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<th>Title</th>
<th>Ten-Year Roadmap Issue Briefing: Demand and Capacity</th>
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<td>Challenge area:</td>
<td>Student Readiness</td>
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**Synopsis:**
To raise educational attainment in Washington on an order of magnitude necessary to meet the needs of our residents and our economy, we will need to add capacity to our system.

Improvements in student readiness, high school graduation rates, and success in ensuring the affordability of postsecondary education will result in increased numbers of students seeking enrollment to colleges, universities, and other postsecondary opportunities.

To better understand the possible demands, a comprehensive assessment of the programmatic, physical, and technological capacity of our system will be needed. A model is being developed that will allow the Council to see the impact on demand for education services in respect to policy alternatives and in the context of improvements in K-12 milestones.

**Guiding questions:**
If everything else we are doing to prepare and encourage students to continue on (or return) to postsecondary education and complete a degree or certificate is successful, what programmatic, physical, and technological capacity will be necessary to meet student demand?

**Possible council action:**
- Information Only
- Approve/Adopt
- Other: ______________________

**Documents and attachments:**
- Brief/Report
- PowerPoint
- Other Documents
Ten-Year Roadmap Issue Briefing

Challenge Area:  
Capacity and Success – Increased Demand

Planning Activity:  
Strategies to meet the challenge of increased demand for postsecondary education.

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July 2013
Executive Summary

This issue brief discusses one challenge area identified in the Washington Student Achievement Council’s 2012 Strategic Action Plan—Demand and Capacity. The briefing utilizes both national and state research and data and includes input from a wide range of stakeholders participating in Roadmap development workgroups.

The Council’s Strategic Action Plan, adopted in November 2012, identified five critical challenges to be addressed in the Roadmap. From these five challenges, the Council identified nine challenge areas that could have an impact on the demand and capacity within postsecondary education.

For example, improvements in student readiness, high school graduation rates, and success in ensuring the affordability of postsecondary education will result in increased numbers of students seeking enrollment to colleges, universities, and other postsecondary opportunities. To better understand the possible demands, a comprehensive assessment of the programmatic, physical, and technological capacity of our system will be needed.

This issue briefing is based on the workgroup’s perspectives and includes the following key issues:

1. Key changes in demographics will present challenges for education in Washington.
2. Adult students interested in either initial or further postsecondary education (i.e. an ‘opportunity population’) can be reached and served easily.
3. Improvements in all Roadmap areas: early learning, postsecondary alignment, outreach and support, success and reduction of placement in remedial coursework, and affordability and access will impact demand for capacity. Improvements in other policy areas like transfer and competency-based education assessments will also affect demand and capacity.
4. The problems of capacity will require creative solutions, including eLearning, competency-based education models, and increased “virtual capacity” at campuses where an increase of physical capacity may be difficult.
5. Increasing capacity requires accountable and sustainable funding, new technological infrastructure, and new capital facilities.

Council staff are working with the Office of Financial Management Forecasting Division and Education Research and Data Center to develop a model to estimate the effects of possible policy changes. The model will allow the Council to see the impact on demand for education services in respect to policy alternatives and in the context of given improvements in K-12 milestones.

This issue briefing is organized following the key questions outlined by the workgroup. A graphical representation of impacts of demand and resources associated with Roadmap strategies is located in Appendix A. Staff will present specific policy options and recommendations for the Council’s consideration at the September 2013 Council meeting.
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Context of the Ten-Year Roadmap

Increasing educational attainment is vital to the well-being of Washington residents and to the health of our state’s economy. To this end, the Washington Student Achievement Council is working to propose goals and strategies for increasing educational attainment through a Ten-Year Roadmap and a two-year Strategic Action Plan.

The Council’s Strategic Action Plan, adopted in November 2012, identifies five critical challenge areas to be addressed in the Roadmap. The five challenge areas are:

1. **Student Readiness** (with four planning activities: Early Learning; Outreach and Support; Alignment; Remedial Postsecondary Education)

2. **Affordability**

3. **Institutional Capacity and Student Success** (with two planning activities: Meeting Increased Demand; and Assessment of Student Skills and Knowledge)

4. **Capturing the Potential of Technology**

5. **Stable and Accountable Funding**

To inform the Council’s work of creating the first Roadmap, workgroups comprising lead Washington Student Achievement Council Members, Council staff, and external workgroup members were formed to research, discuss, and develop issue briefings and policy recommendations for each of these five critical challenge areas.

The Challenge Areas are complex and interrelated. While the Roadmap will recommend actions for each of the Challenge Areas, these recommendations will be integrated into a cohesive plan.

**Challenge Area: Institutional Capacity and Student Success – Increased Demand**

This briefing provides information on one specific challenge area—**Institutional Capacity and Student Success – Increased Demand**. This report will assist Council members in their development of the Ten-Year Roadmap to raise educational attainment in Washington.

The purpose of this issue briefing is to: 1) set the context for this work as it relates to the Ten-Year Roadmap; and 2) identify policy issues and questions to be explored in the challenge area of meeting the needs of increased demand and institutional capacity.
Introduction
Washington faces both challenges and opportunities with respect to growth and capacity within our postsecondary education system. A central question is this: How do we address the increasing demands for a well-educated citizenry and highly skilled workforce? Simply put, meeting growing demand will require the development of a flexible postsecondary education system, one responsive to the needs of the education consumer, the workforce, and the society served by its graduates.

As noted in the Council’s Strategic Action Plan of 2012, too many students in our state do not have access to postsecondary education. If we are successful in improving achievement through high school, we will have even more competition for limited spaces in postsecondary education. In addition, an increasing number of adult returning students are enrolling—recognizing the necessity of further education to meet the needs of our growing economy and improve opportunities for family wage jobs.

Furthermore, success in the student readiness and affordability challenge areas will result in increased numbers of students seeking enrollment in Washington colleges and universities. Essentially, the question addressed in this briefing can be stated this way: ‘If everything else we are doing to prepare and encourage students to continue on (or return) to postsecondary education and complete a degree or certificate is successful, what programmatic, physical, and technological capacity will be necessary to meet student demand?’

To raise educational attainment in Washington on an order of magnitude necessary to meet the needs of our residents and our economy, we will need to add capacity to our system.

Background
Our national and state agenda is placing more emphasis on postsecondary education. In 2012, President Obama challenged every American to commit to at least one year of higher education or postsecondary training. The President also set a new goal for the country, which states that, by 2020, America would once again have the highest proportion of college graduates in the world.¹

In Washington, Governor Inslee followed suit, stating that his “number one priority is revitalizing Washington’s economy and building a 21st century workforce. To do that, we must start with a strong commitment to education—and we must ensure that our investments get results.”²

This call to action comes at the heels of an unfortunate reality. In higher education, the U.S. has been outpaced internationally. The most recent figures from the Organisation for Economic Co-operation and Development show that U.S. college-attainment rates have been stagnant. The rate among young adults (ages 25-34) is 42 percent, about the same as the previous generation. Other nations have dramatically increased attainment rates among this young working population. While the U.S. ranks third in educational attainment rates among the population nearing retirement (age 55-64), we rank 13th among 25-34 year olds—not an enviable position in today’s increasingly competitive global economy.³
The U.S. also suffers from a college attainment gap, as high school graduates from the wealthiest families in our nation are almost certain to continue on to higher education, while just over half of our high school graduates in the poorest quarter of families attend college.\(^4\)

In Washington, 43 percent of the state’s 3.7 million working-age adults (25-64 years of age) hold a two- or four-year college degree.\(^5\) Although Washington’s rate of higher education attainment is well above the national average (38.7 percent),\(^6\) that position is largely the result of talented workers who have moved into the state with a degree in hand.\(^7\)

The Lumina Foundation has embraced a goal of increasing educational attainment across the United States. They argue that by 2025, 60 percent of Americans should hold high-quality degrees, certificates, or other postsecondary credentials.\(^8\)

If our current rate of degree production continues, about 49 percent of Washington’s adult population will hold a college degree in 2025. To reach Lumina’s 60 percent attainment among its projected 2025 population of 4.1 million working age adults, Washington will need to add an additional 400,000 degrees to that total over the next 12 years.\(^9, 10\)

Others forecast a need in Washington for even higher educational attainment. The Center on Education and the Workforce at Georgetown University indicates that 67 percent of all Washington jobs will require postsecondary education by 2018.\(^11\)

**Demand and Capacity Workgroup Policy Issues**

Improvements in student readiness, high school graduation rates, and increased affordability for postsecondary education will result in growing numbers of students seeking to enroll in colleges, universities, and other postsecondary opportunities. Meeting this demand will require a comprehensive assessment of the programmatic, physical, and technological capacity of our system.

**Questions to be Explored**

The following policy questions were used to guide the development of this issue briefing:

1. How will postsecondary demand increase if student achievement is improved in the following areas: preschool-kindergarten participation; performance on K-12 assessments in Math, English, and Science; high school graduation; continuation to postsecondary education; increased transfer; college completion; and adult re-entry?

2. How can additional higher education capacity be created to meet demand by better recognition of competencies and skills developed through a variety of educational and work experiences?
Demand and Capacity Workgroup Discussion

This issue briefing is based on workgroup members’ viewpoints, and includes the following key issues:

1. Key changes in demographics will present challenges for education in Washington.

2. Adult students interested in either initial or further postsecondary education (i.e. an ‘opportunity population’) can be reached and served easily.

3. Improvements in all Roadmap areas: early learning, postsecondary alignment, outreach and support, success and reduction of placement in remedial coursework, and affordability and access will impact demand for capacity. Improvements in other policy areas like transfer and competency-based education assessments also will affect demand and capacity.

4. The problems of capacity will require creative solutions, including eLearning, competency-based education models, and increased “virtual capacity” at campuses—where an increase of physical capacity may be difficult.

5. Increasing capacity requires accountable and sustainable funding, new technological infrastructure, and new capital facilities.

Council staff are working with the Office of Financial Management Forecasting Division and Education Research and Data Center to develop a model to estimate the effects of possible policy changes. The model will allow the Council to see the impact on demand for education services in respect to policy alternatives and in the context of given improvements in K-12 milestones.

This issue briefing is organized following the key questions outlined by the workgroup. A graphical representation of impacts of demand and resources associated with Roadmap strategies is located in Appendix A. Staff will present specific policy options and recommendations for the Council’s consideration at the September 2013 Council meeting.

Issue #1: Key changes in demographics will present challenges for education in Washington.

Between 2013 and 2023, Washington high schools will graduate an additional 5,900 students due to population growth—an increase of 10 percent. If we are successful in our efforts to improve student success in K-12 this number will be higher.

In addition, the class of 2023 will be considerably more diverse than the class of 2013. Hispanic graduates will make up 20 percent of the class compared to 14 percent in 2013, and Asian and Pacific Island graduates will make up 13 percent—compared to 10 percent in 2013. White graduates will shrink both in number and share of the total graduates—from 70 percent in 2013 to 59 percent in 2023 (Appendix B).
These demographic shifts bring into sharp focus the critical importance of closing the achievement gap. According to the Council’s May 2013 Report Educational Attainment for All: Diversity and Equity in Washington State Higher Education, preparation levels vary considerably by race, ethnicity, as well as a number of other factors we track in education.

The chart in Appendix D displays information on four-year high school graduation rates for different sub-populations in Washington schools. Similar variance is evident with other metrics. In the 2013 report A Stronger Nation Through Higher Education, the Lumina foundation provides a national glimpse of achievement gaps faced by populations other than high school students. Washington data reflects similar trends across these populations.

Because people who complete postsecondary education earn more throughout their lives, these gaps in attainment increase income inequality. As in most advanced economies around the world, unequal success rates in postsecondary education are a major contributor to income inequality.

In Washington, the data show that increasing attainment is a particular challenge in rural counties, so expanding access to high-quality higher education for all communities is essential. Washington also must increase college success among the fast-growing groups that will account for a growing proportion of the state’s population including working adults, low-income and first-generation students, and students of color.

As schools work to close the gaps and meet related state goals (see Appendix C), Washington must prepare for increased postsecondary demand. Closing K-12 achievement gaps is essential to the future vitality of the state. As those gaps close, the demands for increased postsecondary opportunities present a capacity issue for postsecondary education.
**Issue #2: Adult students interested in either initial or further postsecondary education (i.e. an ‘opportunity population’) can be reached and served easily.**

The challenge of raising educational attainment is not limited to recent high school graduates. Nearly a million people in Washington between the age of 25 and 64 have some college but have not completed a degree. These adults represent a great deal of untapped potential. Of this group, the 464,000 Washingtonians age 44 and younger are most likely to enroll. With a past track record of success in college, these younger workers represent a tremendous pool of potential new talent if we can re-engage them and move them successfully through the system.

Although adults in this ‘opportunity population’ may appear readily available and easy to capture and serve, strategies to re-engage these students often meet with limited success. A key characteristic distinguishing reentry adults from other college students is the high likelihood that they are juggling other life roles while attending school, including those of worker, spouse or partner, parent, caregiver, and community member. These multiple roles present challenges in students’ allocation of time for both academic study and participation in campus-based organizations and activities.

**Increasing Educational Attainment – Related Council Analysis**

Legislation establishing the Council recognizes the needs outlined above. And to this end the Council is established to “propose to the governor and the legislature goals for increasing educational attainment in Washington, recommend the resources necessary to achieve the goals, and monitor progress toward meeting the goals.”

In addition to the process laid out for the Roadmap and the Strategic Action Plan, the Council is given authority to develop additional analysis to support system growth. For example, the Council, in conjunction with the State Board for Community and Technical Colleges (SBCTC) and the Workforce Training and Education Coordinating Board (WTECB), identifies high demand programs of study through a joint report that examines gaps between supply of educated workers and demand within occupations.

This information can be used by the system to direct growth. Similar authority has historically been used by the Council’s predecessor agency, the Higher Education Coordinating Board, partner agencies, and the legislature to direct high demand enrollment funds to the institutions.

The Council also has responsibility for conducting state and regional analysis to assess the need for substantive changes to our higher education system, including the addition of new postsecondary facilities through the system design process (see Appendix E).
Issue #3: Improvements in all areas of student readiness will impact demand for capacity.

Preschool/kindergarten participation
As part of the Ten-Year Roadmap, the Council will address the need to improve the health, social-emotional well-being, and cognitive outcomes of all children from birth through third grade. These early learning targets are crucial to early student success and successive academic transitions, eventually leading to an increased number of career- and college-ready graduates looking to enroll in postsecondary education.

High School graduation alignment
A key problem found in Washington, and in other states, is the gaps between high school curriculum, state and district graduation requirements, and the skills and knowledge required for postsecondary success. Washington must develop a systematic approach to facilitate alignment of expectations and requirements across sectors. Better alignment will likely increase postsecondary continuation rates and reduce remediation rates in math and English.

College transitional studies
In Washington, nearly three out of five recent high school graduates who enter the community and technical college system enroll in remedial (below college-level) coursework in English, mathematics, or both. Many older adults returning to school also require remedial or brush-up coursework to transition to college-level studies. (Remedial coursework also can be described as College Transitional Studies.)

Roadmap recommendations to improve college transitional study courses should reduce the need for course sections by decreasing placement and shortening time in transitional coursework. This could have a positive influence on demand for capacity by increasing the number of students continuing on to college and other postsecondary opportunities.

Outreach and support
Outreach and support services are not equitably available to all students. In addition to geographic disparities, services do not adequately meet the needs of underrepresented and non-traditional students, especially those from low income families.

Washington’s population is becoming increasingly diverse and unless substantial progress is made to reach and support underrepresented students and, opportunity gaps will likely persist. Improvements in outreach and support to all students will have a positive impact on demand for all forms of postsecondary education: apprenticeships, vocational training programs, certificate programs, two- and four-year degree programs, and graduate programs.

Affordability
Over the last decade, college costs have spiked dramatically. During this time, both U.S. and Washington State economies have suffered through a period of economic recession that resulted in a significant shift of cost burden to the students. Large tuition increases, coupled with income and employment stagnation, have resulted in significant increases in the numbers of families applying for need-based financial aid in recent years, all of which must be considered when looking at demand and capacity in postsecondary education.
**Increased Transfer**

To improve system performance the Council is charged with developing transfer policies to ease the student transitions from our community and technical college sector to baccalaureate degree institutions. Part of this work involves convening the Prior Learning Assessment Workgroup to identify opportunities to reduce time to degree and certificates for returning adults.

More than 70 percent of the students who access higher education in Washington do so first at a two-year institution. Washington’s two-year colleges account for a higher percentage of public and private college student enrollments (49 percent) than in the U.S. in general (34 percent). Strong transfer policy is critical to student access and completion.

Since the development of the first Direct Transfer Agreement (DTA) over 40 years ago, more than 500,000 students have used this pathway to move from our community and technical college system to public and private baccalaureate institutions in Washington. The DTA is a model for the U.S. and, as recently as two years ago, California’s legislature directed the higher education system in that state to adopt a similar pathway.

Transfer policy is implemented and maintained through the cooperative efforts of the state institutions of higher education, the State Board for Community and Technical Colleges, and the Council. This work is supported by many statewide in-sector and cross-sector groups and offices involved in various aspects of transfer.

In the 2011-12 academic year, 113,697 students indicated an intent to transfer. In the same year, more than 19,000 students transferred credits from community and technical colleges to public and private baccalaureate programs in Washington. Of these, 13,033 students (68 percent) transferred to the public four-year institutions. Nearly 5,700 students (30 percent), transferred to private four-year institutions. This includes the addition of nearly 1,900 transfer students to Western Governors University in 2011-12.

Transfers from two-year colleges to Bachelor of Applied Science degree programs at the community and technical colleges continue to grow—more than tripling in the past two years with over 300 transfers in the 2011-12 academic year.

**Competency-based education**

The Potential of Technology Workgroup policy issue briefing, presented at the May 23 Council meeting, provides a good introduction into competency-based education. The following information is excerpted from that briefing:

> The competency delivery model provides content asynchronously within a flexible schedule that allows students to progress at their own rate. Courses are under the direction of course mentors who work one-on-one or in groups with students for content mastery. Formative and summative assessments are standardized, conducted by testing experts to document student learning, and are tested for validity and reliability.
Western Governors University (WGU), which includes WGU Washington, is gaining national prominence for delivering accessible, affordable, accelerated, and flexible education, geared primarily at self-directed, mid-career adults. Washington community and technical colleges recently developed a reverse articulation agreement with WGU Washington as a way to meet the needs of adult students in our state. Enrollments are increasing rapidly since WGU Washington was established by the Legislature in 2011.

Assessment of prior learning is another example of competency-based education. Granting college credit based on assessment of a student’s prior learning in the workplace, military or through other life experiences can have positive impacts on college affordability, institutional capacity, and student success.

As the Council discussed in its first strategic action plan *Critical Crossroads: A Call for Action*, raising our state’s level of educational attainment will require meeting the educational needs of adult residents, whether they are first-time or returning students. Currently, Washington ranks below the national average in the enrollment of 25 to 49 year olds as a percentage of its total population in that age group.27

Prior learning assessment (PLA) is one option that addresses the obstacles identified in the *Call for Action*. PLA is the process used to evaluate previous life experience for academic credit. Prior learning assessment can be accomplished through standardized tests, course challenge examinations, portfolio assessment, and crosswalks28 between work-based learning and college courses.

A 2010 Council for Adult Experiential Learning (CAEL) study involved 62,000 students at 48 institutions across the United States.29 Highlights from a 2011 CAEL report30 reviewing this research concluded:

- Students who are awarded credit for prior learning are more likely to persist and complete.
- Hispanic students who received credit for prior learning earned Bachelor’s degrees at a rate nearly eight times that of Hispanic non-PLA students.
- Awarding PLA credit decreases time to degree, with the most dramatic decrease in Black, non-Hispanic students.
- Saves tuition by reducing the number of required courses.

Legislation passed in 2011 required the Washington Student Achievement Council to convene the Prior Learning Assessment Work Group to coordinate and implement seven goals described in statute for promoting the award of college credit for prior learning (RCW 28B.77.230).

If Washington follows the trend of recent national research, expansion of prior learning assessment in Washington will increase the number of adult students completing certificates, degrees, and credentials. In addition, expansion of PLA will reduce the cost of a degree by awarding course credits for knowledge and skills developed through prior learning.31
Issue #4: The relationship between the current physical capacity of our institutions and the opportunity of “virtual” capacity.

How can additional higher education capacity be created to meet demand by better recognition of competencies and skills developed through a variety of educational and work experiences?

Potential of Technology

Washington could, and should, more effectively leverage technology to improve postsecondary instruction and student achievement. Effective use of technology can expand system capacity, maintain quality and reduce cost.

In 2008, MGT Inc. completed the Enrollment Capacity and Technology Study with the charge to estimate the capacity of institutional space and the effect of technology on enrollments. The report addressed many key issues of this Increased Demand issue briefing—demographic shifts, pipeline issues (degree production), eLearning efforts, and physical system capacity. The report recommends a planning and coordinating framework to ensure that eLearning opportunities are available and that a seamless transition from two year to upper division level programming occurs (Appendix F).

Implementation of the three recommendations from the Potential of Technology Workgroup to be presented to the Council in July could have a direct impact on demand and capacity of our postsecondary education system. This Workgroup determined early on that when technology is used properly, the overall quality of the educational experience—whether in the classroom or at a distance—can be improved if the focus remains on education first and technology second.

Issue #5: Increasing capacity requires accountable and sustainable funding, new technological infrastructure, and new capital facilities.

Funding for postsecondary education could have an impact on demand and capacity. State budgeted enrollment figures for our colleges and universities have not been materially changed since 2009. But since the state does not limit admissions, there is some variance between the number of slots the state “funded” and the number of students on a campus.

The balance between state and student funding for postsecondary education shifted dramatically during the recession, with students now paying the majority of the cost of instruction at the public baccalaureates.

The community and technical college sector saw very large over-enrollments as a result of their open-access mission and the growth of newly unemployed people seeking re-training. In the K-12 sector, the recent Supreme Court’s McCleary decision will result in substantial new investments in Washington’s public school system.

Further tuition increases, changes in financial aid demand and eligibility, cuts in Federal funding for programs like Tech Prep, state K-12 and higher education funding, and changes from the McCleary decision could positively or negatively impact demand and capacity.
Developing a Model to Estimate Needed System Growth

Based on the issues outlined above, Council staff are working with the Office of Financial Management Forecasting Division and Education Research and Data Center to develop a model to estimate the effects of possible policy changes. The model will allow the Council to see the impact on demand for education services in respect to policy alternatives and in the context of given improvements in K-12 milestones.

The model will mathematically describe the relationships between K-12 milestones and later education milestones (high school graduation, two- and four-year college enrollment, and college completion). The model will allow Council staff to estimate increases in demand based on percentage changes in milestone indicators. Staff will also be able to use the model to look at the impacts for different subsets of students (e.g. by gender, race/ethnicity, and special needs). These relationships will be estimated using ERDC longitudinal data and statistical methods.

The key factors to be considered in the model include drivers of demand—those things that will increase pressure for more capacity in postsecondary education, and efficiencies—those things that should free up space in postsecondary institutions by allowing students to move through the system in less time, or with fewer additional credits.

Drivers of Demand include:

- Increased high school graduates, resulting from demographic growth, reduction in the achievement gap, and improvements in academic performance.
- Improvements in the college-going rate due to interventions like College Bound, GEAR UP, and other successful outreach and support activities.
- Improved retention and completion rates.
- Increased numbers of adult and returning students.

Improved “Efficiency” includes:

- Increased access to dual credit coursework.
- Fewer enrollments in developmental and remedial education.
- Reduced excess credits due to improvements in transfer and advising.
- Increased acceptance and use of Competency Based Education Models (including Prior Learning Assessment).

Next Steps: Policy Options and Recommendations

The Institutional Capacity and Success – Increased Demand workgroup will identify specific policy options and recommendations for the Council’s consideration at the September 2013 Council meeting.

Further research will expand on selected policy options. Staff will continue to work with OFM and ERDC to develop the forecasting model. In October, the Council members will consider all of the policy options from all challenge areas and develop a report for the Legislature.
Appendix A

Capacity and Success

Strategies to meet the challenge of increased demand for postsecondary education and increased education attainment rate.

Efforts to Improve:
- Early Learning
- Secondary to Postsecondary Alignment
- Outreach and Support
- Success, and reduce placement in Remedial coursework
- Affordability and Access

Results in Improved:
- Academic Performance
- High School Graduation Rates
- Postsecondary Continuation Rates
- Postsecondary Retention

Requires:
- Increased Capacity through:
  - Accountable and Sustainable Funding
  - Technology Infrastructure
  - Capital Facilities
### Appendix B

#### Projected High School Graduates

**2012 - 2027**

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<th>Year</th>
<th>White non-Hispanic</th>
<th>Hispanic</th>
<th>Black non-Hispanic</th>
<th>Asian/Pacific Islander</th>
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<td>2013</td>
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<td>2014</td>
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<td>6,365</td>
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<tr>
<td>2015</td>
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<td>12,328</td>
<td>2,875</td>
<td>7,488</td>
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<tr>
<td>2021</td>
<td>37,273</td>
<td>12,408</td>
<td>3,290</td>
<td>8,068</td>
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<tr>
<td>2022</td>
<td>38,738</td>
<td>13,017</td>
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<tr>
<td>2023</td>
<td>38,979</td>
<td>13,843</td>
<td>3,804</td>
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<td>2024</td>
<td>39,339</td>
<td>14,208</td>
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<td>2025</td>
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<td>14,047</td>
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<td>9,506</td>
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<tr>
<td>2026</td>
<td>37,786</td>
<td>13,307</td>
<td>3,883</td>
<td>9,332</td>
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</tr>
</tbody>
</table>

**Projected Graduates**

- **2012**: 59,274
- **2027**: 65,157

**Source:** Western Interstate Commission for Higher Education, *Knocking at the College Door: Projections of High School Graduates, 2012.*
Appendix C

State Board of Education – Cut Proficiency Gap by Half by 2017

Example: High School Math

Appendix D

Four Year High School Graduation Rates in Washington – Demographics

- Preparation levels and success are not distributed evenly across the population.
- Achievement gaps persist through postsecondary education.
- Washington’s population is becoming more diverse.

Source: OSPI Graduation and Dropout Statistics Annual Report 2011-12
Appendix E

Previous Plans in Washington

System Design

Previous Strategic Master Plans for Higher Education in Washington identified the need for a higher education system capable of delivering many more postsecondary credentials and degrees, especially at the baccalaureate and graduate levels—up to 40 percent more annually. The System Design Plan, developed in 2009, offered a comprehensive framework for making decisions about how to reach this goal—by recruiting and supporting a new generation of college students, increasing efficiency, emphasizing accountability, and expanding system capacity.

Acknowledging the significant near-term budget challenges faced by the state, the System Design Plan offered strategies to address immediate needs and lay the groundwork for rapid improvement once the recession began to wind down. It also aligned with the Obama Administration’s aggressive goal of restoring the U.S. as the best educated nation in the world by 2020.

Research on workforce needs and future economic growth confirmed that in the next two decades Washington would need to confer tens of thousands of additional degrees and certificates beyond those supplied by simple population growth or increased levels of aspiration.

Key issues related to Demand and Capacity identified in the System Design Plan reflects continuing issues identified by the workgroup, including:

1. Declining levels of baccalaureate and graduate degree attainment will result in real losses for Washington, including talented workers for business and industry, lower median annual household income, a greater percentage of the population living in poverty, a higher percentage using state or federal welfare, fewer taxes paid to the state, greater reliance on state human and social services, and less research and innovation to fuel Washington’s economy.

2. Younger working-age adults are less well educated than their older counterparts. Members of the baby boom generation, who constitute the best-educated workforce in our country’s history, are beginning to retire and will continue to do so in record numbers during the next decade.

3. The state needs to ramp up efforts to include more people from groups traditionally under-represented in higher education.

4. Regional inequities in access to postsecondary education need to be addressed.

5. More workers need to be prepared to be competitive in Washington’s labor market. Forecasted demand for workers at all degree levels exceeds the supply.

6. Create a set of guiding principles on which to base future growth decisions. This includes a near-term strategy to grow enrollment without major capital investment, a new process for evaluating major new expansion proposals (new branch campuses, capital investment in university centers, new campuses, or major technology innovations).
7. Expand competency-based assessment methods, including, but not limited to, prior learning assessment, and increase students earning credits and number of credits earned through these methods.

8. Increase the number of students who successfully transfer from the community and technical college system to Washington baccalaureate institutions.

9. Regularly assess system capacity and growth plans: In 2008 MGT Inc. completed the Enrollment Capacity and Technology Study (see below). Update the Enrollment Capacity and Technology Study analysis on a regular basis.
Appendix F

Enrollment Capacity and Technology Study

The 2007-09 Appropriations Act provided funding to the Higher Education Coordinating Board (HECB) to study the state’s capital facility and technology capacity. The charge was to estimate the capacity of institutional space and the effect of technology on enrollments and space needs for the period 2009-2019.

MGT of America, Inc. assisted the HECB in conducting the study. In a collaborative effort, HECB and MGT staff worked closely with Washington’s public four-year higher education institutions, the State Board of Community and Technical Colleges, the Council of Presidents, and the Independent Colleges of Washington to obtain and analyze the information contained in their report.

The report found that:

- The demographic shift that is taking place in Washington raises the stakes. Washington cannot meet enrollment or degree goals unless the state does better job of educating low-income students and students of color.
- Efforts to address the enrollment pipeline issues need to be given the highest priority. If Washington is to be truly competitive in the global economy, it needs to increase degree production, particularly in the science and technology areas.
- eLearning efforts, and particularly online instruction, must be carefully planned and coordinated to ensure that students have opportunities to utilize this “anytime – anywhere” approach to attain bachelors and higher degrees. A planning and coordinating framework needs to be established to ensure that eLearning opportunities are available and that a seamless transition from two year to upper division level programming occurs.
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Steve Olswang, City U Seattle
Pamela Goad, NWCCU
Cynthia Forland, ESD
Sources & Endnotes

1 http://www.whitehouse.gov/issues/education/higher-education
2 http://www.ofm.wa.gov/budget13inslee/default.asp
4 http://www.whitehouse.gov/issues/education/higher-education
5 2011 Census data
9 Ibid.
19 2012 c 229 § 103
21 Source: State Board for Community and Technical Colleges.
23 500,000 is a conservative estimate based on a review of SBCTC Academic Year Reports from 1971 to the present
25 SBCTC changed how they reported transfer student information this year and included Running Start students with the public baccalaureate data. For this report, complete data was not yet available through the ERDC. SBCTC contacted the public baccalaureates for data and those providing information were included in their report on which this information is based.
28 A Crosswalk refers to a matrix used to compare industry-based learning outcomes with outcomes for specific courses in a college. (Example: Basic Law Enforcement Academy training compared to Criminal Justice coursework).