



**City Funding Request for TAMUCC Electrical
Engineering Program
Dr. Jim Lee**



**Council Presentation
June 2014**



Graduates from Local Higher Education Institutions, 2012



Local higher education institutions have boosted higher paying jobs and wages, and so closing the income gap with the nation.

| | TAMUCC | Del Mar |
|---|---------------------|---------------------|
| Graduates | 2,033 | 1,576 |
| Annual "Wage Premium" Per Graduate in Coastal Bend | \$21,014 | \$13,909 |
| Total Annual Added Income for Coastal Bend | \$42,720,891 | \$21,920,704 |



Significance of TAMUCC Programs



City funding for TAMUCC programs has generated *permanent* impacts with ROI's higher than any existing funded programs.

| Program | Funding | Economic Impact (Annual) | |
|----------------------------|-------------------------|----------------------------|---------------------------------|
| | | Financial | Employment |
| Innovation Center | \$1.5 mil | \$5 mil client revenues | 113 jobs |
| Engineering | \$1.0 mil | \$23 mil starting salaries | 311 students (future jobs) |
| Research Lab | \$0.3 mil | | |
| UAV | \$0.6 mil | \$26 mil | 120 jobs |
| Small Business Internships | \$1.0 mil | \$5 mil salaries | 6 FTEs; >105 interns |
| TOTAL | <u>\$4.5 mil</u> | <u>>\$60 mil</u> | <u>>650 positions</u> |



Mechanical Engineering Earning Impact



Enrollment in the ME program is growing rapidly. Just the “added incomes” from the 38 graduates within the past 2 years exceed the \$1 million public investment.

| | Graduates | % Total | Added Annual Income | Added Lifetime Income | Cumulated Additional Income by 2014 | ROI Ratio by 2014 |
|---|-----------|---------|---------------------|-----------------------|-------------------------------------|-------------------|
| Total Graduates (2012-14) | 38 | 100% | \$1,713,587 | \$68,543,488 | \$1,781,229 | 1.7 |
| Graduates in Corpus Christi (avg. 30%) | 11 | 30% | \$514,076 | \$20,563,046 | \$534,369 | 0.5 |
| Graduates in Coastal Bend (avg. 39%) | 15 | 39% | \$668,299 | \$26,731,960 | \$694,679 | 0.7 |



Projected Impact from Current Students



Given the current enrollment, the ME program will generate over \$4 million in added *local* income

| | Students | % Total | Added Annual Income | Added Lifetime Income |
|--|----------|---------|---------------------|-----------------------|
| Total Engineering Students, 2014 | 311 | 100% | \$14,024,358 | \$560,974,336 |
| Projected graduates in Corpus Christi | 93 | 30% | \$4,207,308 | \$168,292,301 |
| Projected graduates in Coastal Bend | 121 | 39% | \$5,469,500 | \$218,779,991 |

Source: EMSI Analyst, 2014



Coastal Bend Labor Market Outlook



The EE program will close yet another local skill gap.

| | 2014 | 2014-23 | |
|-----------------------------|---------|------------|---------------------|
| | # Jobs | Job Change | Annual Job Openings |
| All Occupations | 247,580 | 18% | 11,582 |
| Mechanical Engineers | 206 | 28% | 15 |
| Electrical Engineers | 238 | 23% | 9 |



Engineering Degrees' Annual Wage Premium, 2014



The “wage premium” for EE is even higher than that for ME

| | Mechanical | Electrical |
|---|-----------------|-----------------|
| Median Wage for Engineering Degree Holders | \$80,974 | \$101,816 |
| Coastal Bend Overall Median Wage | \$35,880 | \$35,880 |
| Wage Premium from Degree | \$45,094 | \$65,936 |

Source: EMSI Analyst, 2014