



State Council of Higher Education for Virginia

Advancing Virginia:
Access, Alignment, Investment

The 2007-13 Strategic Plan for Higher Education in Virginia

Prologue

For more than three decades, the State Council of Higher Education for Virginia (SCHEV) has had statutory responsibility to develop a six-year strategic plan for higher education in cooperation with Virginia's colleges and universities, state policymakers, and other key constituencies. The current plan (2001 to 2007) was released in 2002 and focused on three overall goals: (1) to accommodate 61,000 additional students; (2) to improve Virginia's national standing in sponsored research; and (3) to enhance the Commonwealth's commitment to instructional quality. Progress in achieving these goals was reported by SCHEV in the October 2006 *A Status Report on Advancing Virginia Through Higher Education: The Systemwide Strategic Plan For Higher Education in Virginia*. The general picture presented in the status report is of significant, if somewhat qualified, progress toward achievement of the three goals. Commonwealth institutions have been meeting enrollment projections regularly since 2002, and indicators of instructional quality remain strong. On the other hand, research expenditures have increased steadily since 2002, but not enough to improve Virginia's rank of 37th among the states (for the full report, see <http://schev.edu/reports/reportsindex.asp>).

Any strategic planning effort should begin with a frank assessment of strengths and weaknesses. Virginia is generally recognized as having one of the best systems of higher education in the nation. The Commonwealth's research and comprehensive universities are the envy of many states, performing extremely well in national and regional rankings, and proving highly attractive to out of state students as well as Virginia residents. In addition, Virginia has one of the best collections of private colleges and universities and an outstanding comprehensive community college system that provides open access to hundreds of thousands of full and part time students and continuing education for adults.

Despite the Commonwealth's many accomplishments and widely praised system, there remain significant challenges to address.

- Virginia performs very well as a state in six-year graduation rates for bachelor's degree programs, ranking 11th at 61.7%, compared to a national average of 55.8%. But, partly due to differences in institutional mission, graduation rates at specific four-year institutions range from the very high end of the spectrum to the very low. In three-year graduation rates for associate degrees, Virginia performs less well, ranking 35th with a 24.3% statewide graduation rate, compared to the national average of 29.3%. All those not completing degrees in the different sectors represent a portion of unrealized human potential that the Commonwealth should minimize as much as possible.
- The growing burden placed on students from the lowest income levels due to rising tuition charges is a public policy matter of great concern. For low income students at four-year public and private institutions, the "net price" of college as a percentage of median family income has already risen to a prohibitive level. Significant increases in state-funded and institutional financial aid are needed if low-income students are to have access to four-year institutions comparable to that enjoyed by similarly qualified middle- and high-income students.
- Statewide remediation rates (in terms of the percent of first year students in at least one remedial course) have ranged between 18% and 21% over the last five years. Clearly, when one of every five college freshmen needs to take remedial coursework, there is room for improvement in the preparation students are receiving from the P-12 system.
- While the four-year public institutions have, as a group, been able to meet enrollment demand projections in recent years, rising demographics and the growing attractiveness of many Virginia institutions run the risk of forcing many of those whose who would

have previously attended four year public colleges to attend more expensive private schools, community colleges, or out of state public institutions. When combined with full or over subscription of courses at some community colleges (e.g in Northern Virginia and Tidewater), the potential consequence to students is loss of access to higher education opportunity.

- The 2002 strategic plan accorded priority to advancing Virginia's national standing in research. However, despite significant absolute increases in research expenditures, Virginia's comparative rank among the states remains 37th, where it was in 2002. Clearly, the Commonwealth needs to move even faster if it is to gain on its peers.
- There continue to be acknowledged areas of skill shortages, especially in nursing, teaching, engineering and technology that our colleges have not been able to meet.

This strategic plan does not seek to address every conceivable higher education issue, nor does it seek a "one-size-fits-all" approach for the issues it does address. Rather, it focuses on those issues that have been identified by the Council—with input from higher education experts, leaders in industry, and the citizens' representatives—as most urgently requiring attention, and most readily promising positive results through statewide coordination.

An effort has been made to define the plan's various strategies in terms that are appropriate to the different institutions and organizations that will carry them out. This effort is essential in a coordinated system of higher education, wherein institutions and their governing boards are accorded substantial autonomy. The Council has responsibility for creating the plan, but implementation is the responsibility of various actors in their appropriate roles. SCHEV advocates, coordinates, and performs its assigned regulatory functions. Higher education institutions implement and manage the full range of academic and support programs at the campus level. Industry lends its expertise to help higher education identify pressing state needs and provides resources to meet them. Government provides funding and clarifies

state priorities so that system wide and institutional efforts can be carried out with the implicit confidence of the citizenry. To ensure accountability for achieving the plan's goals, SCHEV will develop a template that identifies responsible agents and implementation activities for each goal, and progress will be reported on an annual basis for the life of the plan.

The intent of the plan is manifold: to establish clarity about state priorities; to inform a coordinated system of higher education within which distinctive institutions may operate with a high degree of autonomy; and to serve state and national needs at the high level of quality Virginians have come to expect from their institutions of higher education.

Process

The process for creating the strategic plan began in 2006 with SCHEV's formation of the Strategic Planning Steering Committee, with membership consisting of the following Council members:

Whittington Clement (Chair)
Helen Dragas
Jim Dyke
Mimi Elrod
Susan Magill
Christine Milliken
Alan Wurtzel

The Steering Committee worked with SCHEV staff to create the Strategic Planning Advisory Committee (SPAC), with representation drawn from college presidents, provosts, vice-presidents, faculty and other professional staff, state government, and industry. Higher education representation was drawn primarily, but not exclusively, from public institutions.

The 36 member SPAC convened in Richmond on December 8, 2006 and received its charge to develop goals and strategies that would be proposed to the Council as the framework for the strategic plan. In order to sharpen the focus of SPAC's deliberations, six subcommittees were created: Access, Affordability, Accountability & Academic Quality, Economic

Development, P-16 Integration, and Research. These subcommittee rubrics were developed to provide coverage of the 12 goals of the Higher Education Restructuring Act and to reflect concerns of current national policy discussions and challenges that remain particularly pressing for Virginia.

Each of the six subcommittees met separately at least twice through February 2007 to identify priorities and methodologies that would be most appropriate within the context of a statewide planning effort. The subcommittees ultimately identified a total of 16 goals, and the entire SPAC convened on March 5, 2007 to receive presentations from each subcommittee chair and to consider the overall set of goals. Similar presentations were then made to the Strategic Planning Steering Committee on March 12. Based on feedback from the March 12th meeting, the 16 original goals were distilled to 12, and those 12 goals form the basis for this plan.

Vision

Education in a modern democracy is society's engine for realizing human potential. Higher education builds on the foundation established by the system of primary and secondary education to produce effective and responsible citizens and professionals. From the graduates of higher education come the professionals of education, commerce, industry, law, medicine, the arts, and the humanities. When individuals or even whole professions need renewal, it is to higher education that they turn.

Public higher education in Virginia constitutes a "system" in the sense that the public institutions share collective responsibility for serving the needs of the state through their varying missions. Though the private and for-profit sectors are not subject to deliberate coordination by the state because they do not receive direct state financial support, they are a significant component of the Commonwealth's higher education enterprise, serving more than 100,000 students.

State law directs that higher education in Virginia must be accessible, affordable, of high quality, and offer sufficient programming to serve state needs. It must do this within a structure that affords a high degree of autonomy to individual institutions and assumes their willingness to make adjustments for the common good. The “systemness” to be achieved cannot be imposed by fiat; it must be driven by the strengths and missions of individual institutions. This notion of coordination through cooperation is what makes Virginia higher education unique and what this strategic plan aims to achieve. Collective priorities reflected in the specific goals and strategies proposed here are:

- Comprehensive access to post-secondary educational opportunities,
- A broad range of programs in multiple settings without unnecessary duplication,
- Accurate identification of, and provision for meeting state human and economic needs, and
- Appropriate flexibility for institutions to realize their distinctive missions.

Strategic Planning & Restructuring

The Higher Education Restructuring Act of 2005 provides the operating framework for Virginia’s system of higher education. The twelve goals of Restructuring are intended to ensure higher education institutions meet state needs through effective management, with levels of autonomy calibrated to reflect institutional performance.

The charges to the six SPAC subcommittees were designed to address the goals of Restructuring without reiterating them. The purpose of the strategic plan is to focus on statewide aspects of higher education that require coordination. These include:

- Data collection to inform planning,
- Information dissemination to inform advocacy, outreach, and educational efforts about higher educational opportunity,

- Alignment of the P-12 system with higher education,
- Alignment of higher education with state workforce and research-industrial needs,
- Greater investment in research to stimulate economic activity, and
- Increased access to higher education opportunity, particularly among populations that have traditionally been underserved.

Higher education needs to be proactive in addressing challenges on a number of fronts. Among these challenges are an increasingly internationalized world economy and the rise of new powers intent on matching American preeminence in scientific and technological research. In this highly competitive global environment American higher education institutions must move forward simply to avoid falling behind.

The Commonwealth has a highly successful system of higher education, recognized as among the very best in the nation. However, there are areas in which further progress needs to be made, some of which have already been noted above. Moreover, states and the federal government are calling for more robust measures of accountability from all of higher education, especially from public institutions. To answer this call, institutions of higher education must demonstrate that they are serving the public interest and that students are actually learning what institutions claim to be teaching. Failure to do so invites a loss of confidence among citizens and legislatures and a potential loss of critical financial support. Thanks to robust increases in state support in the 2006-08 budget cycle, institutions have made substantial progress toward full base adequacy support. In terms of accountability, Virginia has been a leader in the assessment of academic outcomes, and SCHEV is committed to continuing that leadership. Moreover, reporting requirements built into the Restructuring Act constitute one of the most rigorous accountability mechanisms in the nation. The Commonwealth's public institutions of higher education are well positioned to meet national and international challenges while satisfying public calls for accountability.

Themes

The strategic plan focuses on three areas of concern as they apply across institutions and geographical regions: Access, Alignment, and Investment.

Access

Access must go beyond simply gaining entrance to a college or university. The benefits of a college education can only be realized by those who attend higher education institutions and *complete* their intended programs. Higher education functions in a larger context of institutional, political, and social cultures. Students arrive at college as products of their communities and P-12 experiences. Without effective distribution of information about higher education opportunity and alignment with the P-12 system, significant numbers of students may find themselves unprepared for a successful college experience. Worst of all is a scenario in which the P-12 experience leaves a student who would be able to benefit from higher education unaware of its benefits or unwilling to pursue them. This is a loss of human potential that states have an economic interest in as well as a moral duty to minimize.

Alignment

Higher education must reach out simultaneously to the P-12 system, industry, government, and the wider economy for which higher education provides human-power and ultimately leadership. Accordingly, a number of goals in this plan address issues of alignment: curricular alignment with primary and secondary education; programmatic alignment to support pressing state needs and demonstrate accountability; improved data collection to support P-16 integration; and data collection to determine the impact of higher education on the state economy.

Investment

The goals in this plan imply no global prescriptions about funding at Commonwealth institutions. The current system of a presumptive 67/33 split between enrollment-driven state support and tuition works well, and has resulted in an appropriate balance between costs borne by students and costs supported by the state. In addition, the current plan calls for targeted investments, particularly in the area of research. The infusion of new research funds is intended to have a significant focused impact on institutions and therefore on the state's competitiveness. The strategies suggested here are derived from long-standing efforts to identify areas of research that will produce the greatest returns per dollar invested. Also included are recommendations for policy changes that can yield greater infrastructure support for research.

The following section of the strategic plan articulates 12 goals and accompanying strategies, following the three themes outlined above. Together these 12 goals comprise the State Council's prescription for strengthening higher education in Virginia by making it more accessible, better integrated with society, and better positioned to attain national leadership in important areas of research.

The Goals

Section I: ACCESS

Enhancing Access

1. Enhance Access Through P-16 Curricular Alignment
2. Enhance Access Through Improved Coordination of Information

Enhancing Affordability

3. Enhance Affordability Through Financial Aid Advocacy
4. Enhance Affordability Through Education and Investment Incentives

Section II: ALIGNMENT

Enhancing Alignment with P-12 Education

5. Improve College Readiness Through Strengthened P-16 Cooperation and Communication
6. Strengthen P-16 Coordination Through Expanded Data Collection and Analysis

Enhancing Alignment with Workforce Needs

7. Support State Workforce Needs Through Strengthened Participation in Post-Secondary Education
8. Conduct a Comprehensive Economic Impact Study of Higher Education
9. Improve Alignment Between Higher Education and the Commonwealth's Workforce Needs

Enhancing Academic Quality

10. Strengthen Academic Program Quality and Accountability Through Assessment

Section III: INVESTMENT

Enhancing Research

11. Enhance Research Through Investment in Targeted Consortia
12. Enhance Research Through Investment in Infrastructure

Goals Section I: ACCESS

Enhancing Access

Evidence that our society is losing ground in terms of educational attainment and economic outlook is leading to calls for more and better education—and greater access to it—from all corners of the American landscape, from parent-teacher associations to governors to Ben Bernanke, the chairman of the Federal Reserve: “A substantial body of research demonstrates that investments in education and training pay high rates of return both to individuals and to the society at large. That research also suggests that workers with more education are better positioned to adapt to changing demands in the workplace” (2/6/07). The primacy of “access” recurs in important current policy discussions and initiatives, including the 2006 Spellings Commission Report, the National Conference of State Legislatures’ 2006 Blue Ribbon Commission Report, and the Commonwealth’s 2005 Restructuring Act, whose first goal calls for the provision of access for all citizens.

Demographic and funding realities are changing for postsecondary institutions and their students. As was recognized in the Virginia P-16 Council’s 2006 Report, the Commonwealth must keep up with these changes by focusing its attention on facilitating, enhancing, and expanding access to postsecondary education and training for all of its citizens.

Goals 1 and 2 address access directly from two complementary points of view. Goal 1 takes up access as a curricular issue, to promote higher expectations and standards for student preparation so as to enhance academic ambition and the likely success of students once they have entered college. Goal 2 takes up the question of tuition increases relative to other states and to inflation and personal income as well as access as a communication issue, to facilitate broader dissemination of information about higher education opportunity and how to overcome real and perceived barriers to it.

1. Enhance Access Through P-16 Curricular Alignment

Develop innovative, technology-enriched P-16 teaching and learning opportunities via both real and electronic access that expand and enhance Virginians' access to higher education.

Strategies:

1. Establish high expectations and align curricula between secondary and postsecondary education to ensure that Virginia students complete high school ready to succeed in and graduate from college. Areas of improvement include higher academic standards and curriculum expectations, and testing and assessment.
2. Promote collaboration between higher education and the P-12 system to identify effective accelerated college-preparatory experiences and make them more widely available. Such opportunities may include dual enrollment, tech prep, middle- and early-college high schools, Advanced Placement courses and International Baccalaureate programs.

2. Enhance Access Through Improved Coordination of Information

Encourage better coordination of informational resources available to Virginians so that higher education is viewed as affordable and access is expanded and enhanced.

Strategies:

1. Provide postsecondary information earlier, more systematically, and more strategically to Virginia's children and their families, especially members of underrepresented

populations. Such information should “demystify” college by detailing higher education’s benefits, outlining appropriate academic and non-academic preparatory paths, and clarifying eligibility and application processes for financial assistance.

2. Convene a working group of stakeholders to identify existing Commonwealth resources and consider how they may be mobilized more effectively to accomplish the following goals:
 - a. to promote greater social support for Virginians’ education through peers, mentors, and families;
 - b. to ensure that the “non-traditional” student population is provided sufficient support to participate in post-secondary education;
 - c. to foster effective collaboration between higher education and career guidance professionals working in and with the P-12 system;
 - d. to improve communication among partners currently offering educational resources for college financial preparation; and
 - e. to deliver information to students and parents “where they are,” at sporting events, shopping areas, via television, print media, billboards and websites.

Enhancing Affordability

The Restructuring Act requires institutions to “ensure that higher education remains affordable, regardless of individual or family income, and through a periodic assessment, determine the impact of tuition and fee levels net financial aid on applications, enrollment, and student indebtedness incurred for the payment of tuition and fees.” As charged in the 2006-08 Appropriations Act, SCHEV is working with institutions to develop by July 1, 2008 “a clearly understandable measure of affordability.” Current

affordability measures include average need-based borrowing and percentage of need-based borrowing. Each institution has developed strategies for approaching affordability as part of its six-year academic plan under the Restructuring Act.

Of paramount concern is the effect of increasing tuition charges on affordability and access, but particularly on students from the lowest income levels. As noted in the January 2006 SCHEV *Study on the Affordability of Virginia's Public and Private Institutions*, Virginia's 2-year public institutions compare favorably with those in other states. However, the same is not true for students in the lowest income quartile at four-year public and private institutions. For these students, the "net price" of college rises to a prohibitive level considered as a percentage of median family income: more than 40% at public four-years, 90% at the privates. Policies that keep tuition increases to moderate levels, combined with significant increases in state-funded and institutional financial aid are needed if lower income students are to have access to a bachelor's degree education comparable to that enjoyed by their higher income peers with similar qualifications and abilities.

Goals 3 and 4 address affordability from the complementary perspectives of advocacy for financial aid and tuition policies that preserve access and promoting incentives for family investment.

3. Enhance Affordability Through Financial Aid Advocacy

Continue SCHEV's strong commitment to affordability and access to higher education by advocating for sensible tuition policies and expansion of existing financial aid programs that make college affordable for low- and middle-income families and ensure access to Virginia's public and private institutions for all students.

Strategies:

1. Advocate for state and institutional policies that seek to moderate increases in tuition and balance them with expanded financial aid so as to improve the affordability of four-year institutions for low- and middle-income students.
2. Continue to recommend full funding of the Partnership Model for need-based programs.
3. Increase support for the Tuition Assistance Grant (TAG) program to reflect increases in the cost of higher education at Virginia's non-public colleges and universities.

4. Enhance Affordability Through Education and Investment Incentives

Support programs that educate and encourage families to set their sights on college for their children and where possible to save early for college. Such programs can help keep Virginia's families focused on the goal of college education and what it takes to achieve that goal.

Strategy:

1. Support Commonwealth initiatives to promote educational investment by partnering with families.
 - a. Work with Virginia College Savings Program to explore the concept of an income-based incentive program. Corporate partners might also provide financial and human resources.
 - b. Explore the idea of an incentive program that provides matching funds and could be structured to provide increased support as students progress through college, encouraging timely completion.

Goals Section II: ALIGNMENT

Enhancing Alignment with P-12 Education

An effective P-16 system of education is inclusive and expects excellence from students of all backgrounds. It aligns standards between different levels, particularly between P-12 and post-secondary education. It supports standards and the logical progression between levels via assessment-based improvement. It fosters efficiency, particularly involving the reduction of remediation. Lastly, it includes mechanisms for negotiating change and adapting to new challenges and problems (see “What Is P-16 Education?” by G. Van de Water and T. Rainwater, Education Commission of the States, at <http://www.ecs.org/clearinghouse/24/28/2428.htm>).

Goals 5 and 6 address two crucial aspects of alignment between higher education and P-12 education. Goal 5 seeks to enhance college readiness among the Commonwealth’s high school graduates through curricular alignment and feedback between higher education and the P-12 system. Goal 6 recommends development of a data collection system and analysis to support Goal 5.

5. Improve College Readiness Through Strengthened P-16 Cooperation and Communication

Endorse and adopt the goal of the Report of the P-16 Council to work with the State Board of Education and public and private institutions of higher education to establish a common standard of college readiness and to promote ongoing communication within the P-16 system to ensure the college readiness of high school graduates.

Strategy:

1. Support the Commonwealth’s endorsement of existing standards for reading, writing, and mathematics, such as the

nationally recognized American Diploma Project benchmarks and the College Board Standards for College Success.

2. Improve communication and cooperation among public schools and institutions of higher education to reduce the need for remedial coursework in college.
 - a. Produce an annual web-based high school feedback report providing key indicators of high school graduates' success in college.
 - b. Support collaboration between institutions of higher education and public schools to improve student achievement, upgrade the knowledge and skills of teachers, and strengthen the leadership skills of school administrators.
 - c. Encourage community colleges and high schools to use the results of the upcoming study of academic weaknesses of community college students to develop strategies to improve the preparation of high school graduates.

6. Strengthen P-16 Coordination Through Expanded Data Collection and Analysis

Create and support a culture of evidence based on the development and appropriate use of a virtual, comprehensive, longitudinal data system that documents student outcomes, barriers to success, and successful preparation.

Strategies:

1. Support the Commonwealth's efforts to achieve the ten essential elements of a state longitudinal data system identified by the national Data Quality Campaign.

2. Encourage researchers to conduct longitudinal analyses of student experience to determine key factors of college and workplace readiness.

Enhancing Alignment with Workforce Needs

While instruction, research, and public service are acknowledged as the primary missions of higher education, economic development and the enhancement of human potential are its ultimate goals. Higher levels of education are correlated with higher earnings for all racial/ethnic groups and genders. Higher levels of education also correspond to greater interest in the arts, increased civic engagement, and lower levels of unemployment and poverty.

The Restructuring Act calls on Virginia's colleges and universities to meet a series of educational goals, among them to "actively contribute to efforts to stimulate the economic development of the Commonwealth and the area in which the institution is located..." The greatest contribution institutions make to the Commonwealth are their *graduates*, who go on to staff the most important public and private enterprises in the state. Goals 7, 8 and 9 concentrate on supporting state economic development and workforce needs.

7. Support State Workforce Needs Through Strengthened Participation in Post-Secondary Education

Establish aggressive targets for increased postsecondary participation rates, retention rates, and graduation rates at Virginia's public and private institutions of higher education.

Strategies:

1. Support scholarship funding to recruit students in critical shortage areas, such as nursing and teacher education.
2. Emphasize “2 plus 2” partnerships between community colleges and four-year institutions in rural and economically disadvantaged regions.
3. Implement programs—both academic and student support—that will foster increased attraction and retention of “non-traditional” student populations in postsecondary education.
4. Increase the academic and counseling support for K-12 students and teachers through the increased use of career guidance professionals, mentors, tutors, and enhanced professional development for teachers.
5. Expand dual enrollment opportunities for high school students who can benefit from early college attendance.

8. Conduct a Comprehensive Economic Impact Study of Higher Education

Conduct, under the auspices of the Office of the Governor and/or the General Assembly, a comprehensive economic impact analysis of higher education in the Commonwealth.

Strategies:

1. Establish baseline measures across a broad spectrum of economic base analysis and measure changes over time. Examples of items to be considered for measurement include: direct institutional spending; tax revenue generated by college graduates compared to those who never graduated from or attended college; annual expenditures by college and university employees, students, and visitors and the state taxes attributable thereto; percent of graduates

that remain in the state; the number of jobs created off-campus by the institution's presence; annual level of sponsored research; etc.

2. Measure employment supply and demand, especially in critical areas; net job migration; and the impact of the higher salaries generated by an increased graduate population.

9. Improve Alignment Between Higher Education and the Commonwealth's Workforce Needs

Strengthen the links between the business community and higher education institutions by promoting the coordination of academic program development at the undergraduate and graduate levels with state economic development and workforce needs.

Strategies:

1. Establish an advisory council with representation from higher education and industry to identify statewide needs for both applied and research-oriented academic programming and to ensure alignment of institutional competencies and industry needs.
2. Work with institutions to facilitate program development in high needs areas, including:
 - a. Develop courses and training geared toward specific industry needs in high-growth occupational areas.
 - b. Better coordinate educational pathways from the associate to the graduate level.
 - c. Identify ways to improve response time to business and industry requests for higher education courses and services in a format that will meet industry and adult learner needs.

3. Implement a program to upgrade and maintain research infrastructure and equipment at existing regional business incubators and to establish more of them.
4. Implement a program of competitive economic development grants for seeding innovative commercial applications of university research.

Enhancing Academic Quality

There is a national call for accountability in higher education that recognizes the need for colleges and universities to document rigorously and with transparency the difference they make to students' intellectual growth. Virginia has an established record as a leader in the assessment of core learning areas that allows public institutions of higher education to define outcomes and specific assessment methodologies. This history can serve as a strong platform on which to build an even better system of assessment that is rigorously both formative and accountable. Goal 10 addresses assessment of general education and degree programs with a view to ongoing curricular improvement and demonstrating institutional successes.

10. Strengthen Academic Program Quality and Accountability Through Assessment

Maintain and enhance the quality of academic programs at Commonwealth institutions by focusing on outcomes and improvement, while demonstrating accountability to students, parents, state government, and the citizenry in general.

Strategies:

1. Commonwealth institutions should improve assessment to satisfy stakeholders' need for clear information on the

effectiveness of instruction in the core academic competencies. This effort should include both “value added” assessments for public accountability, as well as targeted course and program level assessments to suggest needed improvements.

2. In the case of degree programs, assessment should proceed according to standards established by accrediting bodies, both disciplinary and regional, and by institutions’ own internal standards and expectations. Information about degree program assessments should, where practicable, be made available to the public in ways that will both inform current and prospective students and highlight institutional strengths and successes.

Goals Section III: INVESTMENT

Enhancing Research

The research enterprise is in some respects the keystone of higher education. It is from research and scholarship that new knowledge is discovered. It is precisely in the area of research that it is most difficult to achieve and maintain excellence because of inherent costs and the difficulty of recruiting world class-researchers. This is a national as well as a statewide challenge.

Research has been a state planning concern for Virginia in the past. The second goal of the 2002 Virginia Strategic Plan for Higher Education was to increase Virginia's national standing in sponsored research. According to the most recent available data on research expenditures, Virginia has not improved on its national ranking (37th) since 2002, despite increasing per capita expenditures from \$83 to \$113.

If Virginia is going to bolster its research standing it is essential to identify areas in which the research capacity is sufficiently developed that strategic investment can be translated into national leadership. That strategic planning has already been well developed under the aegis of the Virginia Research and Technology Advisory Commission (VRTAC). While we recognize that there are many areas of diverse and cutting edge research at Commonwealth universities, goal 11 endorses the VRTAC plan, which defines three research topics of mutual priority among higher education, industry, and federal laboratories with the aim of significantly increasing federal funding. Goal 12 addresses infrastructure issues to facilitate recruitment of first rate faculty and graduate students, and to remove regulatory barriers to support research.

11. Enhance Research Through Investment in Targeted Consortia

Endorse the Virginia Research and Technology Advisory Commission (VRTAC) proposal to establish a consortium of universities, industry and federal laboratories that would focus on three thematic research areas of mutual priority:

1. Energy, Conservation, and the Environment;
2. Future Microelectronics in Virginia;
3. Lifespan Biology and Medicine, including public health and safety.

Strategies:

1. Advocate a state investment of \$45 million per year for five years—matched with a cost share of \$15 million per year from university/industry/federal laboratory teams.
2. Regularly report metrics for determining success (e.g., federal research programs awarded, patent filings/licenses, jobs created, etc.) to a Governor's panel.

12. Enhance Research Through Investment in Infrastructure

Strongly support investment in resources necessary for carrying out state-of-the-art research and instruction at public colleges and universities.

Strategies:

1. Recommend adequate funding and appropriate policy changes to attract nationally renowned faculty, top quality graduate students, talented postdoctoral fellows, and qualified technicians.
2. Recommend that the Commonwealth employ existing exemptions from SCHEV's 50:50 research funding guideline to allow targeted 100% general fund research projects (e.g.,

Commonwealth Research Initiative, VA Tech and VSU agricultural extension, and the Virginia Institute for Marine Science).

3. Recommend that the Commonwealth maintain the precedent-setting policy of funding research equipment through the Higher Education Equipment Trust Fund.

The twelve goals and associated strategies outlined above constitute the Council's considered recommendation for addressing state needs and advancing the quality of the Commonwealth's system of higher education. By focusing on the three themes of access, alignment, and investment, the plan aims to make educational opportunity more widely available and better attuned to state needs, and to make Virginia better positioned to advance in research excellence.