.org/pdfs/highered/academic/january07/Engle.pdf

[34]Engle, J., Bermeo, A., & O'Brien, C. (December 2006). *Straight from the source: What works for first-generation college students.* Retrieved from http://www.pellinstitute.org/downloads/publications-Straight_from_the_Source.pdf

[35]Washington Student Achievement Council Staff Analysis of data from the Bureau of Economic Analysis, LEAP Committee budget documents, and Bureau of Labor Statistics. [Data sets].

[36]Washington Student Achievement Council Staff Analysis of 2007-2011 American Community Survey 5-year PUMS data file. [Data sets].

[37]Corporation for Enterprise Development. (October 2012). *Assets and opportunity scorecard resource guide: College savings incentives.* Retrieved from http://cfed.org/assets/scorecard/2013/rg_CollegeSavingsIncentives2013.pdf

[38]Elliott, W. & Beverly, S. (2011). The role of savings and wealth in reducing "wilt" between expectations and college attendance. *Journal of Children & Poverty*, 17(2), 165-185.

WASHINGTON STUDENT
ACHIEVEMENT COUNCIL
EDUCATION · OPPORTUNITY · RESULTS