

# Development Management Group, Inc.

economic development ■ fiscal & economic impact analysis ■ development management



## ECONOMIC IMPACT ANALYSIS

Completed for:

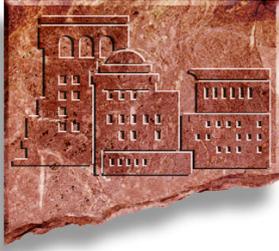


Imperial Valley College  
November 30, 2009  
(Final Report)

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## Development Management Group, Inc.

economic development ■ fiscal & economic analysis ■ development management

November 30, 2009

Dr. Ed Gould, President  
Imperial Valley College  
380 East Aten Road / P.O. Box 158  
Imperial, CA 92251

### **RE: FINAL ECONOMIC IMPACT ANALYSIS FOR IMPERIAL VALLEY COLLEGE**

Dear Dr. Gould:

Attached is the final economic impact analysis that has been prepared for Imperial Valley College. The report was prepared to our best professional standards and includes a significant amount of data that quantifies the economic impacts of Imperial Valley College.

Please note, our findings show that Imperial Valley College is anticipated to produce a gross economic impact to the Imperial Valley Region in excess of \$5.936 billion between 2009 and 2021 (a thirteen year period). This represents an average economic impact of about \$456.6 million each year. These impacts include those generated from current and planned construction, potential new construction, operations, incomes from currently enrolled students and the additional earning power of students that have been enrolled at IVC since 2000.

Our firm will avail itself to present these findings as requested by you or your designee. Thank you again for the opportunity to work on behalf of both your team and the entire region to calculate the economic impacts of Imperial Valley College.

Sincerely,

Michael J. Bracken  
Managing Partner

## **Executive Summary**

Imperial Valley College has been serving the needs of students in the region for about fifty years. During this time, the college has provided students an opportunity to earn an Associates Degree, train for a vocation or prepare for transfer to a four-year educational institution. Imperial Valley College is located on a one-hundred and sixty (160) acre campus in the City of Imperial, CA that serves the Imperial Valley region.

Since approximately 1978 (with the passage of Proposition 13 that included a cap or limit on property taxes), community college districts (including the Imperial Community College District) began to rely more and more upon local tax revenue sources to fund facility expansion projects on campus. In 2004, the voters of Imperial County voluntarily voted in a General Obligation Bond (Measure L) that created \$58.6 million of local funds from new property taxes to both modernize and expand Imperial Valley College. Some match funds were and are also available from the State of California to better leverage local funding. As local funding to expand community college campus is becoming more common, it is important that the community stakeholders (taxpayers) have a greater understanding of the economic impacts that a community college has upon a region's economy.

The purpose of this Economic Impact Analysis is to provide Imperial Valley College officials (both board and staff) along with the community at large a greater understanding of the economic engine that is Imperial Valley College. Development Management Group, Inc. was selected to complete this important and vital project.

Our methodology includes providing a specific breakdown of current economic impacts and projecting impacts into the future. We looked at five (5) specific areas of potential impacts. These include:

- 1) Currently budgeted capital spending
- 2) Potential new capital spending (new bond issue and matching dollars from State of California)
- 3) Operational spending
- 4) Earnings of students currently enrolled at Imperial Valley College
- 5) Additional earning potential of students that have graduated from Imperial Valley College (either an Associates or earning a Bachelor's at either a University of California or California State

University) because of their educational achievement. For purposes of this report, additional earnings calculations for students previously enrolled at IVC date back to 2001.

In terms of demographics, the Imperial Valley can be characterized by low educational achievement with 40% of adults 25 and older lacking a high school diploma or GED, while only approximately 17% of the same group has achieved an Associates degree or beyond. The incomes of those lacking a high school education (or GED) also suffer whereas; the actual income of workers without such educational achievement provides them annual projected earnings of about \$18,734.

As a general rule, persons whom achieve a higher education earn more money than those that do not. Workers with an Associates Degree generally earn about \$36,000 annually or \$8,150 more per year than a person with just a high school diploma (or GED) and twice as much as a worker that did not complete high school. For those that achieve a bachelor's degree, they earn on average about \$51,200 per annum or almost three times as much as a person without a high school diploma (or GED).

One surprising note is that about 14% or 1 in 7 jobs in the Imperial Valley have some connection back to Imperial Valley College. This number is derived from adding the number of direct employees of IVC with that of students that also are employed (either full time or part time) and the number of graduates from IVC since 2001 then factoring the appropriate percentage of persons engaged within and employed in the workforce.

In just 2009 alone (the base year of this analysis), the economic impact of Imperial Valley College on the Imperial Valley Region is estimated to be \$295.7 million. Development Management Group, Inc. took the study a step further to project the economic impacts of IVC on the region as a whole over the thirteen (13) year period to allow for the completion of Measure L funded capital improvement projects and schedule a ten-year period for the spending of a potential new bond measure. Therefore, the analysis was completed from the time period of 2009 through 2021.

In total (for the thirteen year period), it is anticipated that the total economic impact of Imperial Valley College will exceed \$5.936 billion dollars. The average annual economic impact over the same period is about \$456.6 million. It is noted that calculations project a 3% annual increase in such items as new students, new graduates, and income over the same period.

Our economic analysis includes information garnered from eighteen (18) different sources including enrollment information from Imperial Valley College, the United States Census Bureau, State Employment Development Department and State Department of Finance. It takes into account a variety of potential economic impacts sources to provide a holistic look at Imperial Valley College as an “economic engine”. While not subject of this study, it is highly likely (based on the calculations contained herein), that Imperial Valley College, as an economic engine, is one of the five largest economic sources in the entire region (noting the County of Imperial and Imperial Irrigation District as two other large economic engines).

### **Certification**

I certify that my engagement to prepare this report was not contingent upon developing or reporting predetermined results. The statements of fact contained herein and the substance of this report are based on public records, data provided by the Imperial Valley College, and other sources as described in the reference section of this report. This report reflects my personal, unbiased professional analyses, opinions and conclusions. If any of the underlying assumptions related to this report change after the date of this report (November 30, 2009), then the undersigned reserves the professional privilege to modify the contents and/or conclusions of this report.



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\*\*\* *End of Executive Summary* \*\*\*

## **1. Introduction and Purpose**

Development Management Group, Inc. (DMG) has been retained by Imperial Valley College (IVC) to provide a Regional Economic Impact Analysis for Imperial Valley College. The purpose of this Regional Economic Impact Analysis is to provide both college officials and the community at large a greater understanding of the economic impacts benefiting the Imperial Valley region of California through the various activities and functions of Imperial Valley College.

Imperial Valley College is considering seeking additional local financing to construct new facilities to serve the Imperial Valley region. The additional facilities (including classrooms, laboratories and other buildings) are necessary to expand the educational services offered to the community. DMG has discovered that the current facilities, in addition to those that are both planned and funded would create a total capacity for approximately 10,000 students (the College currently has about 9,000 enrolled). At the current rate of growth, Imperial Valley College will reach capacity in approximately three to four years (2012 or 2013). Additional local funding matched with either state or federal sources will enable Imperial Valley College to meet an ever increasing need to both educate and train future workforce participants.

The regional economic impacts fall into five (5) main categories. These include:

- 1) Currently budgeted capital spending
- 2) Potential new capital spending (new bond issue and matching dollars from State of California)
- 3) Operational spending
- 4) Earnings of students currently enrolled at Imperial Valley College
- 5) Additional earning potential of students that have graduated from Imperial Valley College (either an Associates or earning a Bachelor's at either a University of California or California State University) because of their educational achievement. For purposes of this report, additional earnings calculations for students previously enrolled at IVC date back to 2001.

For purposes of projecting future economic impacts, a 3% growth factor is used for such items as staff salaries/benefits and the earnings of current and former students. In the past decade, college enrollment has exceeded this percentage. Additionally, staff salaries (when counting pay, merit (step) increases, benefits and employer paid taxes) have also exceeded this 3% growth factor.

Operational impacts take into account such items as staff salaries, contract spending and material purchases. Construction spending analyzes both current and future infrastructure/facility projects to be built on campus. Impacts will include professional (pre-construction), material and labor. Student impacts analyze the earning power of college students during their time at IVC along with the additional earning potential they hold in the regional economy as a result of their educational achievement.

This report is limited to the economic impacts of Imperial Valley College operationally and through construction projects. It also includes the income and additional earnings of its students and alumni.

## **2. Contact Information for Imperial Valley College**

Imperial Valley College  
380 East Aten Road  
P.O. Box 158  
Imperial, CA 92251  
Contact: Dr. Ed Gould, Ed. D., Superintendent/President  
Contact: Mr. Bill Gay, Public Information Officer

## **3. Contact Information for Development Management Group, Inc.**

Development Management Group, Inc.  
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Contact: Michael Bracken, Managing Partner  
michael@dmgeconomics.com  
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## **4. Statement of Independence**

Imperial Valley College has provided a joint contractual obligation with Development Management Group, Inc. regarding independence of conclusions in this report. Therefore, Imperial Valley College was not and shall not be provide editorial comment or direction regarding the conclusions contained herein. A draft report has been reviewed by Imperial Valley College to the finalization of the report to insure that information relied upon by Development Management Group, Inc. is accurate.

## **5. Peer Review**

Development Management Group, Inc. contracted with Thomas Topuzes and Associates, LLC to complete a peer review of the draft report. A peer review was completed on July 26, 2009.

## **6. Elements/Contents**

1. Introduction and Purpose
2. Contact Information for Imperial Valley College
3. Contact Information for Development Management Group, Inc.
4. Statement of Independence
5. Peer Review
6. Elements/Contents of Economic Analysis
7. Process/Steps Involved in Analysis
8. References Utilized for Analysis
9. Qualifications of Consultant
10. Working Definition of Economic Multiplier
11. Demographics of the Imperial Valley
12. Introduction to Imperial Valley College and Educational Services Provided
13. Description of Educational Services Provided
14. Description of Economic Impacts from Imperial Valley College
15. Impacts from Current and Planned Capital Improvement Projects
16. Impacts from Potential New Capital Improvement Projects
17. Operational Impacts
18. Impacts from Currently Enrolled Students
19. Economic Impacts of Imperial Valley College Graduates
20. Consolidated Impact Statement (Conclusion)
21. Listing of Exhibits
22. Report Certification

Exhibit A: Economic Impacts from Current & Planned Capital Improvement Projects

Exhibit B: Economic Impacts from Potential New Capital Improvement Projects

Exhibit C: Operational Impacts from Imperial Valley College

Exhibit D: Economic Impacts from Currently Enrolled Students

Exhibit E: Economic Impacts from Previously Enrolled Students (Graduates)

Exhibit F: Consolidated Economic Impacts from All Activities

## **7. Process/Steps Utilized in Process of Economic Impact Analysis**

Development Management Group, Inc. utilized a series of task oriented steps in completing an economic impact analysis. To begin, DMG provided Imperial Valley College with a customized questionnaire requesting over fifty (50) pieces of statistical data. In addition, DMG visited IVC to observe various campus activities to ascertain potential operational impacts upon the local/regional economy.

Additional data was procured and received from a variety of sources (see References Utilized for Analysis). All of the subject information and data was then analyzed and the accompanying Exhibits A-F were generated to present the potential impacts in numerical form.

## **8. References Utilized for Analysis**

1. Imperial Valley College Administration
2. Imperial Valley College Measure L Report
3. Imperial Community College District Educational Master Plan 2008-2009
4. Imperial Community College District Strategic Plan 2008-2014
5. Imperial Valley College-Human Resources Staffing Plan
6. County of Imperial
7. Economics and Politics, Inc.
8. United States Census Bureau
9. Nielsen/Claritas, Inc.
10. California Postsecondary Education Commission
11. United States Department of Labor
12. Payscale.Com
13. United States Department of Education
14. California State Employment Development Department
15. Imperial Community College District Five Year Construction Plan 2010-2014
16. Imperial.edu
17. Imperial Valley College Student Survey
18. College Board College Handbook (2010 Edition)
19. United States Bureau of Economic Analysis
20. California Economic Strategy Panel

## **9. Qualifications of Consultants**

Development Management Group, Incorporated (DMG, Inc.) specializes in services related to economic development and redevelopment. Such services include site selection and analysis, economic development strategic planning and implementation, development management, market/development feasibility, economic analysis, entitlement/permit processing and project financing.

Over the past five years, DMG, Inc. has assisted over three dozen companies with their site selection and entitlement/permit processing. These companies have created over 2,500 new jobs and invested over \$100 million within the communities they are located.

In addition, DMG, Inc. has assisted a number of public agencies and economic development corporations with economic impact analysis, strategic planning, marketing and other business recruitment projects. This has resulted in helping to create the administrative and operational infrastructure to enable them to grow their economies.

The company founder, Michael Bracken, brings over 15 years of local, regional and state government experience in the fields of economic development, redevelopment, housing and sales and use tax administration. Before founding Development Management, Inc., Bracken completed four years as the President and Chief Executive Officer of the Coachella Valley Economic Partnership where he led a regional business recruitment team that generated over \$90 million of economic investment for the Palm Springs Region of Southern California.

Bracken holds a Bachelor's Degree in Business Administration and a Master's Degree in Public Administration from the California State University San Bernardino (CSUSB). He co-designed CSUSB's Master's level course titled Management of Local Economic Development, which trains economic development professionals in business recruitment and effective use of financial and tax incentives. He is also a former City Councilman and Vice-Chairman of a Community Redevelopment Agency providing unique and beneficial perspective to local governments.

## **10. Working Definition of Economic Multiplier**

Simply stated, an economic multiplier is a calculation of the number of times a dollar is expected to be spent (or circulate) through the regional economy. Economic multipliers differ based on the origination of that particular dollar. For example, labor dollar multipliers are higher than material dollar multipliers as labor dollars are paid directly to personnel and generally spent more locally. Dollars spent on

materials (for example, construction materials) are more likely to leave the regional economy as they are used to pay manufacturers/suppliers located elsewhere. For purposes of this economic analysis, the regional economy shall be defined as the County of Imperial. The County of Imperial shall include the incorporated cities of Brawley, Calexico, Calipatria, El Centro, Holtville, Imperial and Westmorland. The County of Imperial shall also include both communities of interest and unincorporated communities throughout the legal boundaries of the County.

Dr. John Husing, an economist based in Redlands, CA often provides the example of a gold mining town when describing the concept of economic multipliers. Imagine a gold miner with money paying various persons within the town for a place to sleep, equipment to mine, food and entertainment. The recipients of these dollars then utilize the money they received for their own purchases (including a place to sleep, supplies for their businesses, food and entertainment). Economic multipliers are the basis of understanding how a particular business or use will impact a regional economy.

Specific to Imperial Valley College, the dollars exchanged in their regular course of business fall within one of five basic categories: 1) currently budgeted capital improvement projects (from Measure L and state matching funds) which are used for design, engineering, labor and materials. 2) Potential new capital improvement funds (from a new local bond issue and state matching funds) which would also be used to pay for design, engineering, labor and materials to expand Imperial Valley College Campus(es) 3) Operational spending on such items as staffing, contract services and material purchases 4) Wages and spending of students currently enrolled at Imperial Valley College and 5) Additional wages that Imperial Valley College and those that both graduated from Imperial Valley College and a four-year institution (California State University and University of California) earn because of their educational achievement.

In an effort to streamline interpretation of this analysis, a simple multiplier of 2.00 shall be utilized for each labor or wage dollar spent by Imperial Valley College or earned by a student/former student. Simply stated, this means that for each dollar spent by the Imperial Valley College for labor (either for professional services, construction labor or staffing or earned by a current or former Imperial Valley College student, it is assumed that such dollar will circulate in the economy twice. Once when it is paid to an Imperial Valley College employee or current/former student, it is projected to circulate at least one additional time as it is spent within the Imperial Valley economy.

In preparing this Economic Impact Analysis, Development Management Group, Inc. has researched the latest information available regarding economic multipliers. The United States Bureau of Economic Analysis working in conjunction with the California Economic Strategy Panel 2009 recently completed a published study titled “Using Multipliers to Measure Economic Impacts”. This publication looks at 473 industry types. In this report, earnings have an economic multiplier of between 1.66 (industries related to moving and storage) and 4.80 (industries involving water transportation). Most economic multipliers are in the 2.00 to 2.50 range. Educational services are estimated to have an output impact of about 2.53. For purposes of this Fiscal Impact Analysis, Development Management Group, Inc. shall utilize an economic multiplier of 2.00, which is less than the 2.53 within the United States Bureau of Economic Analysis. This is a conservative figure based on two factors: a) the research provided in the aforementioned publication and b) accounting for the size of the Imperial Valley region thus allowing for greater leakage to surrounding areas where some earning are generally spent (shopping, major consumer purchases, leisure).

Material purchases (construction materials and material purchases made for operations) are calculated assuming that 25% of purchases are made locally (within the region). Further, 1.25 will be utilized as the economic multiplier to make allowance for dollars that leave the region immediately after materials is purchased (spent with other manufacturers, distributors and material suppliers). The reality of the California marketplace is few construction materials are fabricated within the state. There are exceptions to this, including drywall that is produce in the Imperial Valley. For purposes of this report, it is assumed that a vast amount of the materials utilized to construct campus facilities come from outside the region. This calculation allows for material profits (from those supplied locally) to be spent and circulated within the Imperial Valley regional economy.

## **11. Demographics of the Imperial Valley**

To better understand the environment in which Imperial Valley College operates, this section is designed to provide a demographic snapshot for the Imperial County.

**A. Population:** The current population of the Imperial Valley is estimated at 172,324. The population has grown at an annual rate of 2.34% since 2000. Over the next five (5) years, the region is expected to grow by an additional 20,000 persons for a total population of about 192,000 which equates to anticipated growth rate of 2.21%. The projected growth rate for the Imperial Valley is twice the projected growth rate for the United States as a whole.

The region is characterized by a young population. The median age for Valley residents is 30.59; this is approximately six (6) years younger than the median age of the United States as a whole. It is estimated that there are about 51,000 persons within the Imperial Valley that are under the age of 18. This equates to thirty percent (30%) of the overall population of the region, compared to about 24% nationwide. Over the next five (5) years, persons within this age group will grow by 4,600 persons. This will create a need for additional schools at all levels and additional capacity at Imperial Valley College.

**B. Ethnicity:** 76.7% of the region is Hispanic or Latino. The percentage of Hispanic or Latino residents nationwide is approximately 15.5%. Approximately 3.7% of the Imperial Valley’s population is Black or African American, while 2.2% are Asian and 1.8% is Native American.

**C. Income:** The per capita income within the Imperial Valley is \$14,584. This is about \$12,000 less than the per capita income for the United States as a whole (\$26,410). Over the next five (5) years, the median per capita income is expected to rise by 6.0% while the per capita income for the United States as a whole is expected to rise by 10.3%. Unfortunately, this means that incomes for the region are not expected to rise as fast as the average across the nation. Approximately one in five families (19%) live at or below the federally defined poverty line (which for a family of four is \$21,200, family of five is \$24,800) according to the United States Census Bureau.

**D. Employment:** 45% of the total population is engaged in the labor force. For the nation as a whole, 47.3% of the population is engaged in the labor force. The difference is attributed to a younger population as a whole (meaning a higher percentage of the population is still school age) and the higher unemployment rates which are generally three times that of the nation as a whole. In terms of occupations, 50.4% of those employed are working in “white collar” professions while 20.2% have “blue collar” professions and 29.3% are employed either in the armed forces (service) or in farm professions. Below is a more specific breakdown regarding professions\*:

1.	Sales & Office	25.7%
2.	Service	19.5%
3.	Professional & Related Occupations	16.2%
4.	Production, Transportation and Material Moving	11.6%
5.	Management, Business and Financial Operations	9.6%
6.	Farming, Fishing & Forestry	8.9%
7.	Construction, Extraction and Maintenance	8.7%

\*Please note that often times a person engaged in the labor force will classify themselves under a work responsibility classification rather than the classification in which the employer/company is engaged. For example a person that is responsible for sales within an agriculture company will classify themselves as engaged in Sales & Office rather than agriculture.

Sixty percent (60%) of the workforce is employed with for-profit private employers. Fourteen percent (14%) of the workforce is employed by local government agencies with nine percent (9%) employed by various State of California agencies and five percent (5%) employed by the Federal Government. Not for Profit Agencies account for four percent (4%) of the employment and seven percent (7%) are self-employed.

Current unemployment data (November, 2009) show that there are 76,900 persons engaged in the labor force within the County. Approximately 53,700 are currently employed, while 23,200 are currently unemployed. The unemployment rate for the County of Imperial as of November, 2009 is 30.1%. Over the last ten years, the unemployment rate in the region averaged about 17%. The lowest unemployment levels in recent years were found in March, 2006 at 12.2%. While the unemployment rate today is more than twice as high as it was in 2006, the total number of jobs held by Imperial Valley residence is about the same today as it was in 2006.

Most economists and labor professionals believe that Imperial County has the highest rate of unemployment of any county in the nation. A further comparison shows that Imperial County has an unemployment rate approximately three times both the state unemployment rate of 12.2% (November, 2009) and national rate of 10.2% (November, 2009).

**E. Educational Achievement:** The following provides an understanding of the highest level of education achieved by adults age twenty-five (25) and over:

1.	Less than 9 <sup>th</sup> Grade	23.93%
2.	Some High School, no Diploma	16.93%
3.	High School Graduate (GED)	21.55%
4.	Some College, no Degree	20.67%
5.	Associate Degree	6.20%

6.	Bachelor's Degree	6.92%
7.	Master's Degree	2.36%
8.	Professional School Degree	1.14%
9.	Doctorate Degree	.29%

The Imperial Valley offers a limited number of options for higher educational opportunities. Imperial Valley residents are generally limited to either Imperial Valley College or San Diego State University-Imperial Valley Campus. It is noted that online colleges and universities including both the University of Phoenix and National University offer higher education opportunities as well.

One noted fact is that Imperial Valley College enrolls a higher percentage of local high school graduates than any other community college in California. For the fall of 2008, approximately 1265 local high school graduates enrolled at Imperial Valley College. This accounts for 52.8% of the total local high school graduates.

**F. Commute Times:** Unlike most regions in Southern California, long commutes are the exception rather than the rule for Imperial Valley residents. The average travel time to work for a person engaged in the labor force is only 21 minutes per day. In fact, 91% of Imperial Valley workers spend less than 45 minutes per day commuting to and from work.

**G. Housing:** Sixty percent (60%) of housing units are owner occupied while forty percent (40%) are renter occupied. There are approximately 32,000 single family detached homes in the region with the average home value in 2009 being \$182,000. It should be noted that home value data is a lagging number and is based on a rolling sales price figure. Current home values are most likely lower than the data suggests.

The housing stock within the region is considered fairly new with over 23% of housing units being constructed in the last ten (10) years alone. This equates to over 12,700 units of houses being built since 1999 (approximately 1,270 units per year).

## **12. Introduction to Imperial Valley College (provided by Imperial Valley College)**

Almost 50 years ago, a small group of students gathered for the first day of classes on a 160-acre plot of land at the Intersection of Highway 111 and Aten Road. It was the culmination of years of hard work by the citizens of this county to finance and build a freestanding Imperial Valley College.

Construction of the campus had been approved two years before when community college district residents set an all-time state, voting thirteen to one in favor of bonds to finance the new IVC campus.

But even though the grand opening of the main campus in 1962 signaled a new era for higher education in the Imperial Valley, IVC's roots run even deeper into the county's heritage.

Exactly 40 years before the opening of the new campus, classes of Central Junior College began on the grounds of Central Union High School in El Centro—in September 1922. Two years later, in the fall of 1924, instruction began at the Brawley Junior College, located at Brawley Union High School.

Central Junior College first conferred the Associate in Arts degree in 1934. Enrollments increased in both schools until World War II, when attendance dropped sharply. Brawley Junior College was forced, by lack of attendance, to discontinue classes at the close of the 1947 school year.

In the fall of 1951, students, in cooperation with the administration and faculty, petitioned the Board of Trustees for a more representative name for the college. It was now serving students from all of the Imperial Valley. By action of the Board, the name was officially changed to Imperial Valley College.

The school, under the administration of the Central Union High School District, gained recognition as an accredited institution of higher education. As the institution grew with the community, this growth was reflected in the steady rise in enrollment and in the diversity of courses and curricula that was offered.

The extended-day program, which offered regular college classes at night, was initiated on a limited basis in 1952. Its rapid growth served to enlarge the service of the college to the community.

A recommendation that a countywide community college district be established in Imperial County was submitted to the State Department of Education and was approved on July 10, 1959. The Imperial County Superintendent of Schools then set a date for an election at which all qualified voters residing within the boundaries of the seven high school and unified school districts were eligible to vote. The

election was held on October 6, 1959; and by an overwhelming vote, the Imperial Valley Junior College District was established. This was followed by the election of the members of the Junior College District Board of Trustees, one of whom comes from each of the seven high schools or unified school districts represented in the area served by the Imperial Junior College District.

This District includes all of Imperial County except a small area in the northwest corner of the County, which is a part of the Desert Community College District.

Because of the increase in enrollment at both Central Union High School and Imperial Valley College, and because of the lack of space on the Central Union High School Campus, Imperial Valley College moved to temporary quarters erected on the campus of the Imperial Valley Union High School in Imperial, California.

On October 4, 1960, the people of Imperial County set an all-time state record when they voted thirteen to one in favor of bonds to finance the building of a new campus.

The Board of Trustees selected a nationally known architectural firm to plan the new buildings, and a 160-acre site, which met the criteria, recommended by the Citizens' Committee was selected for the new campus.

On January 13, 1971, the Board of Trustees changed the name of the District to Imperial Community College District in order to further emphasize the close relationship the college has with its service area.

Today, Imperial Valley College is providing an educational opportunity to about 9,000 students in one of over fifty education/training categories. Imperial Valley College has a team of over 540 professionals serving the students and region.

### **13. Description of Educational Services Provided**

Imperial Valley College offers students educational services in a variety of study areas. These fields of study include both degree (Associates) and training/certificate opportunities. Below is a list of such fields as provided by Imperial Valley College:

Administration of Justice	General Science
Agricultural Sci./Business	Health Assistant
Air Condition./Refrig. Tech.	Home Health Aide
Alcohol and Drug Studies	Human Relations
Anthropology	Humanities
Art	Interdisciplinary
Automotive-Body Repair & Paint	Journalism
Automotive Technology	Legal Assistant
Behavioral Science	Liberal Studies
Business Administration	Library Technician
Business Financial Services	Life Science
Business Management	Mathematics
Business Marketing	Medical Assistant
Business Office Admin.	Medical Office Assistant
Business Retailing Supervision	Multimedia
Building Construction Project Management	Music
Carpentry/Masonry/Electrical Trades/Wiring	Nursing (RN & LVN)
Communication Arts	Patient Services Administration
Computer Info. Systems	Pharmacy Technician
Correctional Science	Physical Education
Early Childhood Education	Physical Science
Electronics	Pre-Engineering
Emergency Medical Services	Psychology
EMT/Paramedic	Rehabilitation Tech. for Phy. Lmtd.
English	Social Science
Environmental Technology	Spanish
Field Archaeology	Transfer Studies
Firefighter I	Waste Water Technology
Fire Technology	Water Treatment Technology
French	Welding Technology
General Major	

#### **14. Description of Five (5) Sources of Impacts Economic Impacts of Imperial Valley College**

For purposes of creating an economic impact analysis, it has been determined that there are five (5) basic sources of economic impacts. These include:

- A. The economic impacts from current and scheduled capital improvement (construction) projects.
- B. Potential new capital improvement (construction) projects that may be funded by a future bond issue.
- C. Operational impacts including such items as staff salaries, outside contractors and material purchases.
- D. Impacts from students currently enrolled at IVC (wages they earn and spend within the region from jobs both on and off campus).
- E. Impacts from IVC graduates and those graduating from a four-year institution that began their college career at IVC. Calculations for this item shall begin with the year 2001 and continue for the complete timeframe of the study (aggregate of 2001-2021).

#### **15. Impacts from Current & Planned Capital Improvement Projects**

Imperial Valley College is currently utilizing proceeds from Measure L (a local bond measure) and state matching funds to both modernize certain buildings and construct new facilities to meet the educational needs of its students. Measure L was passed by the voters of Imperial County in 2004 as a general obligation bond to assist Imperial Valley College both modernize and expand facilities. A total of \$58.6 million was approved for such activities.

Over the next five years, a number of projects are scheduled to be completed including improvements/modernization or construction of the following: Science Study Building, Building 400, Academic Buildings, Career Technical Building, Technology Building, Library, Gym, Counseling Financial Aid Offices and the Administration Building.

Over the next five (5) years, it is estimated that about \$40 million in construction activity will take place as a result of Measure L and matching funds. The impacts of this activity fall within three main categories:

First, 10% of the total amount is set aside and scheduled to be used for professional services in the engineering and design of the buildings. These monies are generally utilized for professional labor. Therefore \$4 million is scheduled over a 2-year period for this purpose.

Construction activities are then scheduled over a four year period (starting in 2010). It is generally accepted that 50% of construction dollars are spent on materials and 50% on labor for public works type projects (prevailing wage paid construction).

When the economic impacts, with corresponding multipliers are plotted, it is estimated that the economic impact to the Imperial Valley economy as a result of current and planned capital improvement projects total \$49.6 million between now and 2013. Please note that specific project construction date scheduling has not been utilized, rather a level construction spending plan to reflect potential changes and to allow for averaging over the five (5) year period. (Exhibit A of this Economic Impact Analysis provides a numerical breakdown of budgeted capital improvement spending at Imperial Valley College).

#### **16. Impacts from Potential New Capital Improvement Projects (Future Bond Issue)**

As the need for community college services grow in a region such as the Imperial Valley (which itself has a population growing at twice the national average) so will the potential for the continued expansion of the 160 acre Imperial Valley campus in Imperial. For purposes of projecting the economic impacts of continued campus expansion, it is projected that Imperial Valley College may seek an additional \$65 million in local general obligation bonding capacity to match (over time) with State of California facilities funding. It is estimated that the State of California match would be a fifty percent match, meaning that for each dollar that the Imperial Valley community pledges to new capital improvement projects (through a local bond measure), the State will match with fifty cents (.50) of their own dollar.

The combined potential funding is \$97.5 million and is estimated to be available for capital improvement spending over a ten (10) year period beginning in 2012 and ending in 2021. Utilizing the same formula as listed for current projects, 10% is scheduled to be utilized over a two (2) year period for the engineering and design of facilities with the remaining 90% of the funding being split 50% between material purchases and labor.

Utilizing a level construction period lasting eight (8) years between 2014 and 2021, the construction spending (materials and labor) will have a regional economic benefit greater than \$20 million per year. Over the ten (10) year period that includes engineering, design and actual construction, the total economic impact of a new capital improvement campaign would be approximately \$120.96 million. This means for each \$1.00 that the local voters are willing to spend on a general obligation bond that the economic impact to the region is about \$2.00. (Exhibit B provides the projected economic impacts from a new bond issue (with state matching funds)).

### **17. Operational Impacts**

The operation of Imperial Valley College includes a number of different and specific activities. For purposes of this economic impact analysis, such activities shall include expenditures made for labor (staff including but not limited to professors/teachers, administrative support staff, work-study and administration), benefits, contract services (including contract labor) and material purchases.

Spending on staff salaries and benefits (labor) make up the bulk of spending by Imperial Valley College. The college is reported to have 540 direct employees. Of this number, 351 are professors/teachers (both full and part time), 174 support staff and 15 administrators. The total payroll for 2008-2009 is projected at about \$30,000,000 in salaries with an additional 30% being spent on benefits. The total economic impact of the labor dollars paid to staff is projected to be \$78 million.

In addition to direct staff, Imperial Valley College has a number of contract service providers. During the current year, it is projected that the College will spend about \$3.6 million for outside contract services. For purposes of this economic impact analysis, it anticipated that these funds are for staffing and labor, thereby creating an additional economic impact of \$7.2 million.

The next category of operational impacts is that of material purchases both by the college and contract providers (non-capital improvements). The sum of direct and contract purchases is about \$3.9 million annually. As with the construction material spending, it is estimated that 25% of such material purchases are from suppliers within the Imperial Valley, with the balance being outside the region. An economic multiplier of 1.25 is utilized to determine the impact of material spending within the Valley, creating an economic impact of about \$1.2 million for the current year.

It is noted that there are three (3) additional operational impacts that while important to Imperial Valley College and their students, are not significant with respect to their economic impact. These include the operation of the bookstore (which includes labor and materials (books), on-campus restaurant/food service (which also include both labor and materials (food/drinks) and the operation of concessions during Imperial Valley College sporting and special events. As such these specific activities are not included in the economic impact calculations.

The total operational impacts (staff salaries, contract services and material purchases) equal an economic impact of about \$86.4 million in 2009.

### **18. Economic Impacts from Currently Enrolled Students**

Beyond construction and operational impacts, it is important to understand the earnings and spending of current and former students. This section helps articulate and quantify the earnings (and therefore spending) of current students. To calculate the earnings of currently enrolled students, it is assumed that each one has at least a high school diploma or GED. While it is recognized that not all students enrolled at Imperial Valley College have a high school diploma or GED, the balance assumption is that some students have an education beyond the previous stated including a) some college b) an associates degree or c) a four-year or beyond degree. The resulting given is that students at Imperial Valley College have on average a high school diploma or GED.

It is noted that direct salary/earnings information is not available by student. What is available is survey information (from Imperial Valley College) that suggests that 20% of students work full-time while 45% of students work part-time. This means that 35% of students do not work outside the home. To determine the earning power of students, the projected median income (see below\*) of \$19,540 is utilized. For students that report themselves to work full-time, 100% of \$19,540 is used to determine their annual earnings. For students that report working part-time, 50% of 19,540 is used.

Based on the data available, approximately 1793 students are employed full time, while an additional 4,035 students are employed part time. The projected income from these students employment is about \$64 million per year which has an economic impact of over \$149 million on the regional economy.

\*Calculation of “Projected Median Income”: to determine that annual earnings for current students, it is assumed that all students at Imperial Valley College have a high school diploma or GED.

Understanding that the median household income of the IV as a whole is 70% of the national median income (\$48,378 versus \$69,376), a factor of 70% of national median income for high school graduates shall be applied for the Imperial Valley. The national median income for a high school graduate is \$27,915 therefore; the projected annual income for an Imperial Valley graduate is \$19,540. (Exhibit D provides a numerical representation of the earnings of currently enrolled students at Imperial Valley College.

### **19. Economic Impacts from Previously Enrolled Students (Graduates)**

A unique economic benefit of a college is the economic impact the former students (graduates) have on the economy after completing their education. In presenting the following, it is assumed that the presence of Imperial Valley College and thereby the opportunity for students to further their education, thus making them more competitive in the workplace is a type of economic impact to be calculated. Conversely, the absence of Imperial Valley College would have most likely resulted in either a) a greater percentage of potential students leaving the region to seek opportunities elsewhere and/or b) a less educated and therefore skilled workforce, reducing the quality of jobs held resulting in a lesser paid workforce. To determine such impacts, the following assumptions are used:

1. Data going back to 2001 shall be utilized to determine the number of former students that achieved either an AA or a BA/BS from a University of California (UC) or California State University (CSU) will be utilized.
2. Based on data available, it is estimated that 7.81% of students enrolled at IVC either have or will achieve an AA degree and that 3.4% of students enrolled at IVC will achieve a BA/BS from a CSU or UC institution.
3. Using previous graduate information and students that transferred to a University of California or California State University to complete their education, 60% of those that transferred are assumed to have graduated with their Bachelor’s Degree.

4. Calculations all assume a neutral education migration. This means that for each former student that leaves the region with an Associates or former student that obtains a Bachelor's, it is assumed that they will continue to live in Imperial County. To the extent that former students (with Associates or Bachelor's) leave the region, it is assumed that a person with similar educational achievement relocates or moves into the region. Considering that the Imperial Valley region is growing at a rate twice the national average, this is a reasonable assumption.

5. In determining the economic impacts of former students (graduates), scaled median income numbers will not be used; rather the national average figures based on educational achievement are utilized. It is the option of Development Management Group, Inc. that while lower paying positions in the Imperial Valley do generally pay a wage rate that is 70% of the national median, wage rates for those that have achieved higher educational levels are closer or at par with the national median.

Using the example year of 2009 with 700 graduates and a delta (meaning an increase earning potential on average) from the educational achievement of an Associates (versus a high school diploma/GED), this year's students are expected to earn an additional \$5.7 million in wages (or an extra \$8,156 per graduate with an Associates versus a high school graduate/GED)... The economic impact of just the class of 2009 on the regional economy will be twice this amount (economic multiplier of 2.0) or \$11.4 million.

The 2009 Imperial Valley College graduates are combined with a projected 183 previous graduates (from 2005-2006) that continued their education at a UC or CSU and graduated at a 60% rate, the expected additional earning potential is \$23,291 per year over that of a high school graduate/GED or a total expected annual salary of \$51,206. In just 2009, said graduates from Imperial Valley College that obtained a Bachelor's equates to an additional \$4.26 million. (Exhibit E provides a numerical representation of the projected impacts of previous Imperial Valley College graduates in terms of additional earning power because of their educational achievement).

To determine potential impacts of previous educational achievement by IVC students, data going back to 2001 is utilized. It is estimated that there are approximately 4,934 persons within the potential labor force with an AA from IVC and 1,289 persons that began at IVC and ultimately achieved a BA/BS from a UC or CSU.

It is further estimated, based on both national and regional data that about 31% of these above listed persons are currently employed within the labor force. The economic impact of these former IVC students in just additional earnings in 2009 is estimated to be about \$49 million. This statistic is important as the calculations throughout Exhibits E and F build from one year to the next as additional educational achievers from IVC join the labor force.

## **20. Consolidated Impacts (Conclusion)**

The purpose of this Economic Impact Analysis is to provide both Imperial Valley College personnel (board and staff) and the community at large with a greater understanding of the financial impacts the college provides to the economy.

The methodology employed by Development Management Group, Inc. included looking at both current and potential future capital improvements, operations, current and former student earning (therefore spending) impacts upon the regional economy.

Additionally, our method included looking at a projection of these impacts over the next thirteen (13) years (inclusive of 2009). This time period was designed to account for both current capital improvement spending and project potential new capital improvement spending for a ten (10) year period. Therefore, the time period studied and projected goes through the year 2021.

Development Management Group, Inc. has concluded the total potential economic impact of all Imperial Valley College activities could total over \$5.936 billion between the years 2009 and 2021. This is an average annual economic impact of \$456.6 million per year. (Exhibit F provides an overview of the Consolidated Economic Impacts).

In terms of impact on the overall economy on a daily basis, it can be said that about 8,500 people or 1 in 7 employed in the Valley (either full or part time) have some sort of connection to Imperial Valley College. This is calculated by adding the number of current IVC employees (540) to the number of students enrolled that are employed within the economy (5,800) and graduates of IVC with an Associates or BA/BS from a UC or CSU since 2001 (2,200) that are currently employed in the workforce.

Based on population projections and the general evolution of the economy (both nationally and in the Imperial Valley), there will be a need for Imperial Valley College to accommodate a growing number of students. It is also likely that the types of educational curriculum and training requested by students will change, this dictating the need for both additional facilities and specialized facilities.

**21. Exhibits (Attached)**

Exhibit A: Economic Impacts from Current & Planned Capital Improvement Projects

Exhibit B: Economic Impacts from Potential New Bond Issue (Capital Improvement Projects)

Exhibit C: Economic Impacts from Operation of Imperial Valley College

Exhibit D: Economic Impacts from Currently Enrolled Students (Wages Earned)

Exhibit E: Economic Impacts from Previously Enrolled Students (Graduates)

Exhibit F: Consolidated Economic Impacts (All Activities)

**22. Certification**

I certify that my engagement to prepare this report was not contingent upon developing or reporting predetermined results. The statements of fact contained herein and the substance of this report are based on public records, data provided by the Imperial Valley College, and other sources as described in the reference section of this report. This report reflects my personal, unbiased professional analyses, opinions and conclusions. If any of the underlying assumptions related to this report change after the date of this report (November 30, 2009), then the undersigned reserves the professional privilege to modify the contents and/or conclusions of this report.



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**Exhibit A**  
**Imperial Valley College Economic Impact Analysis**  
**Economic Impacts from Current & Planned Capital Improvement Projects**

<b>Current Capital Improvement Plan</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>
<b>Professional Services Labor</b>						
Professional Services (10% of funds)	\$5,300,000	\$5,300,000				
Economic Multiplier of Professional Services (Labor)	2.00	2.00				
Economic Impact of Professional Services	\$10,600,000	\$10,600,000				
<b>Construction Labor</b>						
Labor		\$9,540,000	\$9,540,000	\$9,540,000	\$9,540,000	\$9,540,000
Economic Multiplier of Labor		2.00	2.00	2.00	2.00	2.00
Economic Impact of Construction Labor		\$19,080,000	\$19,080,000	\$19,080,000	\$19,080,000	\$19,080,000
<b>Material Purchases for Capital Improvements</b>						
Construction Materials		\$9,540,000	\$9,540,000	\$9,540,000	\$9,540,000	\$9,540,000
Local Purchase of Construction Materials (25% of Total)		\$2,385,000	\$2,385,000	\$2,385,000	\$2,385,000	\$2,385,000
Economic Multiplier Rate		1.25	1.25	1.25	1.25	1.25
Economic Impact of Construction Materials Purchased		\$2,981,250	\$2,981,250	\$2,981,250	\$2,981,250	\$2,981,250
<b>Annual Economic Impact of Current Capital Improvement Budget</b>	<b>\$10,600,000</b>	<b>\$32,661,250</b>	<b>\$22,061,250</b>	<b>\$22,061,250</b>	<b>\$22,061,250</b>	<b>\$22,061,250</b>

**Notes:**

Current Capital Improvement Projects Based on \$106 million still available from Measure L and State Matching Dollars for use 2009-2014  
Professional Services include design, engineering and other pre-construction activities and are 10% of total funds available  
Construction Budgets are split between 50% (materials) 50% (labor) (net of professional services)

**Exhibit B**  
**Imperial Valley College Economic Impact Analysis**  
**Economic Impacts from Potential New Bond Issue (Capital Improvements)**

	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
<b>Professional Services Labor</b>										
Professional Services (10% of funds)	\$4,875,000	\$4,875,000								
Economic Multiplier of Professional Services (Labor)	2	2								
Economic Impact of Professional Services	\$9,750,000	\$9,750,000								
<b>Construction Labor</b>										
Labor			\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375
Economic Multiplier of Labor			2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Economic Impact of Construction Labor			\$10,968,750	\$10,968,750	\$10,968,750	\$10,968,750	\$10,968,750	\$10,968,750	\$10,968,750	\$10,968,750
<b>Material Purchases for Capital Improvements</b>										
Construction Materials			\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375	\$5,484,375
Local Purchase of Construction Materials (25% of Total)			\$1,371,094	\$1,371,094	\$1,371,094	\$1,371,094	\$1,371,094	\$1,371,094	\$1,371,094	\$1,371,094
Economic Multiplier Rate			1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Economic Impact of Construction Materials Purchased			\$1,713,867	\$1,713,867	\$1,713,867	\$1,713,867	\$1,713,867	\$1,713,867	\$1,713,867	\$1,713,867
<b>Annual Economic Impact of New Capital Improvement Budget</b>	<b>\$9,750,000</b>	<b>\$9,750,000</b>	<b>\$12,682,617</b>							
<b>Total Economic Impact of New Capital Improvement Budget</b>	<b>\$120,960,938</b>									

**Notes:**  
New Bond Issue estimated at \$65 million (local funding)  
Construction Budgets include 50% matching funds from State of California (additional \$32.5 million)  
Total Funding Projected Available is \$97.5 million  
Pre-Construction (Design/Engineering) Calculated at 2 years with Construction of Facilities over 8 years  
Construction Funding Based on Level Budgets over 8-year Period (equal expenditures)  
Assumes Start of Pre-Construction Work in 2012

**Exhibit C**  
**Imperial Valley College Economic Impact Analysis**  
**Economic Impacts from Operations**

<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Employment</b>													
Total Number of Employees (FT & PT)	540	556	573	590	608	626	645	664	684	705	726	747	770
Total Number of Professors/Teachers (FT & PT)	351	362	372	384	395	407	419	432	445	458	472	486	500
Total Number of Administrators	15	15	16	16	17	17	18	18	19	20	20	21	21
Total Number Support Staff	174	179	185	190	196	202	208	214	220	227	234	241	248
Total Students on Payroll (unsubsidized)	45	46	48	49	51	52	54	55	57	59	60	62	64
Total Students on Payroll (work study) (not included in total employees)	231	238	245	252	260	268	276	284	293	301	310	320	329
<b>Direct Operational Wages/Salaries &amp; Benefits</b>													
Total Payroll (Wages)	\$30,000,000	\$30,900,000	\$31,827,000	\$32,781,810	\$33,765,264	\$34,778,222	\$35,821,569	\$36,896,216	\$38,003,102	\$39,143,196	\$40,317,491	\$41,527,016	\$42,772,827
Total Benefits (30% of Wages)	\$9,000,000	\$9,270,000	\$9,548,100	\$9,834,543	\$10,129,579	\$10,433,467	\$10,746,471	\$11,068,865	\$11,400,931	\$11,742,959	\$12,095,247	\$12,458,105	\$12,831,848
Economic Multiplier Rate	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Economic Impact of Direct Labor (Annually)	\$78,000,000	\$80,340,000	\$82,750,200	\$85,232,706	\$87,789,687	\$90,423,378	\$93,136,079	\$95,930,162	\$98,808,066	\$101,772,308	\$104,825,478	\$107,970,242	\$111,209,349
<b>Contract Services for College</b>													
Total Labor (Wages & Benefits)	\$3,618,225	\$3,726,772	\$3,838,575	\$3,953,732	\$4,072,344	\$4,194,514	\$4,320,350	\$4,449,960	\$4,583,459	\$4,720,963	\$4,862,592	\$5,008,470	\$5,158,724
Economic Multiplier Rate	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
Economic Impact of Contract Labor (Annually)	\$7,236,450	\$7,453,544	\$7,677,150	\$7,907,464	\$8,144,688	\$8,389,029	\$8,640,700	\$8,899,921	\$9,166,918	\$9,441,926	\$9,725,184	\$10,016,939	\$10,317,447
<b>Operational Material Purchases</b>													
Direct Material Purchases by College	\$1,459,433	\$ 1,503,216	\$ 1,548,312	\$ 1,594,762	\$ 1,642,605	\$ 1,691,883	\$ 1,742,639	\$ 1,794,919	\$ 1,848,766	\$ 1,904,229	\$ 1,961,356	\$ 2,020,197	\$ 2,080,802
Material Purchases by Contract Providers (non-capital improvements)	\$2,412,149	\$ 2,484,513	\$ 2,559,049	\$ 2,635,820	\$ 2,714,895	\$ 2,796,342	\$ 2,880,232	\$ 2,966,639	\$ 3,055,638	\$ 3,147,307	\$ 3,241,727	\$ 3,338,978	\$ 3,439,148
Total Material Purchases	\$3,871,582	\$ 3,987,729	\$ 4,107,361	\$ 4,230,582	\$ 4,357,500	\$ 4,488,225	\$ 4,622,871	\$ 4,761,558	\$ 4,904,404	\$ 5,051,536	\$ 5,203,082	\$ 5,359,175	\$ 5,519,950
Estimated Local Material Purchases (25%)	\$967,896	\$ 996,932	\$ 1,026,840	\$ 1,057,646	\$ 1,089,375	\$ 1,122,056	\$ 1,155,718	\$ 1,190,389	\$ 1,226,101	\$ 1,262,884	\$ 1,300,771	\$ 1,339,794	\$ 1,379,988
Economic Multiplier Rate	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25	1.25
Economic Impact of Material Purchases	\$1,209,869	\$1,246,165	\$1,283,550	\$1,322,057	\$1,361,719	\$1,402,570	\$1,444,647	\$1,487,987	\$1,532,626	\$1,578,605	\$1,625,963	\$1,674,742	\$1,724,984
<b>Annual Economic Impacts</b>	<b>\$86,446,319</b>	<b>\$89,039,709</b>	<b>\$91,710,900</b>	<b>\$94,462,227</b>	<b>\$97,296,094</b>	<b>\$100,214,977</b>	<b>\$103,221,426</b>	<b>\$106,318,069</b>	<b>\$109,507,611</b>	<b>\$112,792,839</b>	<b>\$116,176,625</b>	<b>\$119,661,923</b>	<b>\$123,251,781</b>

Notes:  
Employment/Salary Calculated with 3% increase per annum  
Contract Services Estimated at 60% Labor / 40% Materials  
Material Purchases 25% Estimated from Local Sources

**Exhibit D**  
**Imperial Valley College Economic Impact Analysis**  
**Economic Impacts from Currently Enrolled Students**

<b>Year</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Total Number of Students</b>	8967	9236	9513	9798	10092	10395	10707	11028	11359	11700	12051	12412	12785
Number of Students Employed Full Time (20%)	1793	1847	1903	1960	2018	2079	2141	2206	2272	2340	2410	2482	2557
Estimated Median Income (2009) Education: HS Diploma/GED	\$19,540	\$20,126	\$20,730	\$21,352	\$21,992	\$22,652	\$23,332	\$24,032	\$24,753	\$25,495	\$26,260	\$27,048	\$27,859
Total Income of Students Employed Full Time	\$35,043,036	\$37,177,157	\$39,441,246	\$41,843,218	\$44,391,470	\$47,094,910	\$49,962,990	\$53,005,736	\$56,233,786	\$59,658,423	\$63,291,621	\$67,146,081	\$71,235,277
Number of Students Employed 1/2 Time (45%)	4035	4156	4281	4409	4542	4678	4818	4963	5112	5265	5423	5586	5753
Median Income (2009) Per Capita (50%)	\$9,770	\$10,063	\$10,365	\$10,676	\$10,996	\$11,326	\$11,666	\$12,016	\$12,376	\$12,748	\$13,130	\$13,524	\$13,930
Total Income of Students Employed Part Time	\$39,423,416	\$41,824,302	\$44,371,401	\$47,073,620	\$49,940,403	\$52,981,774	\$56,208,364	\$59,631,453	\$63,263,009	\$67,115,726	\$71,203,074	\$75,539,341	\$80,139,687
Number of Students Not Employed (35%)	3138	3233	3330	3429	3532	3638	3747	3860	3976	4095	4218	4344	4475
Total Wages of Students from IVC	\$74,466,452	\$79,001,458	\$83,812,647	\$88,916,837	\$94,331,873	\$100,076,684	\$106,171,354	\$112,637,189	\$119,496,794	\$126,774,149	\$134,494,695	\$142,685,422	\$151,374,964
Economic Multiplier of Wages Earned by IVC Students	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
<b>Total Economic Impact of IVC Students Currently Enrolled</b>	<b>\$148,932,903</b>	<b>\$158,002,917</b>	<b>\$167,625,294</b>	<b>\$177,833,675</b>	<b>\$188,663,746</b>	<b>\$200,153,368</b>	<b>\$212,342,708</b>	<b>\$225,274,379</b>	<b>\$238,993,588</b>	<b>\$253,548,298</b>	<b>\$268,989,389</b>	<b>\$285,370,843</b>	<b>\$302,749,927</b>

Notes:  
Student Growth Projected at 3% Per Annum  
Income Growth Projected at 3% Per Annum

**Exhibit E**

**Imperial Valley College Economic Impact Analysis  
Economic Impacts from Previously Enrolled Students (Graduates)**

<b>Year</b>	<b>2001-2008*</b>	<b>2009</b>	<b>2010</b>	<b>2011</b>	<b>2012</b>	<b>2013</b>	<b>2014</b>	<b>2015</b>	<b>2016</b>	<b>2017</b>	<b>2018</b>	<b>2019</b>	<b>2020</b>	<b>2021</b>
<b>Annual Earnings by Education Level</b>														
Projected Annual Earnings Without High School Diploma		\$18,734	\$19,296	\$19,875	\$20,471	\$21,085	\$21,718	\$22,369	\$23,040	\$23,732	\$24,444	\$25,177	\$25,932	\$26,710
Projected Annual Earnings With High School Diploma		\$27,915	\$28,752	\$29,615	\$30,503	\$31,419	\$32,361	\$33,332	\$34,332	\$35,362	\$36,423	\$37,515	\$38,641	\$39,800
Projected Annual Earnings With Associates Degree		\$36,071	\$37,153	\$38,268	\$39,416	\$40,598	\$41,816	\$43,071	\$44,363	\$45,694	\$47,064	\$48,476	\$49,931	\$51,429
Delta (Additional Earning) from High School Diploma		\$8,156	\$8,401	\$8,653	\$8,912	\$9,180	\$9,455	\$9,739	\$10,031	\$10,332	\$10,642	\$10,961	\$11,290	\$11,629
Projected Annual Earnings With Bachelor's Degree		\$51,206	\$52,742	\$54,324	\$55,954	\$57,633	\$59,362	\$61,143	\$62,977	\$64,866	\$66,812	\$68,817	\$70,881	\$73,008
Delta (Additional Earnings) from High School Diploma		\$23,291	\$23,990	\$24,709	\$25,451	\$26,214	\$27,001	\$27,811	\$28,645	\$29,504	\$30,389	\$31,301	\$32,240	\$33,207
<b>IVC Student Achievement (for Earnings Calculation)</b>														
Number of Students Graduating with Associates	4934	700	721	743	765	788	811	836	861	887	913	941	969	998
Annual Earnings of IVC Graduates with Associates	\$177,974,314	\$25,249,700	\$26,787,407	\$28,418,760	\$30,149,462	\$31,985,565	\$33,933,485	\$36,000,035	\$38,192,437	\$40,518,356	\$42,985,924	\$45,603,767	\$48,381,036	\$51,327,441
Additional Annual Earnings with Associates Degree	\$8,156	\$8,156	\$8,401	\$8,653	\$8,912	\$9,180	\$9,455	\$9,739	\$10,031	\$10,332	\$10,642	\$10,961	\$11,290	\$11,629
Total Additional Annual Earnings as Result of AA	\$40,241,704	\$5,709,200	\$6,056,890	\$6,425,755	\$6,817,083	\$7,232,244	\$7,672,687	\$8,139,954	\$8,635,677	\$9,161,590	\$9,719,531	\$10,311,450	\$10,939,418	\$11,605,628
Number of Transfers to UC/CSU	2148	305	323	339	356	374	392	412	433	454	477	501	526	552
Projected Number of Graduates (Transfers) with Bachelor's	1289	183	194	203	214	224	235	247	260	273	286	301	316	331
Total Annual Earnings of IVC Transfers to UC/CSU with Bachelor's	\$66,004,534	\$9,370,698	\$10,221,434	\$11,049,592	\$11,950,134	\$12,924,070	\$13,977,382	\$15,116,538	\$16,348,536	\$17,680,942	\$19,121,938	\$20,680,376	\$22,365,827	\$24,188,642
Additional Annual Earnings with Bachelor's Degree	\$23,291	\$23,291	\$23,990	\$24,709	\$25,451	\$26,214	\$27,001	\$27,811	\$28,645	\$29,504	\$30,389	\$31,301	\$32,240	\$33,207
Total Additional Annual Earnings as Result of BA from UC/CSU	\$30,022,099	\$4,262,253	\$4,649,210	\$5,025,896	\$5,435,507	\$5,878,501	\$6,357,599	\$6,875,743	\$7,436,116	\$8,042,159	\$8,697,595	\$9,406,449	\$10,173,075	\$11,002,181
Total Additional Earnings of IVC AA and UC/CSU Bachelor's (if 100% employed)	\$70,263,803	\$9,971,453	\$10,706,100	\$11,451,651	\$12,252,590	\$13,110,745	\$14,030,286	\$15,015,697	\$16,071,793	\$17,203,749	\$18,417,126	\$19,717,900	\$21,112,493	\$22,607,809
Adjustment of Percentage that is employed	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131	0.3131
Net Additional Wages Earned by IVC AA and UC/CSU Bachelor's	\$21,999,597	\$3,122,062	\$3,352,080	\$3,585,512	\$3,836,286	\$4,104,974	\$4,392,883	\$4,701,415	\$5,032,078	\$5,386,494	\$5,766,402	\$6,173,674	\$6,610,321	\$7,078,505
Cumulative Additional Earnings of IVC AA and UC/CSU BA/BS Achievement	\$25,121,659	\$29,227,388	\$33,689,722	\$38,536,700	\$43,797,775	\$49,504,591	\$55,691,143	\$62,393,956	\$69,652,268	\$77,508,239	\$86,007,160	\$95,197,696	\$105,132,132	
Economic Multiplier of Additional Wages		2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00	2.00
<b>Econ Impact of Additional Wages Earned by IVC,UC &amp;/CSU Grads</b>	<b>Not applicable</b>	<b>\$50,243,317</b>	<b>\$58,454,777</b>	<b>\$67,379,444</b>	<b>\$77,073,399</b>	<b>\$87,595,550</b>	<b>\$99,009,181</b>	<b>\$111,382,286</b>	<b>\$124,787,911</b>	<b>\$139,304,537</b>	<b>\$155,016,477</b>	<b>\$172,014,320</b>	<b>\$190,395,393</b>	<b>\$210,264,264</b>

Notes:

- \*Calculates Educational Achievement of those graduated in years 2001-2008 to utilize in aggregate earning/impact calculations
- Based on net import/net export principle for each educated member of labor force that leaves, one of similar level comes to Valley
- Assumes Graduation Rate (with Bachelor's) of 60% of those transferring to UC/CSU from IVC
- Student Transfers to UC/CSU Projected to Grow by 5% Per Annum (based on past growth rates)
- Students Graduating with Associates Degree from IVC Projected to Grow at 3% Per Annum
- It is estimated that 43.2% of adults in the IV are engaged in the labor force (employed) with 31.31% of adult population employed at current (28.7% unemployment rate)
- Number of Students Graduated with AA 2001-2008 based on 7.81% of students enrolled graduating with AA
- Number of Students Graduated with BA (UC/CSU) based on 2.04% of students enrolled at IVC over same period

