

November 10, 2009

TO: Members of the MAG Building Codes Committee

FROM: Steven Hether, Mesa, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Wednesday **November 18, 2009** - 2:00 pm
MAG Office, Suite 200, Cholla Room
302 North 1st Avenue, Phoenix

A meeting of the MAG Building Codes Committee (BCC) has been scheduled for the time and place noted above. Members of the MAG Building Codes Committee may attend in person, by videoconference or by telephone conference call. Those attending by videoconference or telephone conference call must make arrangements with Steve Gross at MAG and, for videoconferencing, your site coordinator by at least the Monday prior to the meeting.

If you drive to the meeting, please park in the garage under the building and 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 Heidi Pahl Bickart at the MAG office. Requests should be made as early as possible to allow time to arrange for accommodation.

Please be advised that under procedures approved by the MAG Regional Council on June 26, 1996, all MAG committees must have a quorum to conduct business. A quorum is a simple majority of the membership, or 13 people for the MAG Building Codes Committee. If you are unable to attend the meeting, please send a proxy from your jurisdiction or agency to represent you.

If you have any questions or require additional information, please contact Heidi Pahl Bickart at (602) 254-6300 or hpahl@mag.maricopa.gov.

TENTATIVE AGENDA

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| 1. <u>Call to Order</u> | |
| 2. <u>Introductions</u> | 2. For information. |
| 3. <u>September 16, 2009 Meeting Minutes</u> | 3. Review and approve the minutes of the September 16, 2009 meeting. |
| 4. <u>Call to the Audience</u>

Members of the public may request to speak on items that fall under the jurisdiction of the MAG Building Codes Committee (BCC) and are not scheduled on the agenda; or, on items on the agenda for discussion but not for action. A total of 15 minutes will be provided for the Call to the Audience, with a limit of three minutes per speaker, unless the Chair requests an exception to this limit. Those requesting to comment on action agenda items may be provided an opportunity to do so at the time the agenda item is heard. | 4. For information and discussion. |
| 5. <u>Comments From the Committee</u>

An opportunity will be provided for Building Codes Committee members to present a brief summary of current events. The Building Codes Committee 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 in accordance with the Arizona Open Meeting Law. | 5. For information and discussion. |
| 6. <u>Bathtub Overflows</u>

Follow-up discussion on letter from American Brass & Aluminum. | 6. For information and discussion. |
| 7. <u>Structural Engineering and Solar Residential Photovoltaic Applications</u>

Discussion regarding the application of Solar Photovoltaic systems on existing residential roofs. The question of whether structural engineering should be required will be addressed. | 7. For information and discussion. |
| 8. <u>Electric Vehicle and Charging Infrastructure</u> | 8. For information and discussion. |

On August 5, 2009, Electric Transportation Engineering Corporation (eTec), a subsidiary of ECOTality, Inc., a leader in clean electric transportation and storage technologies, was selected by the U.S. Department of Energy for a grant of approximately \$99.8 million to implement the largest deployment of electric vehicles and charging infrastructure in history. The eTec initiative proposes to deploy charging infrastructure in major population areas that include Phoenix (AZ), Tucson (AZ), San Diego (CA), Portland (OR), Eugene (OR), Salem (OR), Corvallis (OR), Seattle (WA), Nashville (TN), Knoxville (TN), and Chattanooga (TN). Kevin Morrow, Executive Vice President, eTec, will provide an update on the implementation of electric vehicle charging infrastructure to prepare for the introduction of electric vehicles into the MAG region.

9. MAG Building Inspectors/Plans Examiners (BI/PE) Forum Update

Discussion and possible action regarding a new chairperson.

10. Updated MAG Building Codes Committee Membership

We are requesting that Committee members review Attachment One, Committee Roster, sent with this agenda. Please forward any changes to Heidi Pahl Bickart prior to the meeting or provide them at the meeting.

11. Update Survey of Code Adoption

Attachment Two identifies the codes that member agencies have adopted. Please review this information and provide any updates or corrections to Heidi Pahl Bickart.

12. Topics for Future Agendas

Potential topics for the next meeting will be discussed. The next meeting of the MAG Building Codes Committee is scheduled for Wednesday December 16, 2009 at 2:00 p.m. in the Cholla Room of the MAG offices.

13. Adjournment

9. For information, discussion and possible action.

10. For information and discussion.

11. For information and discussion.

12. For information and discussion.

MINUTES OF THE
MARICOPA ASSOCIATION OF GOVERNMENTS
BUILDING CODES COMMITTEE

September 16, 2009

Maricopa Association of Governments Office
Cholla Room
Phoenix, Arizona

COMMITTEE MEMBERS

*Michael Clack, Scottsdale, Chair
Ken Sowers, Avondale
Phil Marcotte, Buckeye
*Mike Tibbett, Carefree
*Mike Baxley, Cave Creek
A-Judy Hendrickson for Alex Banachowski,
Chandler
Mary Dickson, El Mirage
*Peter Johnson, Fountain Hills
*John Smith, Gila Bend
Robert Crum for Jo Rene DeVeau, Gila River
Indian Community
A-Ray Patten, Gilbert
Bryan Woodcox for Deborah Mazoyer,
Glendale

Bill King for Ed Kulik, Goodyear
*Chuck Ransom, Litchfield Park
Tom Ewers, Maricopa County
A-Steven Hether, Mesa
Bob Lee, Paradise Valley
*Dennis Marks, Peoria
Tom Wandrie, Phoenix
*Dean Wise, Queen Creek
Surprise
A-Michael Williams, Tempe
Mario Rochin, Tolleson
John Stigsell, Youngtown
*Rick DeStefano, Wickenburg
Rus Brock, Home Builders Association

OTHERS IN ATTENDANCE

Heidi Pahl, MAG
Ward Gilbert, Gilbert Plumbing
Kevin Haugen, Watco Manufacturing Co.
Jason Guillian, The Plumbing Co.
Tom McNeil, Bobier Sales
Jim Porter, PIR Sales
John Lee, PIR Sales
Dennis Correll, AZ PHCC
Gordon Medill, MGM Sales
Chris Stanfield, Benjamin Franklin Plumbing

*Those members neither present nor
represented by proxy.

A-Those members participating via
audioconference

V-Those members participating via
videoconference

1. Call to Order

Bryan Woodcox, Acting Chair, called to order the September 16, 2009 meeting of the MAG Building Codes Committee (BCC) at 2:00 p.m.

2. Introductions

Voting members Steven Hether, Michael Williams, Ray Patten, and proxy Judy Hendrickson attended via telephone conference call. All members introduced themselves.

3. August 19, 2009 Meeting Minutes

Rus Brock noted that he did not say what appears on page 3, second paragraph, first sentence. Bob Lee said that he said that sentence at the last meeting. It was moved by Ken Sowers, seconded by Phil Marcotte and unanimously recommended to approve the August 19, 2009 meeting minutes as amended.

4. Call to the Audience

No comments were made from the audience.

5. Comments From the Committee

Bob Lee reminded BCC that the Arizona Building Officials (AZBO) education institute will be held in October in Tucson.

6. Bathtub Overflow

Ward Gilbert from Gilbert Plumbing attended the meeting to discuss requirements of the International Plumbing Code and International Residential Code regarding bathtub overflow. He noted that this was mentioned at the last BCC meeting. He distributed a letter from TW Lewis. He noted that bathtub manufacturer representatives were in attendance at this meeting.

Ward Gilbert said there are no manufacturers that make a bathtub overflow. He said it is a code conflict. He noted that his company's attorney is involved in this issue. Mr. Gilbert said it is a civil rights violation. He said plumbers at his company will not commit fraud. He said this is a topic of discussion at the ICC code hearings in Baltimore next month.

Bob Lee said it does seem strange that they require a 1.5 inch overflow but they don't regulate the smaller opening to the 1.5 inch water hole. Water flow rates will not be accommodated by this small opening. Mr. Lee asked why bathtub manufacturers and engineers did not address this issue over the past seven years with the ICC. Bob Lee said he doesn't think BCC is in a position to overrule what the code requires.

Ward Gilbert said he asked that same question. The Phoenix metro area is relatively new to the I-codes and building officials in this region address it. He noted that this section of the code is basically ignored elsewhere in the country.

Bill King asked if the plumbing industry could manufacture something to resolve this issue. Ward Gilbert said yes the plumbing industry can manufacture a big hole or a scupper like used around a swimming pool, that would resolve this issue, but it is not practical.

Bob Lee explained that the problem is the misinterpretation of the word “overflow.” Mr. Lee said that if the overflow is caused from a large person stepping into the tub then the bathtub overflow works to prevent the water from overflowing the tub and going on the floor. Ward Gilbert said that is not true. Mr. Gilbert added there are no tests, protocols or documentation to prove that this type of overflow would not occur. He said that a code interpretation group addressed this with ICC who was surprised to learn that “bathtub overflow” was never properly addressed.

Rus Brock said he would like to hear input from manufacturers.

Bob Lee said if it used to be a trip lever housing and it does not do that anymore, than why do the manufacturers put anything there. Ward Gilbert said that the manufacturers never looked up this part of the code and continued to do business as usual.

Ward Gilbert said plumbing companies are being sued over bathtub overflows. He is concerned about the legal issues and financial penalty given to plumbers. Mr. Gilbert said that he now installs bathtubs without overflows. He noted that building inspectors needed to be educated about the fact that bathtub overflows are not necessary.

Rus Brock said that not all homes are required to be built to the IRC and so the IPC can be used in certain circumstances. Bob Lee replied yes in certain instances this is true.

Bryan Woodcox said it would be up to the jurisdiction as to how they were going to review that code and interpret it.

John Stigsell asked if the proposed text for the new 2009 IRC commentary is going to pass. Ray Patten said the 2009 commentary on the IRC would be corrected to reflect commentary from the code committee. John Stigsell said he emailed Larry Stump and he said this issue has come up in his class many times and he tells his students that an overflow is not required. He noted that it is a mistake that needs to be corrected.

Ken Sowers read section 405.7 of the code. He said if fixture has an overflow then it should be handled as such. Mr. Ward said manufacturers are punching a hole in the bathtub because they are told to do so, not because it prevents overflow.

Mario Rochin asked where the water goes in a tub with an overflow hole. Ward Gilbert explained the water goes over the trip lever housing down the back of the tub connecting to the pipe going out.

Bob Lee said advice from the town attorney is that the building official is legally responsible for following what the code states, regardless of why it is in the code. Ward Gilbert said if a city or town forces a plumber to install a tub with an overflow, the plumber is then committing fraud and that gives the plumber the right to sue the city under the US Constitution. He said if the cities could put in writing that they are willing to have a disclaimer that states they are willing to pay for any damages from a bathtub overflow then the plumber will install whatever tub the city wants.

Steve Hether asked for Ward Gilbert's solution to the problem. He asked why manufacturers have been so laissez-faire about this part of the code. He asked if there are suggested code amendments being proposed to ICC from the plumbing industry. Ward Gilbert said industry professionals are recommending that overflows are optional. Mr. Hether said the industry is responsible to ensure the code makes sense.

Gordon Medill, American Brass and Aluminum Foundry said the word "overflow" is a misnomer. He said a tub left unattended while filling will overflow, the current "overflow" only slows down the overflow. He said tubs are filled under pressure and drained under gravity with an inch and half pipe.

Jim Porter agreed with previous speakers and said the current inch and half overflow is and was never intended to prevent overflow.

John Lee presented flow calculations from the American Society of Plumbing Engineers (ASPE) data book.

Tom McNeal said there is a lot of history with this issue. He said this is not any one industry or any one code that is responsible for this mistake. He said this seems like it will be addressed in the near future.

Kevin Hogan clarified that there are 3 pieces of equipment: bathtub, bath waste, and incoming waterflow or spout, 3 separate pieces of equipment manufactured by 3 independent manufacturers. He said engineers do not know the flow rate of incoming water flow so they cannot make a drain to handle overflow. He noted that a bath drain trip lever style was invented so that a person did not have to put their hand to bottom of tub to drain water.

Bill King asked if any manufacturers had a warning about overflow. Kevin Hogan said he was not aware of any such warning and wondered which of the 3 manufacturers would put out this warning. He believes this issue can be resolved through rewriting codes.

Dennis Correll noted this has been an issue for many years. He said lavatory sinks have the same challenge.

Bob Lee said the good thing about lavatory sink is that they do not specifically require an overflow in the code. Mr. Lee remarked that there may be a way to say, outlet and overflow and address the issue, but he is not certain that this would work.

Ward Gilbert asked jurisdictions to request their city attorney to issue a ruling that protects city and plumbers on the bathtub overflow issue.

Bryan Woodcox thanked Ward Gilbert for his efforts and discussion at the meeting. Mr. Gilbert suggested another option where jurisdictions could approach city/town Councils to request an amendment to the code.

Tom Wandrie noted that the building official cannot enforce this code if they know that it doesn't work.

John Stigsell asked if bathtubs could be installed per the IPC. Bryan Woodcox said that would be a decision made by the local jurisdiction. Bill King replied that the city had a standard form where the building official could check box for a special request (e.g. modification of code). Tom Wandrie noted that a modification implies the same.

Ray Patten asked for copies of handouts. Heidi Pahl said she would put handouts on the MAG web site. He asked if it was possible for a disclaimer from plumbers on bathtub overflow.

7. Structural Engineering and Solar Residential Photovoltaic Applications

There was no representative present to discuss the application of Solar Photovoltaic systems on existing residential roofs. The question of whether structural engineering should be required was not addressed. Tom Ewers said industry professionals are working with each jurisdiction to develop a solution.

8. MAG Building Inspectors/Plans Examiners (BI/PE) Forum Update

MAG BCC did not have a recommendation for a new chair person for the BI/PE Forum. Ken Sowers asked if it would be possible to use the AZBO Code Review and Development Committee for discussing BI/PE items until a new Chair for BI/PE is appointed. Bob Lee said the code review and development committee workload is too much at this time, but after the code hearings it may be possible. He said he will ask this committee and provide feedback at the next BCC meeting.

9. Updated MAG Building Codes Committee Membership

Acting Chair Bryan Woodcox reminded members to keep their membership information current and to report any changes to Heidi Pahl.

Mr. Woodcox welcomed Robert Crum with Gila River Indian community to his first MAG BCC meeting.

10. Update Survey of Code Adoption

No updates were reported.

11. Topics for Future Agendas

Bob Lee suggested cancelling the October MAG BCC meeting because it conflicts with the AZBO Education Institute. The committee concurred.

Ken Sowers suggested solar photovoltaic engineering as a future agenda item.

Heidi Pahl announced that eTec is prepared to give an electric vehicle infrastructure update at a future MAG BCC meeting.

12. Adjournment

The meeting adjourned at 3:08 p.m.

MAG BUILDING CODES COMMITTEE MEMBERSHIP AS OF
11/10/2009

ATTACHMENT ONE

Name	Representing	Telephone #	Fax #	E-mail Address
Steven Hether (Chair)	Mesa	480-644-2039	480-644-4900	steve.hether@cityofmesa.org
Dennis Dixon (T)	Apache Junction	480-671-5156	480-982-7010	dennisdixon@ajcity.net
Ken Sowers	Avondale	623-333-4025	623-333-0401	ksowers@avondale.org
Phil Marcotte	Buckeye	623-349-6200	623-349-6221	pmarcotte@buckeyeaz.gov
Mike Tibbett	Carefree	480-488-1471	480 488-3845	mike@carefree.org
Mike Baxley	Cave Creek	480-488-6637	480-488-2263	mbaxley@cavecreek.org
Alex Banachowski	Chandler	480-782-3109	480-782-3110	alex.banachowski@ci.chandler.az.us
Mary Dickson	El Mirage	623-876-2932	623-876-4607	mdickson@cityofelmirage.org
Peter Johnson	Fountain Hills	480-816-5110	480-837-3145	pjohnson@fh.az.gov
John Smith	Gila Bend	1-928-683-2255	928-683-6430	jsmith@gilabendaz.org
JoRene DeVeau	Gila River IC	520-562-3583	520-562-1033	jorene.deveau@gric.nsn.us
Ray Patten	Gilbert	480-503-6820	480-497-4923	rayp@ci.gilbert.az.us
Deborah Mazoyer	Glendale	623-930-3120	623-915-2695	DMazoyer@glendaleaz.com
Ed Kulik	Goodyear	623-932-3910	623-932-1177	ekulik@goodyearaz.gov
Chuck Ransom	Litchfield Park	623-935-1066	623-935-5427	building@litchfield-park.org
Tom Ewers	Maricopa County	602-506-7145	602-506-3282	tomewers@mail.maricopa.gov
Bob Lee	Paradise Valley	480-348-3631	480-951-3751	rlee@paradisevalleyaz.gov
Dennis Marks	Peoria	623-773-7232	623-773-7233	dennis.marks@peoriaaz.gov
Tom Wandrie	Phoenix	602-534-9480	602-495-5430	tom.wandrie@phoenix.gov
Dean Wise	Queen Creek	480-358-3009	480-358-3002	dean.wise@queenecreek.org
Michael Clack	Scottsdale	480-312-7629	480-312-9029	mclack@scottsdaleaz.gov
VACANT	Surprise			
Michael Williams	Tempe	480 350-8670	480 350-8677	michael_williams@tempe.gov
Mario Rochin	Tolleson	623-936-7111	623-936-7117	mrochin@tollesonaz.org
Rick DeStefano	Wickenburg	928-684-5451 x513	602-506-1580	rdestefano@ci.wickenburg.az.us
John Stigsell	Youngtown	623-933-8286	623-933-5951	jstigsell@youngtownaz.org
Rus Brock	Home Builders Assn.	602-274-6545	480-556-5478	brockr@hbaca.org
Heidi Pahl	MAG	602-254-6300	602-452-5098	hpahl@mag.maricopa.gov

(T) Temporary

(P) Proxy

Survey of Code Adoption

Jurisdiction	Building	Mechanical	Plumbing	Electric	Residential	Fire	Energy	Existing Building Code	Fuel	Performance	Notes	URL	Anticipated Adopted Date by Council	Anticipated Effective Date for 2009 ICC Codes (Month and Year)
Avondale	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2003 IFC	2006 IECC		2006 IFGC		2006 Fuel Gas Code. Codes adopted 2/20/07, effective 7/1/07	Avondale	January/February 2010	July 2010
Buckeye	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC	2006 IECC				2006 Fuel Gas Code. Codes adopted 2/20/07, effective 7/1/07	Buckeye		No plans to adopt 2009 codes.
Carefree	2003 IBC	2003 IMC	1994 UPC	2002 NEC	2003 IRC	2003 IFC					Codes became effective July 1, 2006	Carefree		Not going to adopt, staying with 2003.
Cave Creek	2003 IBC	2003 IMC	1994 UPC	2002 NEC	2003 IRC	2003 IFC	2003 IECC					Cave Creek	January/February 2010	July 2010
Chandler	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC	2006 IECC		2006 IFGC		Effective September 28, 2008	Chandler	January/February 2011	Early 2011
El Mirage	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC	2006 IECC	2006 IEBC	2006 IFGC		1997 ICC/ANSI Accessibility Code with Arizonans with Disabilities Act. New codes will go into effect Jan. 1, 2008 with city amendments.	El Mirage	January/February 2010	July 2010
Fountain Hills	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC	2006 IECC				Codes adopted April 17, 2008 with town amendments available on Web site.	Fountain Hills		No plans to adopt 2009 codes.
Gila Bend	1997 UBC	1997 UMC	1997 UPC	1999 NEC	1997 UBC	1997 UFC								Just adopted 2006 IBC.
Gila River	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2003 IFC	None							
Gilbert	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC	2006 IECC		2006 IFGC		ADAAG per state requirements	Gilbert	January/February 2010	July 2010
Glendale	2006 IBC	2006 IMC	2006 UPC	2005 NEC	2006 IRC	2003 IFC		2006 IEBC			With city amendments. Effective Sept. 1, 2007	Glendale	January/February 2010	July 2010
Goodyear	2006 IBC	2006 IMC	1994 UPC	2005 NEC	2006 IRC	2006 IFC	2006 Residential				Adopted 5-14-2007.	Goodyear		
Guadalupe	1997 UBC	1997 UMC	1994 UPC	1999 NEC	1997 UBC	1997 UFC								Need phone #
Litchfield Park	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2003 IFC (waiting on Avondale)	2006 IECC		2006 IFGC		Codes effective July 1, 2008	Litchfield Park		
Maricopa County	2006 IBC	2006 IMC	2006 IPC (effective Jan. 19, 2008)	2005 NEC	2006 IRC						WITH MAG/AZBO AMENDMENTS adopted September 5, 2007.	Maricopa County	January 2010	2009 I codes (and 2008 NEC) effective date of 1-1-10, but with a grace period to 4-1-10.
Mesa	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC		2006 IEBC	2006 IFGC		2006 IBC, IMC, IPC, IRC and 2005 NEC will be effective 2/4/07. Did not adopt the energy code.	Mesa		
Paradise Valley	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC	2006 IECC		2006 IFGC		Effective July 1, 2007	Paradise Valley	January/February 2010	July 2010
Peoria	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC			2006 IFGC			Peoria	January/February 2010	July 2010
Phoenix	2006 IBC	2006 IMC	2006 UPC	2005 NEC	2006 IRC	2006 IFC w/ Amendments	2006 IECC	2006 IEBC	2006 IFGC	2006 ICCP for Buildings and Facilities	Effective July 2, 2008	Phoenix	January 2010	July 2010
Queen Creek	2006 IBC	2006 IMC	2006 UPC	2005 NEC	2006 IRC	2006 IFC	2006 IECC	2006 IEBC			Effective Aug. 7, 2008	Queen Creek		No plans to adopt 2009 codes.
Salt River	2003 IBC	2003 IMC	2003 UPC	2002 NEC	2003 IRC	2003 IFC	None							Need phone #
Scottsdale	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC	2006 IECC				Effective Sep. 1, 2007, except IPC June 30, 2008	Scottsdale	January/February 2010	July 2010
Surprise	2006 IBC	2006 IMC	2006 IPC	2006 IEC w/ 2005 NEC	2006 IRC	2006 IFC	2006 IECC	2006 IEBC	2006 IFGC		Adopted June 28, 2007	Surprise	January 2010	July 2010
Tempe	2006 IBC	2006 IMC	2006 IPC	2008 NEC	2006 IRC	2006 IFC	2006 IECC	2006 IEBC	2006 IFGC		Effective 1/12/2009	Tempe		
Tolleson	2006 IBC	2006 IMC	2006 IPC	2005 NEC w/ 2006 IEC	2006 IRC	2006 IFC	2006 IECC				2006 Fuel Gas Code, 2006 IPMC, 2006 NEAC. Codes adopted 2/20/07, effective 7/1/07.	Tolleson 2006 IFC Amend.	January/February 2010	July 2010
Wickenburg	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2003 IFC	2006 IECC	2006 IEBC	2006 IFGC			Wickenburg		No plans to adopt 2009 codes.
Youngtown	2006 IBC	2006 IMC	2006 IPC	2005 NEC	2006 IRC	2006 IFC			2006 IFGC			Youngtown	January 2010	July 2010