

September 29, 2015

TO: Members of the MAG Economic Development Committee

FROM: Mayor Michael LeVault, Town of Youngtown, Chair

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

Tuesday, October 6, 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  
OCTOBER 6, 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 September 8, 2015 Economic Development Committee Meeting Minutes

5. The Economic Impact of International Businesses in Arizona

The Economic Development Committee continues to work with other agencies on improving the region's economy through diversification, increasing exports and foreign direct investment (FDI) through international business attraction. Economic Development entities such as the Arizona Commerce Authority and the Greater Phoenix Economic Council have a history of pursuing FDI as part of their broader international business attraction. MAG is extending its international database that will provide information to economic development organizations on foreign companies operating in Arizona and the number of jobs these companies

3. Information and discussion.

4. Review and approval of the September 8, 2015 Economic Development Committee meeting minutes.

5. Information and discussion.

provide. MAG staff will provide an update and review the international data.

6. The Economic Impact of Canada on Arizona

Canada's impact on Arizona's economy is significant in both the residential housing market, as well as foreign owned businesses. Canadian investors dominated the market during the housing downturn with a \$4.8 billion of direct investment. MAG's international database indicates that Canada also is Arizona's largest international employer. MAG member agencies have been actively engaging in visits to Canada to assist in improving the local and regional economies. Glenn Williamson, Honorary Consulate of Canada and Founder and CEO of the Canada Arizona Business Council, will discuss the importance of the international data and Canada's presence in Arizona, and a representative from the City of Surprise will discuss their activities and visits to Canada, as well as lessons learned.

7. Update on the MAG Freight Study

The primary focus of the MAG Freight Plan is to review and evaluate the region's transportation system and to enhance the transportation network to facilitate freight movement, and improve access to and from major employment centers, all of which will increase economic development potential for the region. The study will consider guidance from the U.S. Department of Transportation based on the enacted Moving Ahead for Progress in the 21st Century Act (MAP-21), respective to the national freight network. MAG staff will provide an update on the upcoming MAG Freight Plan that was approved in the FY 2013 MAG Unified Work Program and Annual Budget.

8. Update from the Arizona Commerce Authority

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

6. Information and discussion.

7. Information and discussion.

8. Information and discussion.

9. Update from the Greater Phoenix Economic Council

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

10. 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.

11. 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

9. Information and discussion.

10. Information.

11. Information.

MINUTES OF THE  
MARICOPA ASSOCIATION OF GOVERNMENTS  
ECONOMIC DEVELOPMENT COMMITTEE

September 8, 2015

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

MEMBERS ATTENDING

Mayor Michael LeVault, Youngtown, Chair  
#Mayor W.J. "Jim" Lane, Scottsdale, Vice Chair  
#Mayor Gail Barney, Queen Creek  
#Steven Betts, GPEC  
Tony Bradley, Arizona Trucking Association  
Mayor Cathy Carlat, Peoria  
Dr. Joseph Cavinato, Thunderbird  
Angela Creedon, Arizona State University  
Superintendent Greg Donovan, West-MEC  
Mark Dreher, East Valley Partnership  
Councilmember Michael Farrar, Carefree  
\*Thomas Franz, Greater Phoenix Leadership  
Sintra Hoffman, ADOT  
Mayor Linda Kavanagh, Fountain Hills  
Jim Kenny, El Dorado Holdings, Inc.  
Dr. Randy Kimmens, Maricopa Community  
Colleges  
Supervisor Kunasek, Maricopa County

Mayor John W. Lewis, Gilbert  
\*Mayor Georgia Lord, Goodyear  
Councilmember David Luna, Mesa  
#Mayor Jackie Meck, Buckeye  
#Mayor Mark Mitchell, Tempe  
\*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  
Councilmember Lorenzo Sierra, Avondale  
Bill Sheldon, WESTMARC  
Dan Spitz, Achen-Gardner Construction  
\*Mayor Greg Stanton, Phoenix  
#Sandra Watson, ACA  
Mayor Jerry Weiers, Glendale  
\*Mayor Sharon Wolcott, Surprise

\* Not present

# Participated by video or telephone conference call

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

Roc Arnett, EVP  
Gregory Arrington, Youngtown  
Anubhav Bagley, MAG  
Jessica Blazina, Avondale  
Phil Bradstock, Phoenix  
Alan Carey, Global Business, Inc.  
Danielle Casey, Scottsdale  
Alana Chávez Langdon, MAG  
Natalia Cuneo, MAG  
Nick DePorter, Fountain Hills

Jason Earp, Tolleson  
Elias Espinoza, Arizona Business Bank  
Jennifer Graves, Gilbert  
Walt Gray, West Side Town Hall  
Sapna Gupta, Morrison Institute  
Kathya Hidalgo, Phoenix  
Denise McClafferty, MAG  
Kristine Morris, Maricopa County Education  
Lora Mwaniki-Lyman, MAG  
Mark Paratore, Scottsdale

Jessi Pederson, Goodyear  
Linda Priano, MAG  
Nathan Pryor, MAG  
Lori Quan, Phoenix  
Pilar Sinawi, Tolleson  
Rachel Smetana, Scottsdale

Amy St. Peter, MAG  
Tim Strow, MAG  
Kelly Taft, MAG

1. Call to Order

The Economic Development Committee (EDC) meeting was called to order by Chair LeVault at 11:33 a.m.

2. Pledge of Allegiance

The Pledge of Allegiance was recited. Mayor Barney, Steve Betts, Mayor Lane, Mayor Mitchell and Sandra Watson joined the meeting by teleconference, but were unable to participate due to technical difficulties.

Chair LeVault thanked Mayor Lewis for his leadership as the EDC Chair over the past year. He also welcomed Superintendent Greg Donovan, representing West-MEC; Councilmember Michael Farrar, Carefree; Dr. Randy Kimmens, representing Maricopa Community Colleges; Councilmember David Luna, Mesa; and Councilmember Lorenzo Sierra, Avondale; as new members of this committee. Chair LeVault noted Amy St. Peter, MAG Assistant Director, was filling in for the Executive Director at today's meeting.

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

3. Call to the Audience

Chair LeVault 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 LeVault noted no public comment cards had been received.

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

Chair LeVault asked members of the committee if they had any questions or comments regarding the August 4, 2015, meeting minutes. There were none. Bill Sheldon moved to approve the August 4, 2015, Economic Development Committee meeting minutes. Mayor Kavanagh seconded the motion and the motion carried unanimously.

5. Report on the Importance of STEM Education to all Arizona Students

Allan Cameron and Faridodin “Fredri” Lajvardi, are the creators of a student robotics program at Carl Hayden Community High School in Phoenix, where approximately eighty percent of the student population lives below the poverty line. Many are undocumented and speak limited English. Mr. Cameron explained what STEM (science, technology, engineering and mathematics) is and showed a short video clip of their documentary “Underwater Dreams” to the committee members. The documentary shares the events of how four undocumented Hispanic students from a Title I public high school won an underwater robotics competition that included entries from the prestigious Massachusetts Institute of Technology (MIT).

Mr. Cameron stated that kids needs to be excited about learning math, science, engineering and technology, as much as they are with basketball and football. To do that, we really need to change the culture. He noted schools across America invest an enormous amount of resources in sports and we foster the idea that if these kids put in the time and effort, they are going to have a shot to play professional sports. The odds on this happening are astronomical. Imagine what would happen if we put those same resources into engineering programs. Students would then learn a skill set that is valuable anywhere in the world.

Mr. Lajvardi added we need to rethink our entire approach in the way we are teaching our students. A classroom needs to be a reflection of what is going on in society in order to be relevant to the kids. Instead of requiring kids to remember things that they can look up on Google, we need to teach them how to work with people, how to solve real world problems, how to build things, and how to innovate. He stated in today’s world, it is important to realize that most of these students are not going to have the same career their whole lives – they will have multiple careers. This means we need to focus on teaching them how to think and problem solve, then it does not matter what the content is, because they will now be able to identify the problem and come up with possible solutions.

Mr. Camerson discussed the international *For Inspiration and Recognition of Science and Technology* (FIRST) organization founded by renowned inventor Dean Kamen. FIRST develops programs to motivate students to pursue opportunities in the STEM fields. Mr. Lajvardi discussed the Arizona FIRST LEGO League (AZ FLL) state championship tournament. He reported that sixty-two teams of students ages 8 to 14 competed at Arizona State University in a robotics competition designed to spark their interest and boost their basic skills in science, technology, engineering and math.

Mr. Lajvardi explained that teams are judged on their problem solving ideas for meeting the competition challenge, and on adherence to FLL’s core values that include teamwork, professionalism, respect for fellow competitors, friendship, sharing and valuing learning and discovery. Mr. Cameron added it also teaches students how to do research, how to speak in public, how to work as a team and meet a deadline. He noted these are skills that are useful no matter what career the students choose.

Mr. Cameron stated the Arizona Interscholastic Association (AIA) recently made Arizona the second state to recognize robotics as an official high school sport, second only to Minnesota. He added students will now be able to get a letter (like they do in sports) for

doing robotics. He noted the more these kids are exposed to robotics, the more interested and involved they become.

Mr. Lajvardi stated that STEM is a process. Kids are learning how to define the problem, create solutions, design a test and create it—they are learning how to learn. As teachers and coaches, they have learned that these kids need role models, mentors and experience. They also need to be exposed to various age groups. They need to exceed, and to fail, and he expressed the importance of kids working together as a group.

Mr. Lajvardi explained that the only professionals that the majority of these students ever came in contact with were their teachers, and almost all of the students did not even know what an engineer was. To address this, the coaches went out into their local community and found successful STEM professionals to bring back to the school, so that the kids could personally ask questions and learn from them. Students asked the STEM professionals if they really needed calculus, how they chose this profession, what they liked about their jobs and how they got into college. By working with these STEM professionals, the students began to bond with these adults making it a truly authentic teaching experience.

Mr. Lajvardi noted when the teams go to competitions and fail, it does not mean they did not learn anything; they also learn when they fail. The real focus should be the experience and knowledge that these kids gain by participating in the club and competitions. Mr. Cameron explained that, as coaches, it was very important to not have this as a required or elective class, but instead as an after school activity, so that students that wanted to be in the club chose to be there. As a result of this robotics club, many of these kids have gone onto college and have graduated in engineering. He noted many parents of these students do not have an education above the third grade level, but their children were now graduating from college with an engineering degree.

Mr. Lajvardi stated once he retires there may not be a robotics club at Carl Hayden High School because no one has come forward showing interest to take it over. If potential volunteers do not see anyone supporting these programs and if someone has to do all the work on their own, the program may die. He noted if local municipalities are interested in assisting these robotic and STEM clubs, he recommends meeting with the coaches and teachers directly to find out their needs.

Chair LeVault thanked the speakers for their report and asked if there were any comments or questions from the committee.

Mayor Kavanagh stated her community has a great robotics program, but agrees that once the coach retires, she does not see anyone stepping up to take his place. She added she has been a judge at the robotics competitions and the community really gets involved. Mayor Kavanagh also commented that it is important to generate an interest for girls to get involved in engineering and robotics. Mr. Lajvardi indicated that there must be support from the community so that these programs can continue.

Mr. Cameron added sport coaches get the glory, prestige and extra money for coaching, however, this currently is not the case for the robotics club. They get a pat on the back.

Councilmember Farrar stated it is great to see kids getting involved in clubs like this. He added the local Kiwanis Club in his community hosts science fairs and we need to continue supporting these events.

Councilmember Luna noted the importance of the robotics program and asked the coaches if they have considered partnering with Arizona State University (ASU) to create some kind of teacher/student mentorship program. Mr. Lajvardi responded they have presented details about the program to some of the faculty staff at ASU, but an official partnership has not been created.

Mayor Lewis asked when the next robotics state championships will be taking place. Mr. Lajvardi stated there is not a confirmed date yet. He added now that the AIA has recognized robotics as a sport, it will have a higher profile, and he believes more schools will be pressured to become involved.

Mr. Sheldon echoed this was a great presentation and invited Mr. Lajvardi and Mr. Cameron to speak to the WESTMARC Board of Directors. Ms. St. Peter thanked the speakers and noted it is important for committee members to consider what role their communities can play in supporting and continuing these efforts. She added it is truly inspiring to see what a difference one person can make.

Chair LeVault asked how important is it to get kids involved and engaged in STEM by the third grade. Mr. Lajvardi responded at the elementary school level, there are approximately four hundred Lego teams in the competition. By high school there are about fifty teams. However, what is important is that you give every kid this opportunity. Everyone benefits from STEM education, even if they do not go into that field. Mr. Cameron added at the elementary age levels, kids do have the desire and skills to become scientists and engineers. He noted when they hit sixth and seventh grade, they start to become socially aware and this is when we lose the kids. Kids do not see math and science as popular or cool.

Chair LeVault asked how strong is the correlation with parent support and a child's success. Mr. Lajvardi stated students do better if they have the support at home, however, if the child does not have the support, then the teachers try and convince the student that they need to take charge of their own education. Chair LeVault thanked the coaches for the important work they are doing with their students.

6. Showcasing STEM Professionals through Maricopa County Education Service Agency

Laurie King, Director of Learning and Communication Systems, at Maricopa County Education Service Agency (MCESA), discussed an initiative that began in January 2015 to promote STEM courses among school students. She stated they have found there are far too few students who are participating in STEM.

Ms. King stated that one of MCESA's main initiatives is to connect STEM mentors with students and teachers, through interactive videoconferencing, which will also help teachers develop deeper understanding in math and science. In partnership with Science Foundation Arizona, MCESA created a STEM immersion guide to help elementary and middle school

teachers understand what STEM programming is at multiple levels. She explained that principals cannot support teachers, who cannot support students, if they are not familiar with engineering. To address this challenge, MCESA recently began a new project called “Design Day” where school principals and leaders are taken through a process of engineering design so they can come up with solutions to their own challenges.

According to research, some students do not have a STEM identity due to the lack of role models in the STEM field, especially in our rural communities. It is also important to find STEM role models for girls. Ms. King explained if students cannot picture themselves as a stem professional, then they will most likely not pursue STEM courses. To address this issue, MCESA came up with a solution to develop students' STEM identities through the program STEM Pro Live!. This initiative broadcasts the stories of STEM role models during real time and from their workplace, they tell their individual stories on how they entered their careers. She noted they target the professionals who have interesting jobs, who drive up on motorcycles and convertibles to get the interest of the kids.

Ms. King stated these STEM professionals tell great stories to the kids on how they got in their profession. One of the live broadcasts included inserting a pacemaker into a mannequin. After the broadcasts, kids are able to ask any question they want via a live chat room. Some questions the kids ask include: What do you like about your job? Did you have to take a lot of math? and What is the hardest thing about your job? Ms. King noted MCESA has received positive comments from teachers who are taking part in these broadcasts, stating they really see this as value for their students. She added these broadcasts are also being viewed by people from all over the U.S. and internationally and the videos are archived online so they can be viewed anytime.

Ms. King reported that most of the professionals featured in the broadcasts are located in the MAG region, which include Axosoft, Local Motors, Orcutt | Winslow, Arizona Public Service (APS), Freeport-McMoran, Arizona State University and Intel. She remarked the goal is to get STEM professionals to participate from all over the state, and requested committee members let their STEM professionals in their community know about this initiative.

Chair LeVault thanked Ms. King for her report and asked if there were any comments or questions from the committee. Mayor Kavanagh asked how can these videos be accessed and viewed. Ms. King responded the videos are available on the front page of the MCESA website. She added that anyone can sign up online for monthly Pro Live! alerts, and they also send monthly emails to the principals in the county letting them know when the next broadcast will take place. Teachers can also sign up online to get the monthly emails sent directly to them.

Mayor Carlat asked if the STEM Pro Live! videos can be broadcast by the city's Channel 11. Ms. King responded yes, that the archived videos are also available to steam. Mr. Sheldon stated he was very impressed with the program and invited Ms. King to present to WESTMARC to assist in getting more STEM professionals from the west valley involved in this program.

Chair LeVault stated that this is very important work and stressed the importance of getting elementary aged students interested and involved in STEM courses.

7. Overview of the Entrepreneurial Ecosystem in the Greater Phoenix Region

Jonathan Cottrell, CEO of Hopscratch, provided a report on #yesphx, a local initiative that is providing young leaders and entrepreneurs an opportunity to directly shape the economic, civic and social fabric of our region. He noted our region is already known as a viable place for startups and innovation, and is home to numerous incubators and co-work spaces, but there are areas that still need improvement.

Mr. Cottrell discussed the connection between entrepreneurs, investors and ventures, and providing the necessary resources to strengthen the startup ecosystem. He stated by maximizing the presence of STEM education and creating a more robust entrepreneurial community, the MAG region will be more prepared to market itself as a true innovation destination not only within the United States, but also to the world.

Mr. Cottrell stated successful start-up companies need to do a better job of mentoring and reinvesting back into the community and there is a need for more venture capital to fill the early stage funding gaps. He added a long-term vision as a unified community about who we are and what we are building is also needed. He encouraged committee members to go to [www.AZTechBeat.com](http://www.AZTechBeat.com) to learn more about the startups in our communities.

Mr. Cottrell reported on Phoenix Startup Week, which is a free, five-day event for entrepreneurs and startups across the greater Phoenix area. At last year's event, over 2,500 people attended. Discussions at the event included how to find funding, marketing for startups, sales training, and mentoring sessions with CEOs and investors. He invited committee members to the next Phoenix Startup Week, which will take place February 22-26, 2016.

Mr. Cottrell discussed #yesphx (to be pronounced "yes, P-H-X), which is an initiative for the startup community in our region, to become more vibrant, visible, and unified. Our region needs to be the most generous community for entrepreneurs. He stated relationships are very important and asked committee members to allow one-on-one time with them and their staff to build relationships and collaborate on matters of entrepreneur education, investment, and communication. He also asked committee members to support Phoenix Startup week by attending and participating in the event and various tours that will be available. He asked committee members to also start using the #yesphx to maximize collaboration in our region and state.

Chair LeVault thanked Mr. Cottrell for his presentation and asked if there were any comments or questions from the committee. Councilmember Sellers stated TechShop at the ASU Innovation Center represents a significant asset in his community. Mr. Cottrell agreed and noted there are over fifty incubators and accelerators across our region, but we need to do a better job of connecting them with the rest of the entrepreneurial community.

8. Update from the Arizona Commerce Authority

Due to technical difficulties, this agenda item was not heard. An update will be provide at the next meeting.

9. Update from the Greater Phoenix Economic Council (GPEC)

Due to technical difficulties, this agenda item was not heard. An update will be provide at the next meeting.

10. Request for Future Agenda Items

Chair LeVault asked if there were any requests for future agenda items.

Councilmember Sierra stated he also serves as the Vice Chair on the Arizona Hispanic Chamber of Commerce and on September 23, 2015, the Arizona Hispanic Chamber of Commerce will be holding their 19th annual edition of DATOS: The State of Arizona's Hispanic Market, at the Arizona Biltmore. He noted that this year's keynote speaker is Arizona State University President Michael Crow, whose presentation will focus on Latino educational attainment, student success and the future of Arizona's economy. Special guests will include ASU Professor Emeritus Dr. Loui Olivas, and Remy Arteaga, Executive Director of the Stanford Latino Entrepreneurship Initiative.

Councilmember Sierra suggested MAG staff invite a representative from the Arizona Hispanic Chamber of Commerce to come and discuss the highlights from this event at the November EDC meeting.

11. Comments from the Committee

Chair LeVault asked if there were any comments from the committee. Mr. Dreher announced that Roc Arnett, East Valley Partnership President & CEO, is retiring at the end of the year and thanked Mr. Arnett for his service. He added the organization is currently receiving applications for potential candidates for this position and asked committee members to contact him if they know someone who would be interested. The deadline for applications is October.

Chair LeVault introduced Kristian Richardson, Director of U.S. Commercial Services, who discussed an event taking place on April 25-29, 2016, in Hannover, Germany. Mr. Richardson stated for the first time ever, the United States is the Partner Country for HANNOVER MESSE 2016, the world's leading trade fair for industrial technology. He indicated this is an unprecedented opportunity to showcase our goods and services by connecting directly to more than 200,000 attendees, that come from more than 70 countries, and networking with more than 100 business delegations that come to the event ready to make business and investment deals. Participants can connect across industry sectors from energy, industrial automation, digital factory, industrial supply, and research technology.

Mr. Richardson stated participants include global investors, buyers, distributors, resellers, and members of the business media. He added that U.S. participation as the Partner Country

also means U.S. exhibitors receive prime location and increased visibility throughout the show. A detailed handout was provided to each committee members. For more information or to register for the event members can go to [www.export.gov/hannovermesse](http://www.export.gov/hannovermesse).

### Adjournment

There being no further business, the Economic Development Committee meeting was adjourned at 1:00 p.m.

The next meeting of the EDC will be on Tuesday, October 6, 2015, at 11:30 a.m. at the MAG Office, 302 N. First Avenue, Phoenix, Second Floor, Saguaro Room.

---

Chair

---

Secretary