

April 27, 2015

TO: Members of the MAG Economic Development Committee

FROM: Mayor John Lewis, Town of Gilbert, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA  
FOR THE MAG ECONOMIC DEVELOPMENT COMMITTEE

Tuesday, May 5, 2015 - 11:30 a.m.  
MAG Office, Suite 200 - Saguaro Room  
302 North 1<sup>st</sup> Avenue, Phoenix

A meeting of the MAG Economic Development Committee (EDC) has been scheduled for the time and place noted above. Members of the Committee may attend the meeting either in person or by telephone conference. Use of proxy at the MAG EDC is not permitted. A light lunch will be provided.

Please park in the garage under the building. Bring your ticket to the meeting. Parking will be validated. For those using transit, the Regional Public Transportation Authority will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Denise McClafferty at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

If you have any questions regarding the EDC agenda items, please contact Dennis Smith, MAG Executive Director, or Denise McClafferty, Regional Program Manager, at (602) 254-6300.

MAG ECONOMIC DEVELOPMENT COMMITTEE  
TENTATIVE AGENDA  
MAY 5, 2015

COMMITTEE ACTION REQUESTED

1. Call to Order

The meeting of the Economic Development Committee will be called to order.

2. Pledge of Allegiance

3. Call to the Audience

An opportunity will be provided to members of the public to address the Economic Development Committee on items not scheduled on the agenda THAT FALL UNDER THE JURISDICTION OF MAG, or on items on the agenda for discussion but not for action. Members of the public will be requested not to exceed a three-minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Economic Development Committee requests an exception to this limit. Please note that those wishing to comment on action agenda items will be given an opportunity at the time the item is heard.

4. Approval of the April 7, 2015 Economic Development Committee Meeting Minutes

5. Report on the Statewide/Maricopa Community College's Economic Impact Study

Arizona Community Colleges create a positive economic impact on our region and state. The Arizona Community College Coordinating Council recently released its statewide Economic Impact Study reflecting dramatic numbers. The study shows that these colleges are 5.6 percent of the state's gross domestic product: \$1.2 billion direct expenditures; \$300 million due to out-of-state students; and \$14 billion in alumni impact. Jack Lunsford, Chief Executive Officer with the Arizona Community College Coordinating Council will provide an update on the study and its impact to this region. Please refer to the enclosed material.

3. Information and discussion.

4. Review and approval of the April 7, 2015 Economic Development Committee meeting minutes.

5. Information and discussion.

6. Opportunity Arizona - Foundation of Education

For this region to continue to be globally competitive, there needs to be a greater focus on the high-tech, manufacturing sector. By raising awareness of the viability of foundation jobs and career technical education (CTE) we increase the opportunities and the impact these fields have on the region's global competitiveness. CTE programs are creating an educational environment that combines core academics with real-world application. These programs touch the lives of high school and two-year college students statewide. These students typically have a lower financial burden than four-year college students and a greater earning potential than a high school graduate. The focus is to prepare students today for tomorrow's careers by developing skills, technical knowledge, and real-world experience for high-skill, high-demand, and highly successful careers. Diane McCarthy from West-MEC and Jennifer Mellor from the Greater Phoenix Chamber will provide an update on an idea to bring awareness and opportunity to technical schools, community colleges and the labor force needed to adequately grow the manufacturing pipeline.

7. Report on the Metro Phoenix Export Alliance

The Greater Phoenix Export Plan identifies strategies for taking advantage of global opportunities and leveraging the region's strengths and assets. These strategies include leveraging expertise and resources within the region's public and private institutions, deploying them to help small and medium-sized companies with high export potential, and other large established exporters, clearing market hurdles that have traditionally limited them from expanding in global markets, and empowering entrepreneurs and startups to integrate export strategies from early on in their product and business development. The Greater Phoenix Export Plan was developed by the Greater Phoenix Economic Council in collaboration with political, business and civic leaders in the region. One of the strategies under

6. Information and discussion.

7. Information and discussion.

this plan is to form the Metro Phoenix Export Alliance (MPEXA) that will oversee and support the implementation of the plan. Karen Dickinson from Polsinelli PC, and Chair of the Arizona District Export Council, will provide a report on the Metro Phoenix Export Alliance.

8. Report on the Economic Impact of Extending the Border Zone to the Entire State of Arizona

Tourism is one of the largest industries in Arizona, and tourists from Mexico are critically important. At the peak of the economy, 24 million Mexican visitors came to Arizona and spent \$2.7 billion. According to Customs and Border Protection (CBP), the Border Crossing Card is one of the most secure travel documents used at the border and allows for faster processing at both the port of entry and interior immigration checkpoints. Increasing the border zone to all of Arizona will provide more destinations of interest for border crossers, potentially attracting more middle class Mexicans for tourism travel. A Resolution of Support for Extending the Border Zone in Arizona and to streamline the Mexican visa process at the land ports of entry is currently being supported by Arizona regional planning agencies, as well as the Intertribal Council of Arizona and the City of Nogales, Arizona.

MAG staff will present on the potential economic impacts of extending the current 75 miles border zone limit to the entire state of Arizona. The presentation is a summary of a study conducted by the University of Arizona in February 2015. The study was in response to a request by the MAG EDC, to determine what could happen if short-term, low risk Mexican visitors could use their U.S. issued border crossing cards to go further north beyond the current 75 miles limit and spend their dollars in the entire state of Arizona. Please refer to the enclosed material.

9. Discussion on Communication and Engagement Between City and Local Business Leaders

Continuing to grow Arizona's economy requires communication and engagement by both city and

8. Information and discussion.

9. Information and discussion.

business leadership. It cost approximately six times more to acquire a new business than it does to retain a business that already exists. Therefore, it is vital to connect businesses to resources and strengthen the region’s competitive edge. This agenda item provides an opportunity for discussion on what city leaders do to communicate with local business leaders regarding economic development, and what business leaders suggest that municipalities might do to further communication with the business community.

10. Update from the Arizona Commerce Authority

An update will be provided on economic development issues of interest in the state of Arizona.

11. Update from the Greater Phoenix Economic Council

An update will be provided on economic development issues of interest in the Greater Phoenix Region.

12. Request for Future Agenda Items

Topics or issues of interest that the Economic Development Committee would like to have considered for discussion at a future meeting will be requested.

13. Comments from the Committee

An opportunity will be provided for the Economic Development Committee (EDC) members to present a brief summary of current events and/or share any practical applications of information and initiatives presented to EDC members. The EDC is not allowed to propose, discuss, deliberate or take action at the meeting on any matter in the summary, unless the specific matter is properly noticed for legal action.

Adjournment

10. Information and discussion.

11. Information and discussion.

12. Information.

13. Information.

MINUTES OF THE  
MARICOPA ASSOCIATION OF GOVERNMENTS  
ECONOMIC DEVELOPMENT COMMITTEE

April 7, 2015

MAG Offices, Saguaro Room  
302 North 1<sup>st</sup> Avenue, Phoenix, Arizona

MEMBERS ATTENDING

Mayor John W. Lewis, Gilbert, Chair  
Mayor Michael LeVault, Youngtown, Vice Chair  
#Mayor Gail Barney, Queen Creek  
Steven Betts, GPEC  
Dr. Joseph Cavinato, Thunderbird  
\*Angela Creedon, Arizona State University  
Mark Dreher, East Valley Partnership  
\*Thomas Franz, Greater Phoenix Leadership  
\*Mayor John Giles, Mesa  
Mayor Linda Kavanagh, Fountain Hills  
#Jim Kenny, El Dorado Holdings, Inc.  
Supervisor Kunasek, Maricopa County  
Mayor W.J. "Jim" Lane, Scottsdale  
\*Mayor Georgia Lord, Goodyear  
Mayor Jackie Meck, Buckeye

\*Mayor Mark Mitchell, Tempe  
\*John Nelson, ADOT  
\*Mayor Christian Price, Maricopa  
Jim Rounds, Elliott D. Pollack & Company  
Todd Sanders, Greater Phoenix Chamber  
of Commerce  
\*Mayor Thomas L. Schoaf, Litchfield Park,  
Councilmember Jack Sellers, Chandler  
Bill Sheldon, WESTMARC  
Dan Spitz, Achen-Gardner Construction  
\*Mayor Greg Stanton, Phoenix  
\*Sandra Watson, ACA  
Mayor Jerry Weiers, Glendale  
#Mayor Kenneth Weise, Avondale  
Mayor Sharon Wolcott, Surprise

\* Not present

# Participated by video or telephone conference call

OTHERS PRESENT (from sign-in sheet(s)):

Roc Arnett, EVP  
Anubhav Bagley, MAG  
Len Becker, Buckeye  
John Catapano, Maricopa Community Colleges  
Alan Carey, GBI  
Alana Chávez Langdon, MAG  
Natalia Cuneo, MAG  
Monique de los Rios-Urban, MAG  
Jenna Goad, Glendale  
Jennifer Graves, Gilbert  
Walt Gray, West Side Town Hall  
Sapna Gupta, Morrison Institute, ASU

Brad Lundahl, Scottsdale  
Jack Lunsford, AZ Community College  
Coordinating Council  
Denise McClafferty, MAG  
Jessi Pederson, Goodyear  
Linda Priano, MAG  
Nathan Pryor, MAG  
Tom Remes, Phoenix  
Lorena Rueda, ADOT/TTCA  
Shannon Selby, Tempe  
Dennis Smith, MAG  
Tim Strow, MAG  
Kelly Taft, MAG

1. Call to Order

The Economic Development Committee (EDC) meeting was called to order by Chair Lewis at 11:34 a.m.

2. Pledge of Allegiance

The Pledge of Allegiance was recited. Mayor Barney, Jim Kenny, and Mayor Weise joined the meeting via teleconference.

Chair Lewis noted public comment cards were available for those members of the public who wish to comment. Chair Lewis stated that transit tickets were available from Valley Metro for those using transit to come to the meeting. Parking validation was available for the MAG parking facilities for those who parked in the garage.

3. Call to the Audience

Chair Lewis noted that the Call to the Audience provides an opportunity to members of the audience who wish to speak on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. Citizens are requested to not exceed a three minute time period for their comments. A total of 15 minutes is provided for the Call to the Audience agenda item, unless the Economic Development Committee requests an exception to this limit. Those wishing to comment on agenda items posted for action will be provided the opportunity at the time the item is heard. Chair Lewis recognized public comment from Alan Carey.

Alan Carey, Managing Director of Global Business, Inc., stated that the Luxembourg Aerospace and Materials delegation that recently visited Phoenix stated that our region was one of the highlights of their trip. He added that it is hoped that this will attract at least a few companies to the Phoenix area to provide new export opportunities for businesses in our region. Mr. Carey thanked the Greater Phoenix Economic Council for organizing the event and noted that there is a delegation from Arizona that will be in attendance at the Paris Air Show in June. He also thanked the MAG mayors for their support and suggested that we encourage local aerospace and aviation companies to attend the event. He added that the Arizona Commerce Authority may be able to provide additional details in regards to setting up appointments with companies from Belgium, Germany and Luxembourg, while in the Val d'Oise region for the air show. Chair Lewis thanked Mr. Carey for his comments.

4. Approval of the March 3, 2015 Economic Development Committee Meeting Minutes

Chair Lewis asked members of the committee if they had any questions or comments regarding the February 3, 2015, meeting minutes. There were none. Councilmember Sellers moved to approve the March 3, 2015 Economic Development Committee meeting minutes. Mayor Meck seconded the motion and the motion carried unanimously.

5. Report on the Collaboration Between the City of Phoenix Export Readiness Initiative and Arizona Commerce Authority's Export Tech Program

Hank Marshall, Community and Economic Development Executive Officer with the City of Phoenix and Kevin O'Shea, Vice President of International Trade with the Arizona Commerce Authority (ACA), stated they would provide a report on their collaboration regarding the ExportTech Program and how other interested cities could implement this program. Mr. O'Shea stated that exports have increased by approximately 15 percent in the last two years, outpacing California, Texas and Utah. Exports to Mexico have increased 22 percent in the last year. Other countries where Arizona has seen export growth are Mexico, Ukraine, Saudi Arabia, Ireland and Taiwan. He added that the MAG region has approximately 6,000 companies exporting goods and services, which accounts for 75 percent of Arizona's total exports.

Mr. Marshall stated that Arizona's exports are less than ten percent, whereas the U.S. average is approximately 15 percent. He discussed the Export Readiness initiative and how it assists companies from being "export curious" to "export serious." The three pillars of the initiative are to inform, educate, and assist the business community. Mr. O'Shea stated that this initiative is in partnership with ACA's ExportTech Program and the City of Phoenix. He explained that this is a 60-day boot camp where companies participate in classes and receive export coaching to gain a better understanding on the export process and opportunities in foreign markets. He added that the companies graduate with an international export plan tailored to their specific products and/or service. They also receive some financial assistance so that the export plan can then be implemented to draw more international traffic.

Mr. O'Shea stated that ExportTech delivered three programs in the 2014, which included companies from Tucson, Mesa, Phoenix, Gilbert and Prescott Valley. Currently, the program includes six companies from Phoenix and one from Gilbert, with two or three more programs running in 2015.

Mr. Marshall added that in five years, the ExportTech Program has been implemented in 29 states, has touched 603 companies and produces an average increase of \$770,000 per year for program participants. He provided information on the types of companies that took advantage of this program. This included a major engineering company, a tissue bank, a home builder and a sports coaching company. He explained that it is not just one sector and every one of these companies will venture into exporting opportunities. Other programs that will be launched in the coming months include Export Circles, Global Reach and Global Target, all of which are additional programs to show this state is deeply engaged in exports.

Chair Lewis thanked Mr. Marshall and Mr. O'Shea for their report and added that mayors can play a key role by raising awareness of the ExportTech program in their business communities. Chair Lewis asked if there were any comments or questions from the committee.

Mr. Smith stated that staff could make the ExportTech Program flyer available to city managers and economic development people. Mr. Marshall added that the ExportTech Program has been taking place two or three times a year, but believes that if it was offered

every other month it would have a significant impact in increasing the amount of companies ready to export.

6. Report from the Greater Phoenix Chamber of Commerce on the Phoenix Forward Program

Todd Sanders, President & CEO of the Greater Phoenix Chamber of Commerce, provided an introduction on the Phoenix Forward initiative. Mr. Sanders explained that a few years ago the Greater Phoenix Chamber of Commerce launched an economic development initiative and hired a consultant to analyze the landscape to see where the Chamber could have the most impact in the community. The key finding in the study was that 80 percent of new jobs come from existing companies within the communities. This led to the creation of the Phoenix Forward program in partnership with the City of Phoenix, the Arizona Commerce Authority (ACA) and Maricopa County.

Jennifer Mellor, Vice President of Economic Development of the Greater Phoenix Chamber of Commerce provided a report on the program. Ms. Mellor explained that Phoenix Forward focuses on growing the economy from within by keeping jobs in Arizona and creating the right ecosystem for the expansion of existing businesses in three key areas: health care & bioscience, advanced business services and transportation & logistics. She explained that the primary activities for this initiative include industry leadership councils, business outreach for retention and expansion teams, industry intelligence and regional image building. Ms. Mellor added that data and trends will be collected, which will allow economic development stakeholders to identify if there are opportunities of adjustments that could be made to these key industries so that they are more business friendly. The data collected will be exchanged with the data from the City of Phoenix and ACA, to provide an information resource on the current business climate for many agencies in our region.

Ms. Mellor added that Phoenix Forward is a great program, but that it is currently only limited to the City of Phoenix. She noted that the long term vision is to regionalize the program. She explained that this could be done by chambers of commerce implementing this model in their communities and by all working collaboratively. Ms. Mellor provided an example of the model that Montgomery County's Business First program uses. Their program uses a customer-oriented approach to economic development and is designed to link businesses to resources in the community. She added that it is a coordinated group of more than 50 government agencies, development organizations, and nonprofit corporations. The goal of their program is to provide a single point of contact for all business needs. Ms. Mellor explained that they have an Outreach Specialist, a professional in the economic development community, that will learn more about the business and identify area resources to help them succeed in today's competitive environment.

Ms. Mellor indicated that the main concern cities have regarding implementing this initiative is the training of the teams that would be reaching out to businesses. She added that to address this issue, the chamber has engaged in conversations with Arizona State University to discuss the possibility of creating a certification program that would train these teams.

Chair Lewis thanked Mr. Sanders and Ms. Mellor for the presentation and asked if there were any comments or questions from the committee. Mr. Smith commented that if we were able

to gather all this information through a regional program it would allow technical schools and community colleges to become aware of what the needs are and what training needs to be done.

Anubhav Bagley, MAG Information Services Manager, added that after several meetings with cities, there is a need for a business retention expansion program at a regional level. Some key components to this type of initiative include areas such as labor force, education levels, supply chain connections and infrastructure enhancements. Mr. Smith added this would be a collective effort among all the cities, chambers of commerce, and stakeholders in this field.

7. Expanding Economic Development Opportunities in the Valley

Kevin Hull, Vice President and Senior Commercial Relationship Manager of BMO Harris Bank, and Chris Rude, Senior Relationship Manager, provided an overview on how BMO Harris Bank is collaborating on initiatives to expand economic development opportunities in the Valley. They discussed the focus on raising awareness among their clients on existing programs and by taking advantage of the global economy, increasing revenue through exporting.

Mr. Hull referred to a case study of a West Valley company. The company obtained sales orders from Europe, Asia and Canada but the main challenge was that the company could not find financing to support these new orders. He explained that BMO Harris Bank assisted this company in doing research on programs that could help the company overcome the problem. The program they used was SBA Export Working Capital Program, which gave the company the borrowing capacity to acquire the necessary inventory to ship the product. The company increased its revenue by fifty percent, hired forty more employees last year, and is expected to hire twenty this year.

Mr. Rude also explained that our region has several programs that can help optimize credit lines to support global trade, streamline key processes and develop a strategy to manage foreign risk. He added that it is crucial to leverage all the available expertise and to raise awareness in the business community so that they are aware of the programs that are available to them. He explained that BMO Harris Bank can assist with risks associated in collecting from foreign entities, help in understanding foreign laws and foreign collection, risks of currency exchange rates, as well as logistics and tracking.

Mr. Hull added that BMO Harris Bank also has expertise in working with locally based companies who either import or export products to foreign markets, specifically Canadian companies. He stated that they recently put together a cross border banking program that allows companies on both sides of the border to seamlessly bank back and forth. The bank also makes Canadian companies aware of services that provide expertise on tax laws on both sides of the border. Mr. Hull added that the majority of comments they receive from Canadian companies are that they are considering relocating to Arizona because of the quality, availability, and cost of the labor force.

Chair Lewis thanked Mr. Hall and Mr. Rude for the report and asked if there were any comments or questions from the committee. There were none.

The next two agenda item were taken out of order.

9. Update from the Arizona Commerce Authority

Lyndsay Higgins, Director of Marketing and Brian Sherman, Senior Vice President of Business Development from the Arizona Commerce Authority (ACA) discussed the new start up company web page on the ACA's website. (<http://www.azcommerce.com/start-up>). Mr. Sherman explained that the primary objective of this website is to revive the site and create an image that is more reflective of Arizona's business start up community. He noted that this website plays a key role in ACA's attraction mission because it showcases the image of Arizona's start up community to the world.

Mr. Sherman demonstrated how the website is divided into two key approaches, topical areas and information on the business life cycle. He explained that the topical areas include information on events, incubators and accelerators, co-working spaces, university resources, capital resources and industry resources. The information on the business life cycle is classified according to the different business life cycle phases, which are ideation, pre-revenue, break even and growth. The website is also mobile friendly. Mr. Sherman also discussed planning tools, small business checklists, and other services that are available to start ups companies.

Chair Lewis thanked Mr. Sherman and Ms. Higgins for the demonstration and asked if there were any comments or questions from the committee. There were none.

10. Update from the Greater Phoenix Economic Council

Steve Betts, Greater Phoenix Economic Council Board Member, stated that in partnership with ACA, the City of Phoenix and the Business Journal, an event will be held at the Sheraton Downtown Phoenix on April 22, 2015, with Carlos Slim, Sr., as the keynote speaker. Mr. Slim is one of the world's richest businessmen and co-chair of the United Nations International Telecommunications Union.

Mr. Betts also noted that U.S. Secretary of Commerce, Penny Pritzker, presented a \$200,000 grant award to GPEC, the Arizona Technology Council and other technology groups. He noted that the grant from the U.S. Cluster Grant for Seed Capital Funds will provide seed funding to support growth of start ups and innovation companies. He also updated the committee on recent business relocations and expansions that took place in the cities of Scottsdale and Phoenix.

Denise McClafferty, MAG Regional Program Manager, stated that a business seminar will take place at the Mexico Consul General's office on May 7, 2015. She noted that this seminar will focus on how to do business in Mexico.

8. Discussion on Communication and Engagement Between City and Local Business Leaders

Chair Lewis asked the city leaders to share their experiences on how they communicate with local business leaders regarding economic development. Some initiatives shared by the mayors included ambassador forums where business leaders get together and receive key information, working closely with their local chamber of commerce, organizing meetings offsite with the younger business community, participating in business retention and expansion visits, holding quarterly breakfast meetings with business leaders, holding ribbon cutting ceremonies, personalizing attention to potential businesses coming to the community and showing appreciation to businesses that are vital to the community. Chair Lewis added that at the next committee meeting, the EDC businesses leaders will have the opportunity to share their interactions with local governments.

11. Request for Future Agenda Items

Chair Lewis asked if there were any requests for future agenda items. Mr. Marshall added that the City of Phoenix has a business center located on the sixth floor in this building, at 302 N. 1st Avenue, Phoenix, that allows the business community to use it according to their needs, such as conducting interviews and doing research for their business. He extended an invitation to the committee members to visit the business center.

12. Comments from the Committee

Chair Lewis asked if there were any comments from the committee. There were none.

Adjournment

There being no further business, the Economic Development Committee meeting was adjourned at 1:05 p.m.

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Chair

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Secretary

# FACT SHEET

*Demonstrating the Value of Arizona Community Colleges*

**FEBRUARY 2015**

*Arizona Community Colleges (ACC) create a significant positive impact on the business community and generate a return on investment to their major stakeholder groups—students, society, and taxpayers. Using a two-pronged approach that involves an economic impact analysis and an investment analysis, the study calculates the benefits to each of these groups. Results of the analysis reflect Fiscal Year (FY) 2013-14.*

**INCOME CREATED BY ACC IN FY 2013-14 (ADDED INCOME)**

<p><b>\$1.2 BILLION</b> Operations spending impact</p>
<p><b>\$300.0 MILLION</b> Impact of student spending</p>
<p><b>\$13.0 BILLION</b> Alumni impact</p>
<p><b>\$14.5 BILLION</b> Total impact</p>

**IMPACT ON BUSINESS COMMUNITY**

During the analysis year, the colleges and their students added **\$14.5 BILLION** in income to the Arizona economy, approximately equal to **5.6%** of the Gross State Product. The economic impacts of ACC are described below:

*Operations spending impact*

- The colleges employed 17,623 full-time and part-time employees in FY 2013-14. Payroll amounted to **\$863.7 MILLION**, much of which was spent in Arizona to purchase groceries, clothing, and other household goods and services. The colleges spent another **\$586.8 MILLION** to support their day-to-day operations.
- The net impact of the colleges’ payroll and expenses in Arizona during the analysis year was approximately **\$1.2 BILLION** in added income.

*Impact of student spending*

- Around 9% of students attending the colleges originated from outside Arizona. Some of these students relocated to Arizona and spent money on groceries, transportation, rent, and so on at state businesses.
- The expenditures of students who relocated to the state during the analysis year added approximately **\$300 MILLION** in income to the economy.

*Alumni impact*

- Over the years, students have studied at the colleges and entered or re-entered the workforce with newly-acquired skills. Today, thousands of these former students are employed in Arizona.
- The accumulated contribution of former students currently employed in the state workforce amounted to **\$13 BILLION** in added income during the analysis year.

## JOB EQUIVALENTS BASED ON INCOME

Job equivalents are a measure of the average-wage jobs that a given amount of income can potentially support. They are calculated by dividing income by the average income per worker in the state. Based on the added income created by the colleges, the job equivalents are as follows:

Operations spending impact = **24,918** job equivalents

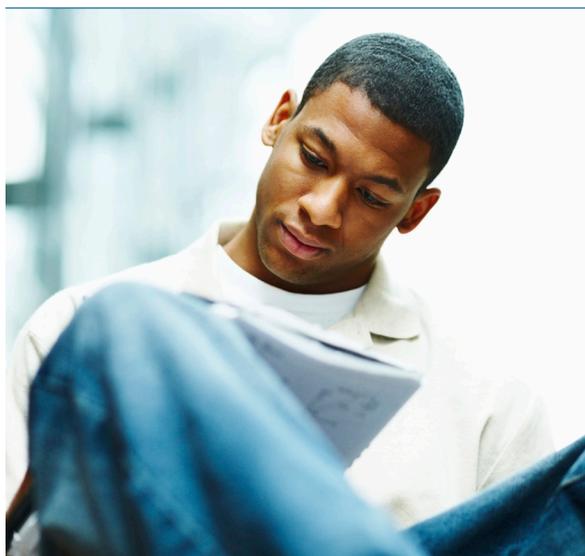
Impact of student spending = **6,340** job equivalents

Alumni impact = **274,509** job equivalents

Overall, the added income created by the colleges and their students supported **305,768** job equivalents.

## FOR EVERY \$1 SPENT BY...

<b>STUDENTS</b>	<p><b>\$4.90</b></p> <p>Gained in lifetime income for STUDENTS</p>
<b>SOCIETY</b>	<p><b>\$11.20</b></p> <p>Gained in added state income and social savings for SOCIETY</p>
<b>TAXPAYERS</b>	<p><b>\$3.60</b></p> <p>Gained in added taxes and public sector savings for TAXPAYERS</p>



## RETURN ON INVESTMENT TO STUDENTS, SOCIETY, AND TAXPAYERS

### Student perspective

- The colleges' 2013-14 students paid a total of **\$358.7 MILLION** to cover the cost of tuition, fees, books, and supplies. They also forwent **\$1.9 BILLION** in money that they would have earned had they been working instead of learning.
- In return for the monies invested in the colleges, students will receive a present value of **\$11 BILLION** in increased earnings over their working lives. This translates to a return of **\$4.90** in higher future income for every \$1 that students invest in their education. The average annual return for students is **19.2%**.

### Social perspective

- Society as a whole in Arizona will receive a present value of **\$38.7 BILLION** in added state income over the course of the students' working lives. Society will also benefit from **\$591.2 MILLION** in present value social savings related to reduced crime, lower unemployment, and increased health and well-being across the state.
- For every dollar that society spent on the colleges during the analysis year, society will receive a cumulative value of **\$11.20** in benefits, for as long as the 2013-14 student population at the colleges remains active in the state workforce.

### Taxpayer perspective

- In FY 2013-14, state and local taxpayers in Arizona paid **\$843.1 MILLION** to support the operations of the colleges. The net present value of the added tax revenue stemming from the students' higher lifetime incomes and the increased output of businesses amounts to **\$2.8 BILLION** in benefits to taxpayers. Savings to the public sector add another **\$207.1 MILLION** in benefits due to a reduced demand for government-funded services in Arizona.
- Dividing benefits to taxpayers by the associated costs yields a **3.6** benefit-cost ratio, i.e., every \$1 in costs returns \$3.60 in benefits. The average annual return on investment for taxpayers is **9.7%**.

# EXECUTIVE SUMMARY

## *Demonstrating the Value of Arizona Community Colleges*



FEBRUARY 2015

ANALYSIS OF THE ECONOMIC IMPACT & RETURN ON INVESTMENT OF EDUCATION

*Arizona Community Colleges (ACC) create value in many ways. The colleges play a key role in helping students increase their employability and achieve their individual potential. The colleges provide students both with the skills they need to have a fulfilling and prosperous career and an opportunity to become a part of an educated citizenry. With this higher education, students add value to their region and promote the well-being of Arizona.*

The contribution of the colleges influence both the lives of students and also the state's economy. The colleges serve a range of industries in Arizona and support state businesses, and society as a whole in Arizona benefits from an expanded economy and improved quality of life. The benefits created by ACC even extend to the state and local government through increased tax revenues and public sector savings.

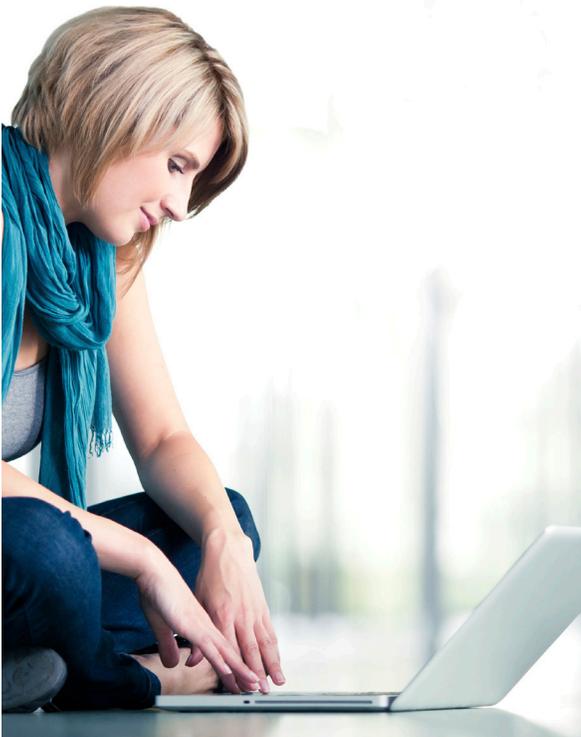
The purpose of this study is to investigate the economic impacts created by the colleges on the business community and the benefits that the colleges generate in return for the investments made by their key stakeholder groups—students, society, and taxpayers. The following two analyses are presented:

- **STATEWIDE ECONOMIC IMPACT ANALYSIS**
- **INVESTMENT ANALYSIS**

All results reflect student and financial data for Fiscal Year (FY) 2013-14. Impacts on the business community are reported under the economic impact analysis, and the return on investment to students, society, and taxpayers are reported under the investment analysis. Both analyses are described more fully in the following sections.

# ECONOMIC IMPACT ANALYSIS

*The colleges promote economic growth in Arizona in a variety of ways. The colleges are employers and purchasers of goods and services, and the living expenses of students from outside of Arizona benefit state businesses. In addition, the colleges are primary sources of education to Arizona residents and suppliers of trained workers to Arizona industry.*



The statewide economic impact analysis examines the impact of the colleges on the state business community through increased consumer spending and enhanced business productivity. Results are measured in terms of added income and are organized according to the following three impacts:

1. Impact of operations spending;
2. Impact of the spending of students who relocated to the state, and;
3. Impact of the increased productivity of alumni that were employed in the state's workforce during the analysis year.

## **OPERATIONS SPENDING IMPACT**

The colleges are important employers in Arizona. In FY 2013-14, the colleges employed 17,623 full-time and part-time faculty and staff. Of these, 98% lived in Arizona. Total payroll at the colleges was \$863.7 million, much of which was spent in the state for groceries, rent, eating out, clothing, and other household expenses.

The colleges are large-scale buyers of goods and services. In FY 2013-14 the colleges spent \$586.8 million to cover their expenses for facilities, professional services, and supplies.

The total income that the colleges created during the analysis year as a result of their day-to-day operations was \$1.2 billion. This figure represents the colleges' payroll, the multiplier effects generated by the spending of the colleges and their employees, and a downward adjustment to account for funding that the colleges received from local sources.

## JOB EQUIVALENTS BASED ON INCOME

Job equivalents are a measure of the average-wage jobs that a given amount of income can potentially support. They are calculated by dividing income by the average income per worker in the state. Based on the added income created by the colleges, the job equivalents are as follows:

Operations spending impact = **24,918** job equivalents

Impact of student spending = **6,340** job equivalents

Alumni impact = **274,509** job equivalents

Overall, the added income created by the colleges and their students supported **305,768** job equivalents.

## IMPACT OF STUDENT SPENDING

Around 9% of students attending the colleges originated from outside Arizona in FY 2013-14. Some of these students relocated to Arizona. These students likely would not have come to the state if the colleges did not exist. While attending, out-of-state students spent \$352.2 million to purchase groceries, rent accommodation, pay for transportation, and so on. A significant portion of these expenditures occurred in Arizona, generating \$300 million in new income in the economy during the analysis year.

## ALUMNI IMPACT

The colleges' biggest impact results from the education and training they provide for state residents. Since the colleges were established, students have studied at them and entered the workforce with new skills. Today, thousands of former students are employed in Arizona.

During the analysis year, former students of the colleges generated \$13 billion in added income in the state. This figure represents the higher wages that students earned during the year, the increased output of the businesses that employed the students, and the multiplier effects that occurred as students and their employers spent money at other businesses.

**TABLE 1. INCOME CREATED BY ACC IN FY 2013-14 (ADDED INCOME)**

<p><b>\$1.2 BILLION</b></p> <p>Operations spending impact</p>
<p><b>\$300.0 MILLION</b></p> <p>Impact of student spending</p>
<p><b>\$13.0 BILLION</b></p> <p>Alumni impact</p>
<p><b>\$14.5 BILLION</b></p> <p>Total impact</p>

## TOTAL IMPACT

The overall impact of ACC on the state business community during the analysis year amounted to \$14.5 billion, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. This added income was equal to approximately 5.6% of Arizona's Gross State Product.

# INVESTMENT ANALYSIS

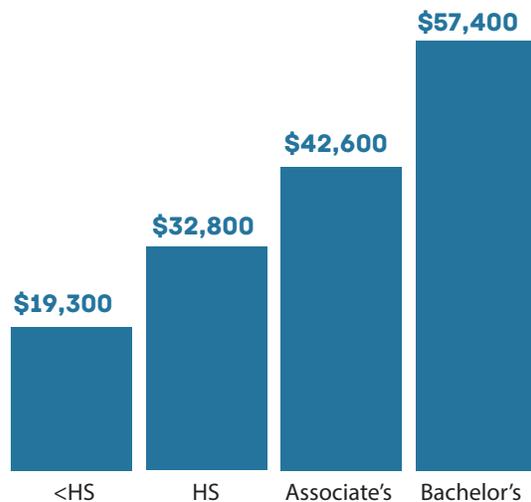
*Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile. If costs outweigh benefits, then the investment will lose money and is considered unprofitable. This study considers the colleges as investments from the perspectives of students, society, and taxpayers. The backdrop for the analysis is the entire Arizona economy.*

## STUDENT PERSPECTIVE

In 2013-14, the colleges served 334,056 credit students and 51,060 non-credit students. In order to attend college, students paid for tuition, fees, books, and supplies. They also gave up money that they would have otherwise earned had they been working instead of attending college. The total investment made by the colleges' students in FY 2013-14 amounted to \$2.3 billion, equal to \$358.7 million in out-of-pocket expenses plus \$1.9 billion in forgone time and money.

In return for their investment, the colleges' students will receive a stream of higher future wages that will continue to grow through their working lives. As shown in Figure 1, mean income levels at the midpoint of the average-aged worker's career increase as people achieve higher levels of education. For example, the average associate's degree completer from the colleges will see an increase in earnings of \$9,800 each year compared to someone with a high school diploma or equivalent. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately \$391,572 in higher income.

**FIGURE 1. ANNUAL INCOME BY EDUCATION LEVEL AT CAREER MIDPOINT IN ARIZONA**



Source: EMSI complete employment data.



The present value of the higher future wages that the colleges' students will receive over their working careers is \$11 billion. Dividing this value by the \$2.3 billion in student costs yields a benefit-cost ratio of 4.9. In other words, for every \$1 students invest in the colleges in the form of out-of-pocket expenses and forgone time and money, they receive a cumulative of \$4.90 in higher future wages. The average annual rate of return for students is 19.2%. This is an impressive return compared, for example, to the less than 1% return per annum that is generally expected from saving money in today's standard bank savings accounts.

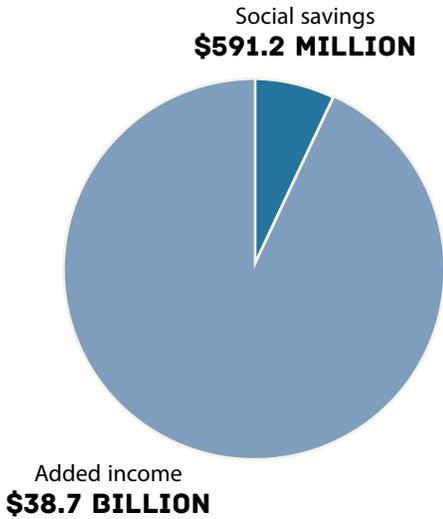
### SOCIAL PERSPECTIVE

Society as a whole within Arizona benefits from the presence of ACC in two major ways. The first and largest benefit that society receives is the added income created in the state. As discussed in the previous section, students earn more because of the skills they acquire while attending the colleges. Businesses also earn more because the enhanced skills of students make them more productive. Together, higher student wages and increased business output stimulate increases in income across the state, thereby raising prosperity in Arizona and expanding the economic base for society as a whole.

Benefits to society also consist of the savings generated by the improved lifestyles of students. Education is statistically correlated with a variety of lifestyle changes that generate social savings across three main categories: 1) health, 2) crime, and 3) unemployment. Health savings include avoided medical costs associated with smoking, alcoholism, obesity, drug abuse, and mental disorders. Crime savings include reduced security expenditure and insurance administration, lower victim costs, and reduced criminal justice system expenditures. Unemployment savings include the reduced demand for income assistance and welfare benefits. For a list of study references to these statistical benefits, please contact the Arizona Community Colleges for a copy of the main report.

Figure 2 shows the present value of the added income and social savings that will occur in Arizona over the working lifetime of the 2013-14 student population at the colleges. Added income amounts to a present value of \$38.7 billion due to the increased lifetime incomes of students and associated increases in business output. Social savings amount to \$591.2 million, the sum of

**FIGURE 2. PRESENT VALUE OF ADDED INCOME AND SOCIAL SAVINGS IN ARIZONA**





health, crime, and unemployment savings in Arizona. Altogether, total benefits to society equal \$39.2 billion (in present value terms).

Society invested \$3.4 billion in the colleges during the analysis year. This includes all expenditures by the colleges, all student expenditures, and all student opportunity costs. For every dollar of this investment, society as a whole in Arizona will receive a cumulative value of \$11.20 in benefits, equal to the \$39.2 billion in benefits divided by the \$3490.2 million in costs. These benefits will occur for as long as the colleges' 2013-14 students remain employed in the state workforce.

## TAXPAYER PERSPECTIVE

From the taxpayer perspective, benefits consist primarily of the taxes that state and local government will collect from the added income created in the state. As the colleges' students earn more, they will make higher tax payments. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the students' working careers, state and local government will have collected a present value of \$2.8 billion in added taxes.

A portion of the savings enjoyed by society also accrues to state and local taxpayers. Students are more employable, so the demand for welfare and unemployment benefits reduces. Improved health habits lower the students' demand for national health care services. Students are also less likely to commit crimes, so the demand for law enforcement services reduces (study references are available in the main report). All of these benefits will generate a present value of \$207.1 million in savings to state and local taxpayers.

Total benefits to taxpayers equal \$3.1 billion, equal to the sum of the added taxes and public sector savings. Comparing this to the taxpayer costs of \$843.1 million—equal to the funding that the colleges received from state and local government during the analysis year—yields a benefit-cost ratio of 3.6. This means that for every \$1 of public money invested in the colleges, taxpayers receive a cumulative value of \$3.60 over the course of the students' working lives. The average annual rate of return is 9.7%, a solid investment that compares favorably with other long-term investments in both the private and public sectors.

**TABLE 2. SUMMARY OF INVESTMENT ANALYSIS RESULTS**

<b>STUDENT PERSPECTIVE</b>	
<b>\$11,049,413</b>	Benefits (thousands)
<b>\$2,257,923</b>	Costs (thousands)
<b>\$8,791,490</b>	Net present value (thousands)
<b>4.9</b>	Benefit-cost ratio
<b>19.2%</b>	Rate of return

<b>SOCIAL PERSPECTIVE</b>	
<b>\$39,248,400</b>	Benefits (thousands)
<b>\$3,490,152</b>	Costs (thousands)
<b>\$35,758,248</b>	Net present value (thousands)
<b>11.2</b>	Benefit-cost ratio
<b>NA</b>	Rate of return*

<b>TAXPAYER PERSPECTIVE</b>	
<b>\$3,055,542</b>	Benefits (thousands)
<b>\$843,067</b>	Costs (thousands)
<b>\$2,212,475</b>	Net present value (thousands)
<b>3.6</b>	Benefit-cost ratio
<b>9.7%</b>	Rate of return

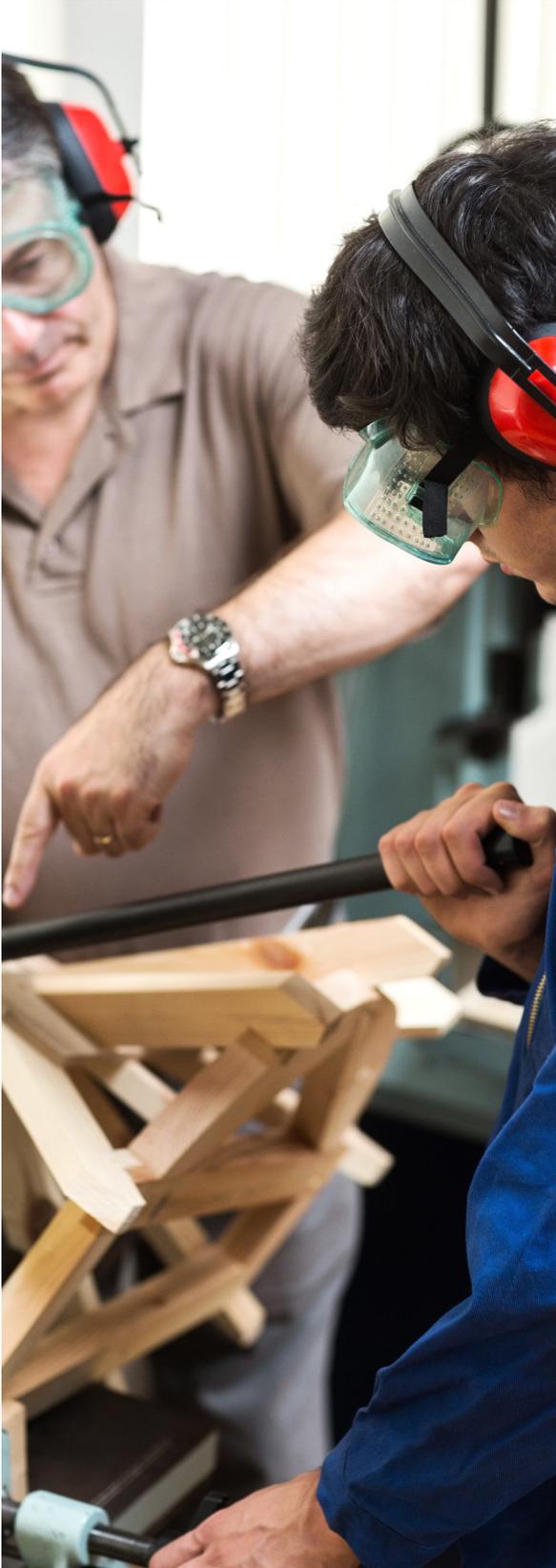
\* The rate of return is not reported for the social perspective because the beneficiaries of the investment are not necessarily the same as the original investors.

## SUMMARY OF INVESTMENT ANALYSIS RESULTS

Table 2 presents the results of the investment analysis for all three of the colleges' major stakeholder groups—students, society, and taxpayers. As shown, students receive great value for their educational investment. At the same time, the investment made by state and local taxpayers in the colleges creates a wide range of benefits to society and returns more to government budgets than it costs.



# CONCLUSION



The results of this study demonstrate that the colleges create value from multiple perspectives. The colleges benefit state businesses by increasing consumer spending in the state and supplying a steady flow of qualified, trained workers into the workforce. Each college enriches the lives of students by raising their lifetime incomes and helping them achieve their individual potential. Together, the colleges benefit society as a whole in Arizona by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students. Finally, the colleges benefit state and local taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services.

## ABOUT THE STUDY

Data and assumptions used in the study are based on several sources, including the 2013-14 academic and financial reports from the colleges, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of EMSI's Social Accounting Matrix (SAM) model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact ACC for a copy of the technical report.

## ABOUT EMSI

Economic Modeling Specialists International, a CareerBuilder company, is a leading provider of economic impact studies and labor market data to educational institutions, workforce planners, and regional developers in the U.S. and internationally. Since 2000, EMSI has completed over 1,200 economic impact studies for educational institutions in four countries. Visit [www.economicmodeling.com](http://www.economicmodeling.com) for more information about EMSI's products and services.

# FACT SHEET

*Demonstrating the Economic Value of Maricopa County Community College District*

FEBRUARY 2015

*Maricopa County Community College District (MCCCD) creates a significant positive impact on the business community and generates a return on investment to its major stakeholder groups—students, society, and taxpayers. Using a two-pronged approach that involves an economic impact analysis and an investment analysis, the study calculates the benefits to each of these groups. Results of the analysis reflect Fiscal Year (FY) 2013-14.*

## INCOME CREATED BY MCCCD IN FY 2013-14 (ADDED INCOME)

**\$732.4 MILLION**

Operations spending impact

**\$240.6 MILLION**

Impact of student spending

**\$6.3 BILLION**

Alumni impact

**\$7.3 BILLION**

Total impact

## IMPACT ON BUSINESS COMMUNITY

During the analysis year, MCCCD and its students added **\$7.3 BILLION** in income to Maricopa County economy, approximately equal to **3.8%** of the Gross Regional Product. The economic impacts of MCCCD break down as follows:

### Operations spending impact

- MCCCD employed 9,856 full-time and part-time employees in FY 2013-14. Payroll amounts to **\$527.8 MILLION**, much of which is spent in Maricopa County to purchase groceries, clothing, and other household goods and services. The college spends another **\$362.8 MILLION** to support its day-to-day operations.<sup>1</sup>
- The net impact of district payroll and expenses in Maricopa County during the analysis year was approximately **\$732.4 MILLION** in added income.

### Impact of student spending

- Around 11% of students attending MCCCD colleges originated from outside the county. Some of these students relocated to Maricopa County and spent money on groceries, transportation, rent, and so on at county businesses.
- The expenditures of students who relocated to the region during the analysis year added approximately **\$240.6 MILLION** in income to the economy.

### Alumni impact

- Over the years, students have studied at MCCCD colleges and entered or re-entered the workforce with newly-acquired skills. Today, thousands of these former students are employed in Maricopa County.
- The accumulated contribution of former students currently employed in the regional workforce amounted to **\$6.3 BILLION** in added income during the analysis year.

<sup>1</sup> Considering data limitations, 2012-13 college financial data is used as a proxy for 2013-14. All other data reflects the 2013-14 reporting year.

## JOB EQUIVALENTS BASED ON INCOME

Job equivalents are a measure of the average-wage jobs that a given amount of income can potentially support. They are calculated by dividing income by the average income per worker in the region. Based on the added income created by MCCCDC, the job equivalents are as follows:

Operations spending impact = **14,571** job equivalents

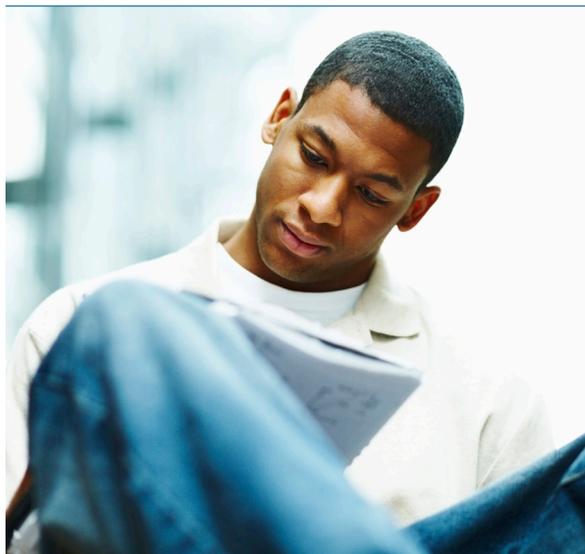
Impact of student spending = **4,786** job equivalents

Alumni impact = **125,341** job equivalents

Overall, the added income created by MCCCDC and its students supported **144,697** job equivalents.

## FOR EVERY \$1 SPENT BY...

<b>STUDENTS</b>	<p><b>\$4.20</b></p> <p>Gained in lifetime income for STUDENTS</p>
<b>SOCIETY</b>	<p><b>\$12.10</b></p> <p>Gained in added state income and social savings for SOCIETY</p>
<b>TAXPAYERS</b>	<p><b>\$4.00</b></p> <p>Gained in added taxes and public sector savings for TAXPAYERS</p>



## RETURN ON INVESTMENT TO STUDENTS, SOCIETY, AND TAXPAYERS

### Student perspective

- MCCCDC's students spent a total of **\$225.2 MILLION** to cover the cost of tuition, fees, books, and supplies. They also forewent **\$1.2 BILLION** in money that they would have earned had they been working instead of learning.
- In return for the monies invested in the college, students will receive a present value of **\$6 BILLION** in increased earnings over their working lives. This translates to a return of **\$4.20** in higher future income for every \$1 that students invest in their education. The average annual return for students is **16.6%**.

### Social perspective

- Society as a whole in Arizona will receive a present value of **\$25.7 BILLION** in added state income over the course of the students' working lives. Society will also benefit from **\$337.9 MILLION** in present value social savings related to reduced crime, lower unemployment, and increased health and well-being across the state.
- For every dollar that society spent on MCCCDC during the analysis year, society will receive a cumulative value of **\$12.10** in benefits, for as long as the 2013-14 student population at MCCCDC remains active in the state workforce.

### Taxpayer perspective

- In FY 2013-14, state and local taxpayers in Arizona paid **\$499 MILLION** to support the operations of MCCCDC. The net present value of the added tax revenue stemming from the students' higher lifetime incomes and the increased output of businesses amounts to **\$1.9 BILLION** in benefits to taxpayers. Savings to the public sector add another **\$111.9 MILLION** in benefits due to a reduced demand for government-funded services in Arizona.
- Dividing benefits to taxpayers by the associated costs yields a **4.0** benefit-cost ratio, i.e., every \$1 in costs returns \$4.00 in benefits. The average annual return on investment for taxpayers is **10.3%**.

# EXECUTIVE SUMMARY

## *Demonstrating the Economic Value of Maricopa County Community College District*



FEBRUARY 2015

ANALYSIS OF THE ECONOMIC IMPACT & RETURN ON INVESTMENT OF EDUCATION

*Maricopa County Community College District (MCCCD) creates value in many ways. The district plays a key role in helping students increase their employability and achieve their individual potential. It provides students with the skills they need to have a fulfilling and prosperous career. Further, it supplies an environment for students to meet new people, increase their self-confidence, and promote their overall health and well-being.*

The contribution of MCCCD influences both the lives of students and also the regional economy. The district serves a range of industries in Maricopa County and supports local businesses, and society as a whole in Arizona benefits from an expanded economy and improved quality of life. The benefits created by MCCCD even extend to the state and local government through increased tax revenues and public sector savings.

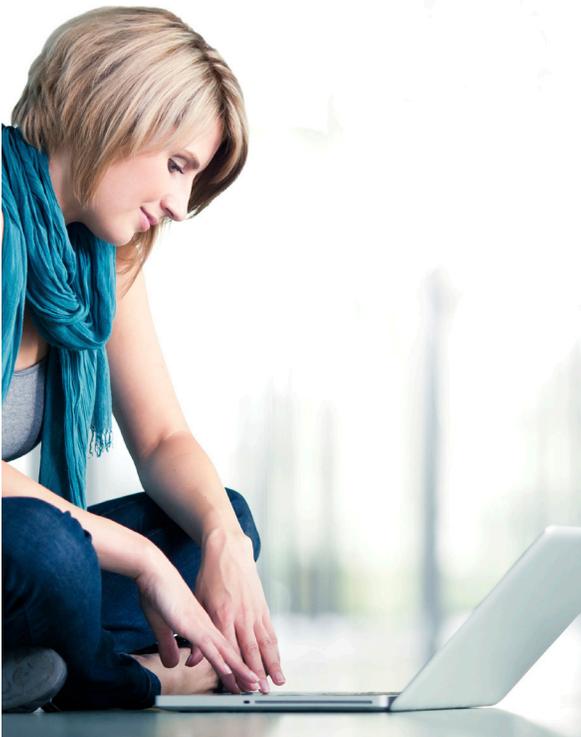
The purpose of this study is to investigate the economic impacts created by MCCCD on the business community and the benefits that the district generates in return for the investments made by its key stakeholder groups—students, society, and taxpayers. The following two analyses are presented:

- **REGIONAL ECONOMIC IMPACT ANALYSIS**
- **INVESTMENT ANALYSIS**

All results reflect student and financial data for Fiscal Year (FY) 2013-14. Impacts on the business community are reported under the economic impact analysis, and the return on investment to students, society, and taxpayers are reported under the investment analysis. Both analyses are described more fully in the following sections.

# ECONOMIC IMPACT ANALYSIS

*MCCCD promotes economic growth in Maricopa County in a variety of ways. The District is an employer and buyer of goods and services, and the living expenses of students from outside of Maricopa County benefit local businesses. In addition, MCCCD is a primary source of education to Maricopa County residents and a supplier of trained workers to Maricopa County industry.*



The regional economic impact analysis examines the impact of MCCCD on the local business community through increased consumer spending and enhanced business productivity. Results are measured in terms of added income and are organized according to the following three impacts:

1. Impact of district operations;
2. Impact of the spending of students who relocated to the region, and;
3. Impact of the increased productivity of alumni that were employed in the regional workforce during the analysis year.

## **OPERATIONS SPENDING IMPACT**

MCCCD is an important employer in Maricopa County. In FY 2013-14, the district employed 9,856 full-time and part-time faculty and staff. Of these, 97% lived in Maricopa County. MCCCD spends \$527.8 million in payroll, much of which circulates through the regional economy in purchases for groceries, rent, eating out, clothing, and other household expenses.<sup>1</sup>

MCCCD is itself a large-scale buyer of goods and services. The district spends \$362.8 million to cover its expenses for facilities, professional services, and supplies.

The total income that MCCCD created during the analysis year as a result of its day-to-day operations is an estimated \$732.4 million. This figure represents the district's payroll, the multiplier effects generated by the spending of the district and its employees, and a downward adjustment to account for funding that the district received from local sources.

<sup>1</sup> Considering data limitations, 2012-13 college financial data is used as a proxy for 2013-14. All other data reflects the 2013-14 reporting year.

## JOB EQUIVALENTS BASED ON INCOME

Job equivalents are a measure of the average-wage jobs that a given amount of income can potentially support. They are calculated by dividing income by the average income per worker in the county. Based on the added income created by MCCCCD, the job equivalents are as follows:

Operations spending impact = **14,571** job equivalents

Impact of student spending = **4,786** job equivalents

Alumni impact = **125,341** job equivalents

Overall, the added income created by MCCCCD and its students supported **144,697** job equivalents.

## INCOME CREATED BY MCCCCD IN FY 2013-14 (ADDED INCOME)

**\$732.4 MILLION**

Operations spending impact

**\$240.6 MILLION**

Impact of student spending

**\$6.3 BILLION**

Alumni impact

**\$7.3 BILLION**

Total impact

## IMPACT OF STUDENT SPENDING

Around 11% of students attending MCCCCD originated from outside the county in FY 2013-14. Some of these students relocated to Maricopa County. These students likely would not have come to the region if the district did not exist. Out-of-region students spend an estimated \$296.3 million each year to purchase groceries, rent accommodation, pay for transportation, and so on. A significant portion of these expenditures occur within the region, generating \$240.6 million in new income in the economy during the analysis year.

## ALUMNI IMPACT

MCCCCD's biggest impact results from the education and training it provides for local residents. Since the district was established, students have studied at MCCCCD and entered the workforce with new skills. Today, thousands of former students are employed in Maricopa County.

During the analysis year, former students of MCCCCD generated \$6.3 billion in added income in the region. This figure represents the higher wages that students earned during the year, the increased output of the businesses that employed the students, and the multiplier effects that occurred as students and their employers spent money at other businesses.

## TOTAL IMPACT

The overall impact of MCCCCD on the local business community during the analysis year amounted to \$7.3 billion, equal to the sum of the operations spending impact, the student spending impact, and the alumni impact. This added income was equal to approximately 3.8% of the region's Gross Regional Product.

# INVESTMENT ANALYSIS

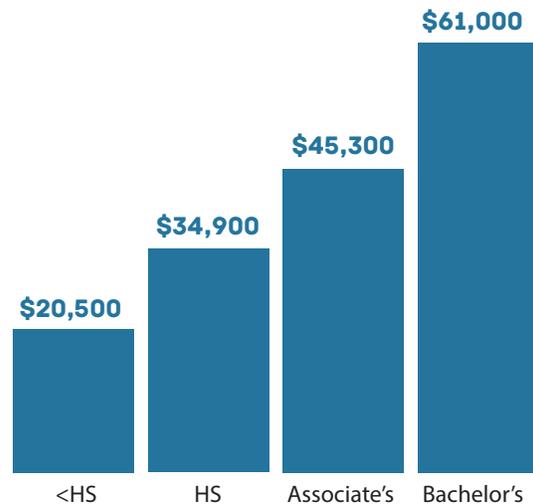
*Investment analysis is the process of evaluating total costs and measuring these against total benefits to determine whether or not a proposed venture will be profitable. If benefits outweigh costs, then the investment is worthwhile. If costs outweigh benefits, then the investment will lose money and is considered unprofitable. This study considers MCCCDC as an investment from the perspectives of students, society, and taxpayers. The backdrop for the analysis is the entire Arizona economy.*

## STUDENT PERSPECTIVE

In 2013-14, MCCCDC served 213,454 credit students and 27,892 non-credit students. In order to attend college, students paid for tuition, fees, books, and supplies. They also gave up money that they would have otherwise earned had they been working instead of attending college. The total investment made by MCCCDC's students in FY 2013-14 amounted to \$1.4 billion, equal to \$225.2 million in out-of-pocket expenses plus \$1.2 billion in forgone time and money.

In return for their investment, MCCCDC's students will receive a stream of higher future wages that will continue to grow through their working lives. As shown in Figure 1, mean income levels at the midpoint of the average-aged worker's career increase as people achieve higher levels of education. For example, the average associate's degree completer from MCCCDC will see an increase in earnings of \$10,400 each year compared to someone with a high school diploma or equivalent. Over a working lifetime, this increase in earnings amounts to an undiscounted value of approximately \$426,400 in higher income.

**FIGURE 1. ANNUAL INCOME BY EDUCATION LEVEL AT CAREER MIDPOINT IN MARICOPA COUNTY**



Source: EMSI complete employment data.



The present value of the higher future wages that MCCCDC's students will receive over their working careers is \$6 billion. Dividing this value by the \$1.4 billion in student costs yields a benefit-cost ratio of 4.2. In other words, for every \$1 students invest in MCCCDC in the form of out-of-pocket expenses and forgone time and money, they receive a cumulative of \$4.20 in higher future wages. The average annual rate of return for students is 16.6%. This is an impressive return compared, for example, to the less than 1% return per annum that is generally expected from saving money in today's standard bank savings accounts.

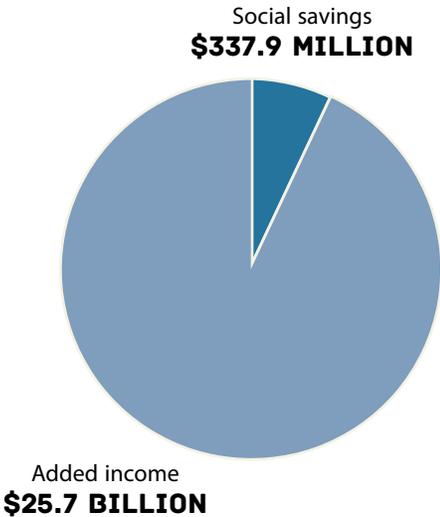
**SOCIAL PERSPECTIVE**

Society as a whole within Arizona benefits from the presence of MCCCDC in two major ways. The first and largest benefit that society receives is the added income created in the state. As discussed in the previous section, students earn more because of the skills they acquire while attending MCCCDC colleges. Businesses also earn more because the enhanced skills of students make them more productive. Together, higher student wages and increased business output stimulate increases in income across the state, thereby raising prosperity in Arizona and expanding the economic base for society as a whole.

Benefits to society also consist of the savings generated by the improved lifestyles of students. Education is statistically correlated with a variety of lifestyle changes that generate social savings across three main categories: 1) health, 2) crime, and 3) unemployment. Health savings include avoided medical costs associated with smoking, alcoholism, obesity, drug abuse, and mental disorders. Crime savings include reduced security expenditure and insurance administration, lower victim costs, and reduced criminal justice system expenditures. Unemployment savings include the reduced demand for income assistance and welfare benefits. For a list of study references to these statistical benefits, please contact the district for a copy of the main report.

Figure 2 shows the present value of the added income and social savings that will occur in Arizona over the working lifetime of the 2013-14 student population at MCCCDC. Added income amounts to a present value of \$25.7 billion due to the increased lifetime incomes of students and associated increases in business output. Social savings amount to \$337.9 million, the sum of health, crime, and unemployment savings in Arizona. Altogether, total

**FIGURE 2. PRESENT VALUE OF ADDED INCOME AND SOCIAL SAVINGS IN ARIZONA**





benefits to society equal \$26 billion (in present value terms).

Society invested \$2.1 billion in MCCCCD educations during the analysis year. This includes all expenditures by MCCCCD, all student expenditures, and all student opportunity costs. For every dollar of this investment, society as a whole in Arizona will receive a cumulative value of \$12.10 in benefits, equal to the \$26 billion in benefits divided by the \$2.1 billion in costs. These benefits will occur for as long as MCCCCD's 2013-2014 students remain employed in the state workforce.

## TAXPAYER PERSPECTIVE

From the taxpayer perspective, benefits consist primarily of the taxes that state and local government will collect from the added income created in the state. As MCCCCD students earn more, they will make higher tax payments. Employers will also make higher tax payments as they increase their output and purchase more supplies and services. By the end of the students' working careers, state and local government will have collected a present value of \$1.9 billion in added taxes.

A portion of the savings enjoyed by society also accrues to state and local taxpayers. Students are more employable, so the demand for welfare and unemployment benefits reduces. Improved health habits lower the students' demand for national health care services. Students are also less likely to commit crimes, so the demand for law enforcement services reduces (study references are available in the main report). All of these benefits will generate a present value of \$111.9 million in savings to state and local taxpayers.

Total benefits to taxpayers equal \$2 billion, equal to the sum of the added taxes and public sector savings. Comparing this to the taxpayer costs of \$499 million—equal to the funding that MCCCCD received from state and local government during the analysis year—yields a benefit-cost ratio of 4.0. This means that for every \$1 of public money invested in MCCCCD, taxpayers receive a cumulative value of \$4.00 over the course of the students' working lives. The average annual rate of return is 10.3%, a solid investment that compares favorably with other long-term investments in both the private and public sectors.

**TABLE 2. SUMMARY OF INVESTMENT ANALYSIS RESULTS**

<b>STUDENT PERSPECTIVE</b>	
<b>\$5,961,422</b>	Benefits (thousands)
<b>\$1,407,489</b>	Costs (thousands)
<b>\$4,553,933</b>	Net present value (thousands)
<b>4.2</b>	Benefit-cost ratio
<b>16.6%</b>	Rate of return

<b>SOCIAL PERSPECTIVE</b>	
<b>\$26,033,774</b>	Benefits (thousands)
<b>\$2,148,920</b>	Costs (thousands)
<b>\$23,884,854</b>	Net present value (thousands)
<b>12.1</b>	Benefit-cost ratio
<b>NA</b>	Rate of return*

<b>TAXPAYER PERSPECTIVE</b>	
<b>\$2,010,604</b>	Benefits (thousands)
<b>\$498,970</b>	Costs (thousands)
<b>\$1,511,634</b>	Net present value (thousands)
<b>4.0</b>	Benefit-cost ratio
<b>10.3%</b>	Rate of return

\* The rate of return is not reported for the social perspective because the beneficiaries of the investment are not necessarily the same as the original investors.

## SUMMARY OF INVESTMENT ANALYSIS RESULTS

Table 2 presents the results of the investment analysis for all three of MCCCDC’s major stakeholder groups—students, society, and taxpayers. As shown, students receive great value for their educational investment. At the same time, the investment made by state and local taxpayers in the district creates a wide range of benefits to society and returns more to government budgets than it costs.



# CONCLUSION



The results of this study demonstrate that MCCCCD creates value from multiple perspectives. The district benefits local businesses by increasing consumer spending in the region and supplying a steady flow of qualified, trained workers into the workforce. It enriches the lives of students by raising their lifetime incomes and helping them achieve their individual potential. It benefits society as a whole in Arizona by creating a more prosperous economy and generating a variety of savings through the improved lifestyles of students. Finally, it benefits state and local taxpayers through increased tax receipts across the state and a reduced demand for government-supported social services.

## ABOUT THE STUDY

Data and assumptions used in the study are based on several sources, including the 2013-14 academic and financial reports from the district, industry and employment data from the U.S. Bureau of Labor Statistics and U.S. Census Bureau, outputs of EMSI's Social Accounting Matrix (SAM) model, and a variety of studies and surveys relating education to social behavior. The study applies a conservative methodology and follows standard practice using only the most recognized indicators of investment effectiveness and economic impact. For a full description of the data and approach used in the study, please contact the district for a copy of the technical report.

## ABOUT EMSI

Economic Modeling Specialists International, a CareerBuilder company, is a leading provider of economic impact studies and labor market data to educational institutions, workforce planners, and regional developers in the U.S. and internationally. Since 2000, EMSI has completed over 1,200 economic impact studies for educational institutions in four countries. Visit [www.economicmodeling.com](http://www.economicmodeling.com) for more information about EMSI's products and services.

# Extending the Border Zone to the Entire State of Arizona: Estimated Expenditures and Economic Impact Simulations, 2013-2016

## Executive Summary

March 12, 2015

Prepared for: The Maricopa Association of Governments

Prepared by: Economic and Business Research Center, the University of Arizona, Tucson, AZ

***This report concludes that extending the border zone to the entire state of Arizona could generate up to \$181 million in estimated spending in 2016, bringing the total projected spending of Mexican visitors to Arizona to nearly \$3.1 billion and a total jobs impact of 31,766.***

- Every year, thousands of frequent, low-risk, short-term visitors travel from Mexico into Arizona to conduct business, visit with family and friends, or shop at local stores—spending billions of dollars. Although these visitors have been pre-cleared through thorough background checks for frequent travel into the U.S., their U.S.-issued border crossing cards (BCCs) limit their travel in Arizona to 75 miles entering through Arizona’s land ports of entry—allowing visitors to travel about as far as the city of Tucson, with the exception of a 25-mile limit for visitors entering through the San Luis port of entry (Yuma region).
- A resolution of support to expand the border zone from its current 75-mile zone to the entire state and to streamline the U.S. visa process for Mexican citizens at the land ports of entry is currently being supported by regional planning agencies<sup>1</sup> throughout Arizona, including the Maricopa Association of Governments (MAG), as well as the Intertribal Council of Arizona and the city of Nogales, Arizona. Extending the zone for the BCC requires an administrative action by the U.S. Department of Homeland Security.
- Since the late 1970s, the University of Arizona (UA) has conducted four extensive research studies that assess direct spending by Mexican visitors and estimate their total economic impact on Arizona. The last Mexican visitors study was conducted in 2007-2008.
- In 2015, MAG requested that the UA conduct an economic impact analysis of potential Mexican spending resulting from expanding the border zone to the entire state of Arizona. Estimates of Mexican spending for 2013, border crossing projections, and related baseline spending numbers for 2014, 2015 and 2016 were developed. The goal was to assess the economic impacts of the “what if” scenarios of extending the border zone statewide. The UA utilized IMPLAN, a nationally recognized impact analysis model to estimate the economic impacts related to these scenarios.
- The 2007-2008 Mexican visitors study conducted by the UA for the Arizona Office of Tourism determined that visitors from Mexico spend \$2.7 billion in Arizona. This report notes that annual spending of Mexican visitors to Arizona declined to \$2.257 billion in 2013 due to the recession and effects of heightened travel and border security measures.
- Extending the border zone will affect approximately 1,010,713 Mexican visitors who have been issued a BCC over the last 10 years in Nogales and Hermosillo, the two closest cities to Arizona located in the state of Sonora. This group represents a significantly large population who could positively impact Arizona’s economy. Nearly 1.5 million of the 1.7 million visa applications adjudicated at the U.S. State Department’s consulates and embassies in Mexico in fiscal year 2013 were for BCCs<sup>2</sup>.

<sup>1</sup> Central Arizona Governments (CAG), Flagstaff Metropolitan Planning Organization (FMPO), Maricopa Association of Governments (MAG), Pima Association of Governments (PAG), Southeastern Arizona Governments Organization (SEAGO), Western Arizona Council of Governments (WACOG) and Yuma Metropolitan Planning Organization (YMPO).

<sup>2</sup> U.S. State Department Hearing on Border Security – 2013.

# Extending the Border Zone to the Entire State of Arizona: Estimated Expenditures and Economic Impact Simulations, 2013-2016

## Executive Summary (continued)

- The proposed change would allow pre-cleared Mexican travelers holding a BCC, which currently acts as a visa document, to travel beyond Tucson without having to fill out an additional paper I-94 form. The proposed change could provide flexibility for these visitors to spend their tourism dollars throughout Arizona, invigorating tourism-sensitive economies in both rural and urban regions of the state.
- An analysis of legal border crossings following the 1999 border zone extension in Arizona from 25-miles to 75-miles indicates an increase of almost 3.9 percent in border crossings between 1998 and 1999 (the year prior to the extension) compared to between 1999 and 2000 (the year following the zone change).
- The most recent border zone expansion occurred in 2013 in the state of New Mexico, which extended its border zone from 25 miles to 55 miles. Analysis of border crossings right after the extension indicates crossings (including through the El Paso port of entry) were 4.2 percent higher during the year after the border expansion than the year prior to the border expansion.
- This report concludes that extending the border zone to the entire state of Arizona could:
  - **Generate up to \$181 million in estimated spending in 2016, bringing the total projected spending of Mexican visitors to Arizona to nearly \$3.1 billion and a total jobs impact of 31,766<sup>3</sup>.** These numbers would be expected to increase each year thereafter.

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<sup>3</sup> Based on a scenario of a three percent increase in passenger crossings resulting from the positive message the extension would send, and a 15 percent increase in passenger crossers who decide to travel north of the 75-mile border zone due to the extension.