

Red Rocks Community College  
Academic Master Plan  
2011-2020

The growth of instructional programs at Red Rocks Community College over the next 10 years will be greatly influenced by numerous external and internal factors. How we respond to the external influences and how we shape our internal structure will determine the quality and health of the college in 2020.

**External Factors: National and International**

While there are many issues that are yet unknown or are beyond the college's scope of influence, there are two factors that are worth taking a serious look at. These are the aging population and the need for new programs in green and efficient energy use.

According to *US News and World Report*, the number of people in the U.S. over the age of 50 in 2008 was 38.7 million and will rise to 88.5 million in 2050. In 2007, there were 3.3 workers for every beneficiary, down from 5.1 per beneficiary in 1960. In 2032, there will be only 2.1 workers per beneficiary. A *MetLife* study reported that 75% of boomers intend to stay in the workforce to some extent. Many boomers are concerned with financial security. There are expected to be sharp increase in demand for health care and elder-care resources.

Already a few community colleges across the county are offering accelerated courses to help the 50 plus generation move from private sector to public services jobs.

The International Energy Agency reports that the global energy demand is expected to increase 70% by 2030. At the same time the USGS predicts we will reach peak oil by 2026 and they estimate that the price per barrel of oil will reach \$180 by 2020.

**External Factors: State and Local**

Colorado projections (*WICHE, ACT*) show either flat or a slight decline in high school graduation rates through the 2012-2013 school year. From 2013 – 2022 Colorado is projected to have an approximate high school graduation increase of 7.1 percent. The diversification of ethnicity in HS graduates is increasing with the largest increase happening in the Hispanic population.

The CCCS Office of Institutional Research ranked the following occupations as high wage (>\$20), high growth for Jefferson County through 2019; engineering, math and computer science, allied health care and business and financial operations, protective service operations and education. Ranked the lowest in terms of wages but with an increase in demand are food preparation and services and sales. In addition, Jefferson County's office of economic development is committed to attracting and promoting green energy jobs into Jefferson County over the next 10 years.

The state of Colorado has passed significant legislation during the 2009 and 2010 legislative years that will impact growth at RRCC. Included are degree designations, state-wide transfer agreements, Ascent, and tuition increase flexibility for State Universities. Lastly, economists generally agree that the economy will recover slowly over the next few years and then show modest growth.

### **Opportunities Based on External Factors**

Given the continued increase of high school graduates from 2013, the continued sharp increases in state supported University tuition, strong articulation agreements and the high quality of our general education programs, RRCC's academic programs will continue to grow at a rate equal or greater than the HS graduation rate.

Allied health, engineering, computer science, business and financial operations, protective services, and education are all potential growth areas. RRCC needs to work closely with our local hospitals and other allied industries and explore geriatric programs, physical and occupational therapy, and health IT. This will require expanded space and could best be developed with a dedicated health campus such as the Arvada Campus. Programs at such a campus could be paired with related certificates and degrees in counseling, criminal justice, and other public service jobs aimed at boomers.

Of continued importance is RRCC's commitment to green energy and sustainability programs. We have established ourselves as a frontrunner and we have multiple opportunities for grants to continue and expand this area of concentration. We not only need additional space to make this happen, but we need to better utilize the space we currently have.

### **Opportunities Based on Internal Factors**

RRCC has an opportunity to hire more faculty, especially in areas that have no or insufficient full time faculty and in areas for new program development. Grants provide an excellent opportunity to fund faculty and staff for new growth areas. The college needs to pursue an additional NSF ATE grant in water quality, a NSF Center grant in Energy, a FIPSE grant for developmental education and health careers related grants. RRCC needs to provide funds to offer learning communities pairing gen-ed and developmental courses. At the same time, we need to review and transition out declining or duplicative programs.

RRCC should convert some of our computer classrooms to a model that encourages students to bring their own laptop and connect to a shared computer. This would allow better cross utilization of classrooms. We also need to improve classroom utilization in general. We need to explore condensed, Friday or morning schedules. We also need to encourage more hybrid classes in all areas and more one-day per week options for students.

### **Internal Factors: Faculty**

In the Fall of 2009, 73.2 % of all RRCC courses were taught by adjunct instructors. RRCC had 79 Full time faculty (plus 4 teaching pros) and approximately 429 adjunct. During the last two to three years, most instructional areas that replaced or added new full time faculty saw a jump in FTE above the overall college growth.

### **Internal Factors: Remediation**

In 2006, 31.13% of new full time students tested into remediation in at least one subject. In 2009, 41.91% tested into remediation in at least one subject.

- The percent of first time students enrolled in remedial math increased from 10.77% to 13.74%.
- The percent of first time students enrolled in remedial English increased from 8.06% to 12.55%.

Currently the college is working with full time faculty and pursuing external funding to better address the success rates of students taking remedial classes. This will lead to increased student retention.

### **Physical facilities**

Current instructional space is inadequate, particularly in the academic areas. The demand for high tech classrooms continues to grow. With it, increased demand for available electricity and wireless capabilities for students are straining our physical space. Academic areas account for over 60% of our FTE, thus the quality of our classes in these areas are especially critical for continued growth and success.

### **Growth Projections:**

During the past 10 years FTE increased from 3424.67 to 5490.65 a 60.33% increase. The next 10 years will have a more modest growth. The attached predictions indicate that FTE is increased by 17.27%. Specifically, FTE has been increased 2.5% for the FY2011. FY2012 has no increase because of the decrease in HS graduates in Jeffco. In FY2013, the light rail to RRCC will be complete so enrollment will begin to rise again. Academic areas then increase at a rate of 1% per year for the remaining years. There is a decrease in CIS related programs due to increasing internet natives attending RRCC and a decrease in multimedia and CIS related jobs requiring graduates of 2 year programs. It is assumed that growth will be more erratic but will even out to about 17-20% over the next 10 years.