



*The*  
**ECONOMIC  
IMPACT**  
*of Houston Community College*

*2010 Regional Economic Growth and Investment Analysis*





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# INTRODUCTORY LETTER

October 2010

To business and community leaders,

This is a time of significant growth for Houston Community College and our communities. The institution continues to enrich the region with record numbers of qualified, highly educated students as we work to achieve our vision to be the nation's most relevant college.

In today's economy, access to post-secondary education and training is essential for individual career success. Estimates indicate that 80 percent of today's new jobs require education or training beyond high school and that those jobs represent the fastest-growing and highest-paying segments of the new economy. HCC provides such opportunities to more than 100,000 area students each year. In fact, a student who earns an Associate degree will earn, on average, 35% more than a student with a high school diploma.

HCC contributes to the vitality of both the local and state economies. For example, every \$1 tax invested in HCC returns \$6.60 to the community in economic benefits. Few public institutions can boast a return this substantial, further reinforcing HCC's contribution to the economic growth of the region.

Under the leadership of the HCC board and administration, the district has made significant investments in facilities, technology, and operational efficiencies over the last five years that have prepared HCC for the future. Now, more than ever, our community is looking to us for job training, flexible learning alternatives, and cost-effective solutions to today's economic challenges.

The following report, which is the summary of a study commissioned by HCC and conducted by Economic Modeling Specialists Inc. (EMSI) in 2010, details the role the college plays in promoting economic development, enhancing students' careers and improving quality of life.

The report quantifies HCC's significant role in the local economy and reinforces the fact that it is a sound investment from multiple perspectives. First, students benefit from improved lifestyles and increased earnings. Second, taxpayers benefit from a larger economy and lower social costs. Finally, the community as a whole benefits from increased job and investment opportunities, higher business revenues, greater availability of public funds, and an eased tax burden.

The findings clearly indicate that HCC is essential to our community's continued success. Houston Community College is proud to play an essential role in educating and training our students and positively impacting the economy. Thank you for your continued support.

Sincerely,




**Dr. Michael P. Williams**

*Board Chair, Houston Community College*




**Dr. Mary S. Spangler**

*Chancellor, Houston Community College*



# EXECUTIVE SUMMARY

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Houston Community College impacts students, the regional economy and taxpayers in a number of significant ways. The following study, conducted by Economic Modeling Specialists Inc. (EMSI), applies a comprehensive model designed to quantify the economic benefits of Houston Community College and translate these into common sense cost/benefit and investment terms.

The study includes two major analyses:

## **INVESTMENT ANALYSIS**

This analysis treats education funding as an investment, calculating all measurable returns and comparing them to costs, from the perspective of students, taxpayers, and society as a whole.

- For every dollar students invest in HCC, they receive a cumulative \$4.50 in higher future income discounted (over the course of their working careers).
- Texas benefits from improved health and reduced welfare, unemployment, and crime, saving the public \$15.8 million per year.
- Taxpayers see a rate of return of 6.6% on their investment in HCC.

## **ECONOMIC GROWTH ANALYSIS**

This analysis measures added income in the region due to college operations, student spending, and the accumulated skills of past and present students still in the workforce.

- The net added income due to HCC Operations (\$154.9 million) and the spending of non-local students (\$102.6 million) contribute a total of \$257.4 million in income to the HCC service area economy each year.
- The accumulated credits achieved by former HCC students over time translate to \$1.7 billion in added regional income each year due to the higher earnings of students and increased output of businesses.

## INVESTMENT ANALYSIS AT A GLANCE

### Benefit Type

### Annual Amount

#### Higher Earnings \*

Aggregate (all students)	\$192,667,400
Per credit-hour equivalent (CHE)	\$ 207
Per full-time equivalent (FTE) student	\$ 6,218

#### Social Savings

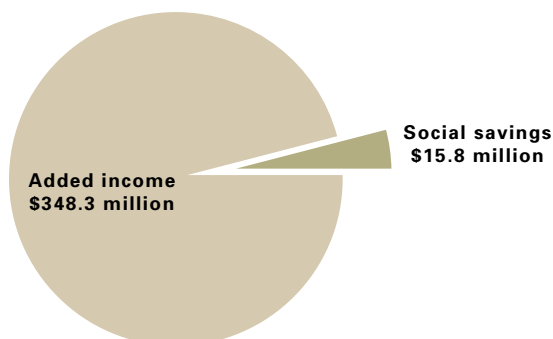
Aggregate (all students)	\$ 15,805,500
Per credit-hour equivalent (CHE)	\$ 17
Per full-time equivalent (FTE) student	\$ 510

Stakeholder	Rate of Return	Benefit/Cost	Payback (Years)
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Student Perspective	14.9%	4.5	9.7
Social Perspective	N/A	26.0	N/A
Taxpayer Perspective	6.6%	1.9	16.9

*\*Refers to the annual higher earnings that accrue to students, not to the total taxable income added to the state economy.*

## ANNUAL BENEFITS TO TEXAS PUBLIC DUE TO HCC STUDENTS





HCC contributes more money to the state treasury than it receives. Not only does the college pull its own weight, but it also effectively subsidizes other sectors funded by taxpayers. Absent HCC, taxes would have to increase in order to maintain services in other sectors at their current levels.

## ECONOMIC IMPACT ANALYSIS AT A GLANCE

### Added Income (\$ Thousands)

#### Spending Effect

<i>College Operations Effect</i>	\$ 154,867
<i>Student Spending Effect</i>	\$ 102,552
<b>Total Spending Effect</b>	<b>\$ 257,419</b>
<b>Student Productivity Effect</b>	<b>\$ 1,661,095</b>
<b>Grand Total</b>	<b>\$ 1,918,514</b>

## HCC Growth

Since the previous economic impact report was published in 2008 to the current year (2010), three major shifts have occurred at HCC:

- HCC's credit student enrollment has increased by 22% to over 72,000 students a semester.
- Grant funding has increased from \$13 million to \$23 million per year, while private fundraising increased from a total of \$3.1 million in 2007/2008 to a total of \$7.8 million over two years.
- HCC's annexation of two additional school districts has resulted in an increase of approximately \$13.6 billion to HCC's tax base.



# FACT SHEET

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**Houston Community College plays a significant role in the local economy and is a sound investment from multiple perspectives. Students benefit from improved lifestyles and increased earnings. Taxpayers benefit from a larger economy and lower social costs. Finally, the community as a whole benefits from increased job and investment opportunities, higher business revenues, greater availability of public funds, and a reduced tax burden.**

## INVESTMENT ANALYSIS

### Student Perspective

- HCC served **78,814** credit students and **29,914** non-credit students in the 2008-09 reporting year.
- Education increases lifetime income. The average income at the career midpoint of someone with an associate's degree in the HCC service area is **\$59,700**, 35% more than a student with a high school diploma.
- Throughout his or her working career, the average HCC student's discounted lifetime income increases by **\$4.50** for every dollar invested in HCC.
- Students enjoy an attractive **14.9%** average rate of return on their HCC educational investment, recovering all costs (including tuition, fees, and forgone wages) in **9.7** years.

### Social Perspective

- Texas will see avoided social costs amounting to **\$15.8 million** per year due to HCC students, including savings associated with improved health, reduced crime, and reduced welfare and unemployment.
- Higher earnings of HCC students and associated increases in state income expand the tax base in Texas by about **\$348.3 million** each year.

## Taxpayer Perspective

- State and local governments allocated approximately **\$193.2 million** in support of HCC in FY 2008-09.
- For every dollar of this support, taxpayers see a cumulative return of **\$1.90** over the course of students' working careers (in the form of higher tax receipts and avoided costs).
- State and local governments see a rate of return of **6.6%** on their support for the college. This return compares very favorably with private sector rates of return on similar long-term investments.

## ECONOMIC GROWTH ANALYSIS

### College Operations Effect

- The HCC service area economy annually receives roughly **\$154.9 million** in income due to HCC operations. This is a conservative figure adjusted to account for monies that leave or are withdrawn from the economy in support of the college.

### Student Spending Effect

- Students who come from outside the college's service area each year spend money at local businesses for room and board, transportation, and other personal expenses.
- The expenditures of non-local students generate roughly **\$102.6 million** in added income in the HCC service area each year.

### Productivity Effect

- Approximately **85%** of HCC students settle in the service area. The current regional economy embodies an estimated **8.1 million** credits that have accumulated over time as thousands of former HCC students (completers and non-completers) enter the workforce year after year.
- HCC skills translate to higher earnings for students and increased output of businesses. The added income attributable to the accumulation of HCC credits in the workforce amounts to around **\$1.7 billion** each year.

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**HCC**  
HOUSTON COMMUNITY COLLEGE

**HCC**  
HOUSTON COMMUNITY COLLEGE

INTERNATIONAL

# BUSINESSES BENEFIT FROM HCC

**Houston Community College plays a vital role in training the region's workforce, ensuring that the area can compete in today's global marketplace.**

## **HCC RAISES CONSUMER SPENDING**

- HCC employed 1,931 full-time and 1,654 part-time faculty and staff in the 2008-09 reporting year, with an annual payroll of \$175.4 million.
- HCC had a total operating budget of \$385.1 million, of which an estimated 56% was spent in the HCC service area for supplies and services.

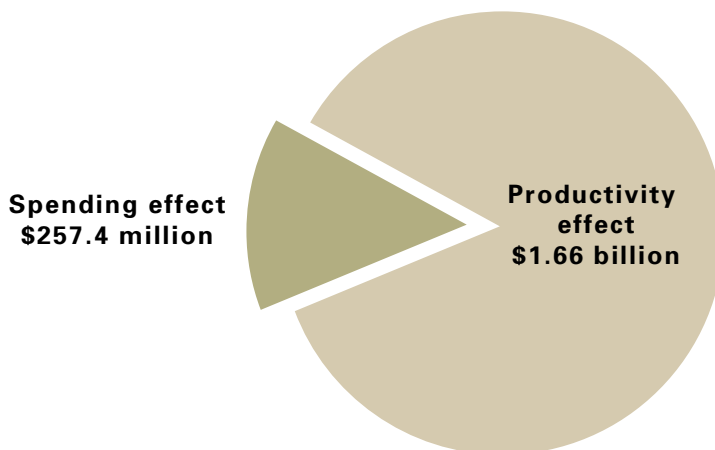
## **HCC CREATES A SKILLED WORKFORCE**

- HCC activities encourage new business, assist existing business, and create long-term economic growth. The college enhances worker skills and provides customized training to local business and industry.
- An estimated 8.1 million HCC credits have accumulated in the HCC service area workforce over time as former HCC students (completers and non-completers) enter the regional workforce each year.

## HCC GENERATES NEW INCOME

- HCC generates a net of \$154.9 million in added income in the HCC service area economy each year through its payroll and purchases for supplies and services.
- The expenditures of non-local students create an additional \$102.6 million in added regional income.
- The total spending effect of HCC comes to \$257.54 million in added new income each year.
- Former HCC students who remain active in the workforce contribute close to \$1.7 billion in added income in the HCC service area each year.

### ADDED INCOME IN HCC SERVICE AREA DUE TO HCC



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# HCC'S IMPACT ON SOCIETY

HCC provides significant social benefits by increasing state income and reducing social costs. The social perspective adds up all benefits attributable to HCC, regardless of recipient, and compares the total to the original investment made. This is called the "benefit/cost ratio." If the ratio is less than 1.0, the investment is not worthwhile; if it is greater, the investment is considered sound.

For example, a transportation authority might justify a new road by showing that savings in travel time and vehicle expenses accrued by thousands of drivers exceed the project's cost. Public parks are justified by showing that recreation, scenic, and other values enjoyed by park users exceed the cost of park infrastructure, operation, and the net value of the park's land and resources not used for other purposes. So the social perspective counts all benefits, not just those that accrue back to state or local government.

Benefits generated by HCC also accrue to different groups. Students benefit from higher incomes, employers benefit from increased worker productivity, and the public at large benefits from an expanded economic base. The public also enjoys a variety of external social benefits, such as reduced crime, lower welfare and unemployment, improved health, and less absenteeism from work. All of these are tallied up and compared to the investment made by state and local governments, or the taxpayers. A social perspective benefit/cost ratio greater than 1.0 is a minimal indicator of a worthwhile public investment.

Counting benefits and costs this way, HCC's benefit/cost ratio is 26.0. In other words, the cumulative added value attached to each dollar invested will have a present value of \$26.00 by the end of the students' working career.

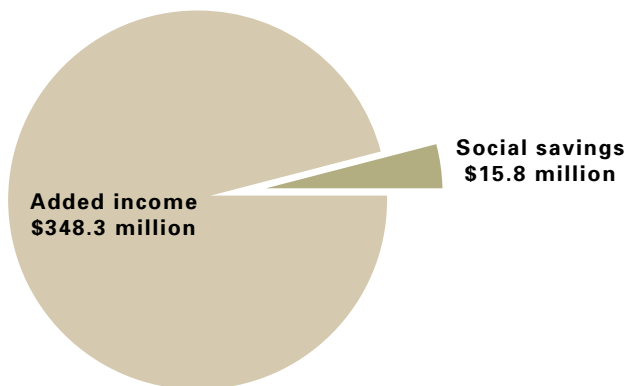
## HCC INCREASES STATE INCOME

- The activities of HCC's 2008-09 student body will generate about \$211.8 million in labor income in the state economy each year.
- Once HCC's current students become active in the workforce, they will promote business output, raise consumer spending, and increase property income in the state. All of this contributes an additional \$136.6 million in taxable income each year.
- Altogether, higher student income and associated effects on business productivity add \$348.3 million in income annually to the state economy.

## HCC REDUCES SOCIAL COSTS

- Education is statistically correlated with improved lifestyle behaviors, including reduced incidences of absenteeism, alcohol abuse, and smoking, lower probability of committing crime, and fewer welfare and unemployment claims.
- It is estimated that HCC's 2008-09 student population will generate social savings to the Texas public equal to \$15.8 million a year.
- These savings accrue to all state and local residents—students, homeowners, businesses and taxpayers.

## ANNUAL BENEFITS TO THE TEXAS PUBLIC DUE TO HCC







# STUDENTS

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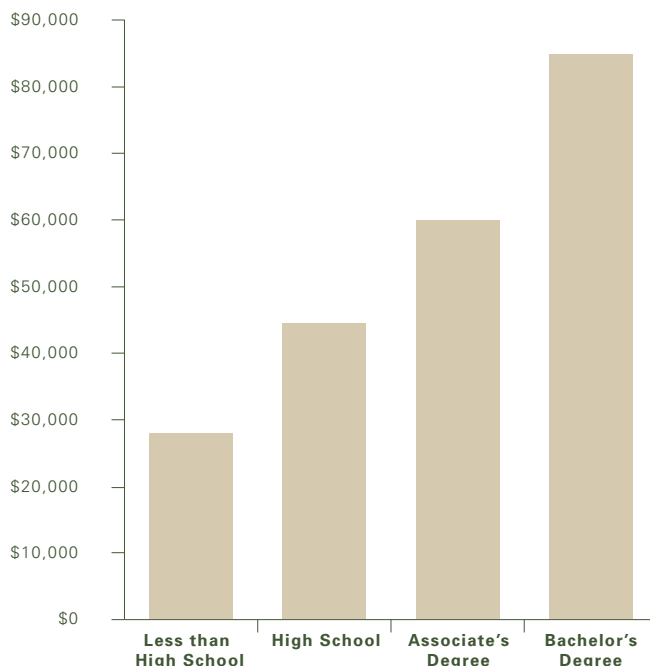
# BENEFIT FROM HCC

**HCC students benefit greatly from a higher education with increased earnings throughout their careers.**

## **EDUCATION PAYS BACK FOR A LIFETIME**

- Students enjoy an attractive 14.9% rate of return on their HCC educational investment.
- Over the course of his or her working career, the average HCC student's lifetime earnings will increase \$4.50 for every dollar invested in their HCC education (in the form of tuition, fees, and forgone earnings).
- The average annual income of the typical associate's degree graduate in the HCC service area at the midpoint of his or her career is \$59,700, 35% more than someone with a high school diploma.
- Over the course of a working lifetime, associate's degree graduates in the HCC service area earn \$577,200 more than someone with a high school diploma (undiscounted).

## **AVERAGE EARNINGS BY EDUCATION LEVEL IN HCC SERVICE AREA**



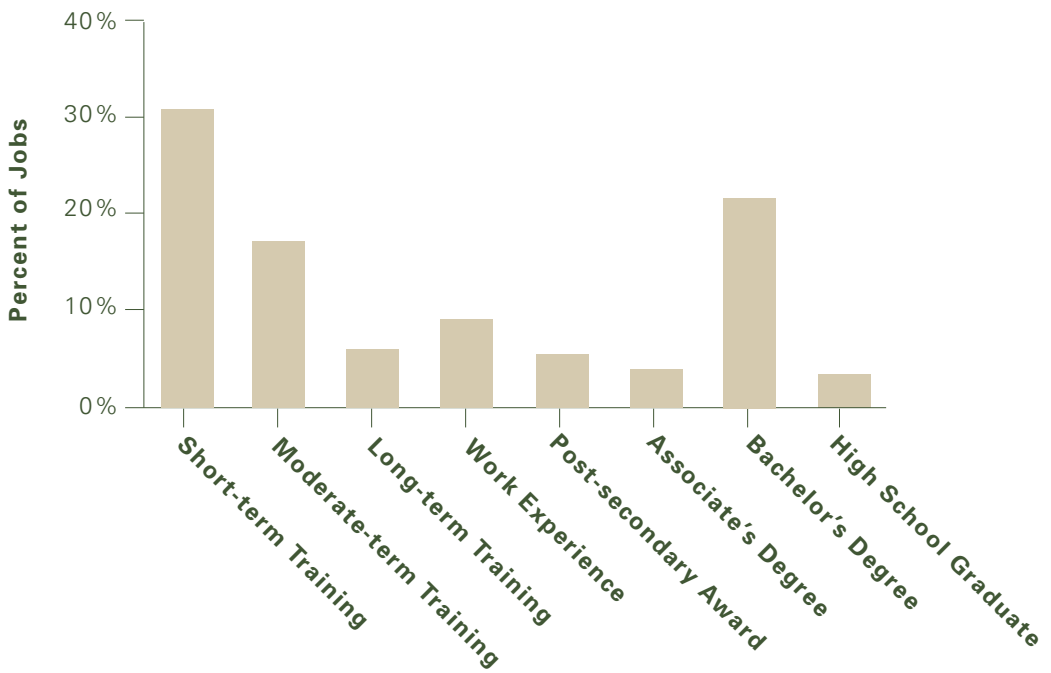


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## EDUCATION IS THE TICKET TO A BETTER JOB

- By 2019 it is anticipated that there will be about 693,600 new and replacement jobs available in the HCC service area.
- About 30% of these jobs will require an education level equal to an associate’s degree or greater.
- Another 6% of available jobs in 2019 will require some kind of post-secondary certificate or vocational award.

## HCC SERVICE AREA JOBS BY EDUCATION LEVEL





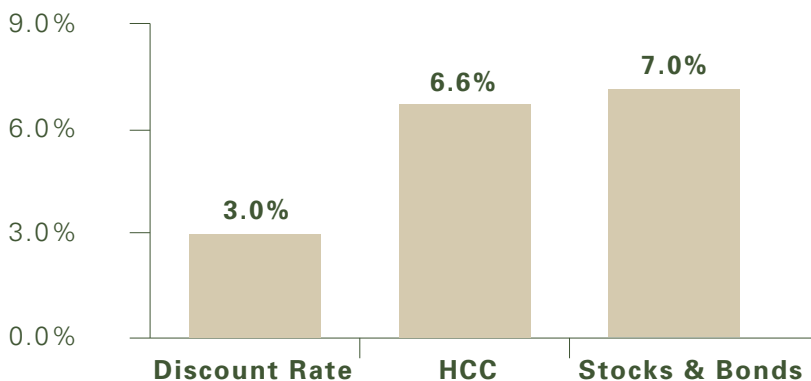
# TAXPAYER IMPACT

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HCC leverages taxpayer dollars for a significant return on public investment. The taxpayer investment perspective counts only benefits that can be entered into the books of state and local governments. For example, educated workers earn more and thus pay more taxes. Furthermore, because state and local governments bear part of the cost of crime, their budgets benefit from education's crime-reducing effect, and the same is true for other benefits of an educated populace. The bottom line: state and local governments receive returns from their support of HCC in the form of increased tax revenue and savings associated with avoided social costs.

Worthwhile public projects often generate negative taxpayer perspective returns, because the role of government is to provide services that the public wants but that the business sector may find unprofitable. Considerable funds are spent on public parks, for example, yet they yield little or no direct return. From a taxpayer perspective, returns are negative, though the park is justified by the benefits tracked under the social perspective.

## COMPARISON OF HCC'S RATE OF RETURN TO DISCOUNT RATE AND AVERAGE RETURN ON STOCKS AND BONDS



But unlike most government endeavors, funding for HCC generates strong results from both the social and taxpayer perspectives. Economists generally assume a 3%

discount rate in analyzing government investments, assuming that governments can obtain unsecured loans at a rate of 3% or receive a 3% return on any excess funds, if they were invested. Since HCC's taxpayer rate of return of 6.6% is greater than 3%, state and local governments actually make money on the investment. By funding the college, therefore, other recipients of state and local funding are actually subsidized through the revenues generated by the college.

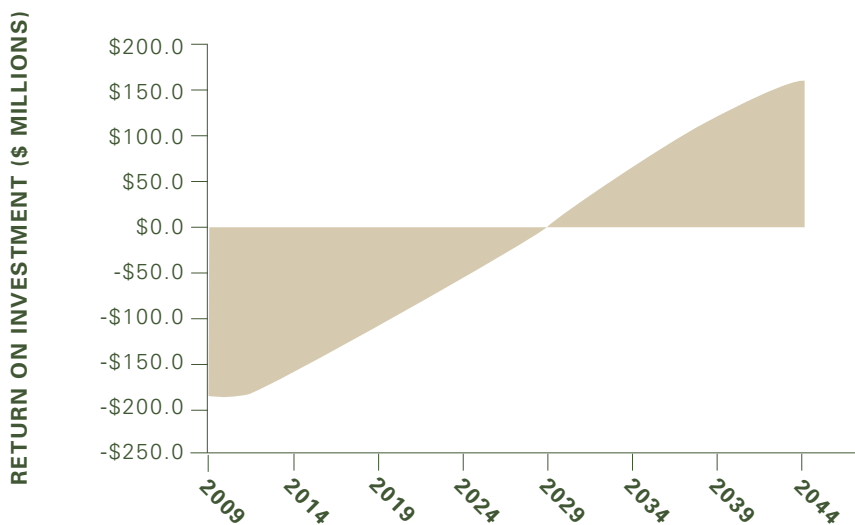
### HCC LEVERAGES TAXPAYER DOLLARS

- An estimated 95% of HCC students remain in Texas and contribute to economic growth. Students who enter the workforce expand the tax base by generating higher earnings and reducing social costs.
- Higher student earnings and associated increases in property income generate about \$24.5 million in added tax revenue each year.
- State and local governments will save approximately \$1.6 million in avoided social costs each year, including savings associated with improved health, lower costs of law enforcement, and fewer welfare claimants.

### HCC GENERATES A RETURN ON PUBLIC INVESTMENT

- State and local governments allocated about \$193.2 million in support of HCC in FY 2008-09.
- For every dollar appropriated by state and local governments to HCC, taxpayers will see a return with a cumulative added value of \$1.90 in the form of higher tax revenues and avoided social costs.
- State and local governments will receive a rate of return of 6.6% on their investments in HCC.

### LONG-TERM RETURN TO STATE AND LOCAL TAXPAYERS ON THEIR HCC INVESTMENT



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# CONCLUSION

The results of this study demonstrate that HCC is a sound investment from multiple perspectives. The college enriches the lives of students and increases their lifetime incomes. It benefits taxpayers by generating increased tax revenues from an enlarged economy and reducing the demand for taxpayer-supported social services. Finally, it contributes to the vitality of both the local and state economies.

## **ABOUT THE STUDY**

This report summarizes the results from “The Economic Contributions of Houston Community College” detailing the role that the college plays in promoting economic development, enhancing students’ careers, and improving quality of life. Data sources include, but are not limited to, 2008-09 academic and financial reports from the college, industry and employment data from the U.S. Bureau of Labor Statistics, earnings and demographic data from the U.S. Census Bureau, and a variety of studies and surveys relating education to social behavior.

The results presented in this 2010 report reflect several new adjustments that were not applied in the study previously conducted by Economic Modeling Specialists Inc. (EMSI) for HCC in 2008. These adjustments include, among others, data updates and methodological changes to the calculation of the social externalities, a discounting factor used to account for the substitution of in-region for out-of-region workers, and the implementation of an attrition model used to estimate the percent of students who leave the workforce over time. For these and other reasons, several of the key findings in this study are lower than those previously reported by EMSI.

# HCC LEADERSHIP

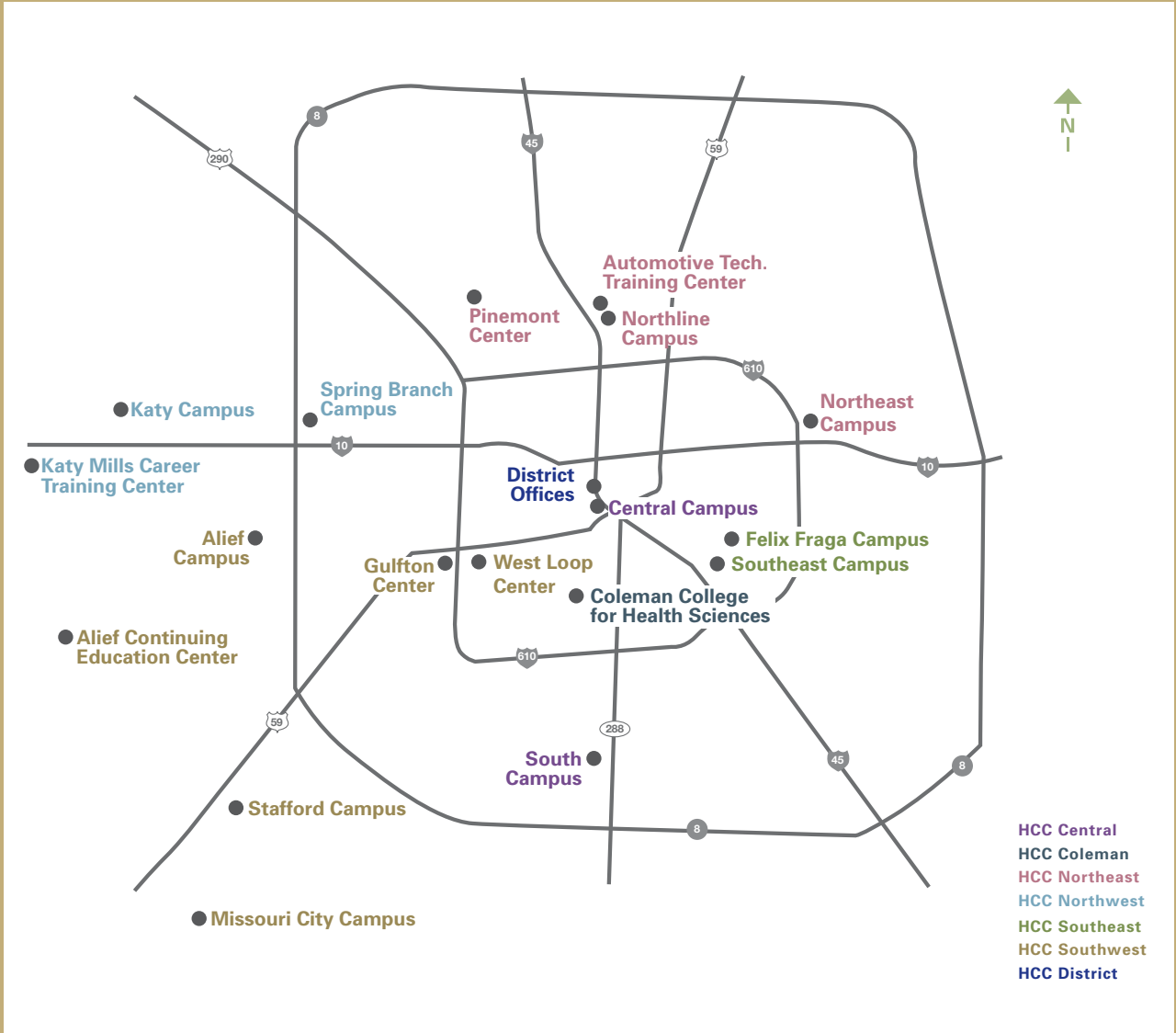


*HCC Administrators (L to R) Dr. Charles Cook, Dr. Art Tyler, Dr. Diana Pino, Dr. Mary Spangler, Bill Carter, Dr. Daniel Seymour*



*HCC Presidents (L to R) Dr. Betty Young, Dr. Fena Garza, Dr. Margaret Ford Fisher, Dr. Zachary Hodges, Dr. William Harmon, Dr. Irene Porcarello*

# HCC LOCATIONS



# HCC BOARD OF TRUSTEES, 2010



*Dr. Michael P. Williams  
Chair, District IV*



*Neeta Sane  
Vice Chair, District VII*



*Sandie A. Mullins  
Secretary, District VI*



*Yolanda Navarro Flores  
District I*



*Bruce A. Austin  
District II*



*Mary Ann Perez  
District III*



*Richard M. Schechter  
District V*



*Eva Loredo  
District VIII*



*Christopher W. Oliver  
District IX*

# MISSION

The Houston Community College Foundation enhances the quality of life of our community and of our fellow citizens through fundraising efforts that improve access to higher education, support career and technology training, and advance student learning at Houston Community College.

# VISION

HCC's vision is to be the most *relevant* community college in the country. We will be the *opportunity* institution for every student we serve – *essential* to our community's success.



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