

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

February 24, 2012

SUBJECT:

3-1-1 Models Technical Ratings

SUMMARY:

The 3-1-1 Business Plan Committee tasked the MAG Technology Advisory Group (MAGTAG) with providing preliminary ratings of the five 3-1-1 model implementations. The MAGTAG created a task force with subject area experts from a number of agencies to establish the ratings. These ratings were returned to the MAGTAG at the February 23, 2012 meeting for review and approval. The ratings were reviewed and approved with minor modifications and are attached to this summary transmittal.

These ratings were developed using the following assumptions:

- Annual call volume will be equivalent to approximately 1/3 of the region's population.
- For Option 5, the physical location of the caller should determine the agency receiving the call.
- The cost of handling a call once it is transferred to a specific agency is not included. Each agency would need to assess those costs based on how they would handle the transferred calls.

This item is provided for information, discussion and possible action.

PUBLIC INPUT:

None.

PROS & CONS:

PROS: None at this time.

CONS: None at this time.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: None at this time.

POLICY: None at this time.

ACTION NEEDED:

Information, discussion and possible action.

PRIOR COMMITTEE ACTIONS:

On February 23, 2012, the MAG Technology Advisory Group unanimously approved the 3-1-1 Models Technical Matrix for forwarding to the 3-1-1 Business Plan Committee.

MEMBERS ATTENDING

Pat Timlin, El Mirage, Chair
#David Stevens, Maricopa County, Vice Chair
*Patrick Quain, ADOA
#Dee Hathaway, Buckeye
*Jim Keen, Carefree
#Patrick Hait, Chandler
#Mike Ciccarone, Fountain Hills
#Ajay Joshi, Gilbert
#Linda Colantro for David Atchison, Glendale
*Kathy Fernandez, Goodyear

#Dale Shaw, Mesa, Chair
*Duncan Miller, Paradise Valley
#John Imig, Peoria
#Greg Binder, Phoenix
#Brad Hartig, Scottsdale
#Tracy Mills, Surprise
#Dave Heck, Tempe
*Arkady Bernshteyn, Valley Metro Light Rail
#Patrick Cutts, Scottsdale Police Department

* Those members neither present nor represented by proxy.
Participated by telephone conference call. + Participated by videoconference call.

CONTACT PERSON:

Audrey Skidmore, Information Technology Manager, (602) 254-6300.

3-1-1 Models Technical Matrix

Agenda Item #5

| | Option 1 | | | Option 2 | Option 3 | | Option 4 | Option 5 | |
|-------------------------------------|--|---|---|--|--|--|---|---|---|
| | A | B | C | A | A | B | A | A | B |
| Description | IVR Only | Outsourced Human Switchboard | Insource Human Switchboard | Regional Call Center | Transfers Calls to 211 and Visa Versa | Physical Colocation or Transfer of Responsibility | No Action | Calls Routed by Central Office or Cell Tower | Calls Fully Routed by Physical Location |
| Startup Cost | \$ | \$ | \$\$\$\$\$\$\$\$ | \$\$\$\$\$\$\$\$ | \$\$\$\$\$\$\$\$ | \$\$\$\$\$\$\$\$ | - | \$ | \$\$\$\$\$\$\$\$ |
| Ongoing Cost | \$ | \$\$\$ | \$\$\$\$ | \$\$\$\$\$\$\$\$ | \$\$\$\$\$\$\$\$ | \$\$\$\$\$\$\$\$ | - | \$ | \$\$\$\$\$\$\$\$ |
| Difficulty of Implementation | Low | Low | Moderate | High | High | High | N/A | Moderate | High |
| Feasibility | High | High | Moderate | Moderate | Moderate | Moderate | N/A | Low | Low |
| Assumptions | <ul style="list-style-type: none"> 30 simultaneous calls handled would be close to the 33 calls per minute assumed. | <ul style="list-style-type: none"> Calls limited to one minute. If agencies desire the call takers to further refine routing, for example sending calls to specific departments, call time will increase. | <ul style="list-style-type: none"> Calls limited to one minute. If agencies desire the call takers to further refine routing, for example sending calls to specific departments, call time will increase. | <ul style="list-style-type: none"> 80% of calls answered in 20 seconds and about 4 minutes total per call | <ul style="list-style-type: none"> This is essentially the same as setting up the Regional Call Center in Option 2 with the addition of some procedures, so the cost is analagous. Incremental cost for the transfer should be small. | <ul style="list-style-type: none"> Would either need to build a call center or pay for 211 to build a larger call center and operate it so cost analagous to building a Regional Call Center as in Option 2 Actual transfer of the call center to 211 would require negotiation and is therefore left out of this analysis | N/A | <ul style="list-style-type: none"> Providers would need to be willing to make the required changes. Most cell and landline providers do not appear to charge for the initial programming. CenturyLink charges per tariff. | <ul style="list-style-type: none"> The providers would be willing and able to provide the same level of detail that they provide for the 911 system |
| Pros | <ul style="list-style-type: none"> Simple administration Low initial cost Low ongoing cost Does not preclude using other options at a future date Uniform user experience | <ul style="list-style-type: none"> Flexibility to have some human intelligence built into the call transfer (e.g., if the caller wants animal control, they could be transferred to the County.) Easily able to determine cost of actual calls delivered by agency Uniform user experience | <ul style="list-style-type: none"> Flexibility to have some human intelligence built into the call transfer (e.g., if the caller wants animal control, they could be transferred to the County.) Uniform user experience | <ul style="list-style-type: none"> Centralized administration All calls answered by an operator during operating hours | <ul style="list-style-type: none"> Same as Regional Call Center in Option2 Established routing relationship | <ul style="list-style-type: none"> Same as Regional Call Center in Option2 Clients would be seamlessly transitioned to the correct resource 211 operators could be cross trained to handle large call events | <ul style="list-style-type: none"> No additional cost associated with this option. | <ul style="list-style-type: none"> Routing is automatic based on physical location | <ul style="list-style-type: none"> Accurate routing is automatic based on physical location |
| Cons | <ul style="list-style-type: none"> No automatic routing of calls without user interaction | <ul style="list-style-type: none"> Incremental cost for minute overages is \$0.80 which could result in substantial charges if the volume estimate is low or there is an event that affects call volume Extra step in the call delivery process No automatic routing of calls without user interaction | <ul style="list-style-type: none"> Extra step in the call delivery process No automatic routing of calls without user interaction | <ul style="list-style-type: none"> Complexities related to integrating different agency work order systems Member agencies must update a common knowledge base | <ul style="list-style-type: none"> Same as Regional Call Center in Option 2 | <ul style="list-style-type: none"> Same as Regional Call Center in Option 2 | | <ul style="list-style-type: none"> Granularity of routing would result in significant misrouting of calls ANI/Zip Code plus 4/Area Code are of limited use in our area because of number portability, adjacent geographies, and limited number of area codes there would be significant additional charges incurred to implement any of these solutions | <ul style="list-style-type: none"> High maintenance cost Legal questions to be resolved |
| Additional Considerations | <ul style="list-style-type: none"> Where do operator calls go? Need agreement to reroute misrouted calls Need adequate agency capacity to accept routed calls | <ul style="list-style-type: none"> Getting a solid initial estimate of call volume would be critical IVR for after hours Need adequate agency capacity to accept routed calls | <ul style="list-style-type: none"> Tracking of transferred calls would be required to allocate costs Would need the flexibility to upsize if need increased Need IVR for after hours Need adequate agency capacity to accept routed calls | <ul style="list-style-type: none"> Phased approach starting as a switchboard may be viable IVR required for after hours | <ul style="list-style-type: none"> Same as Regional Call Center in Option 2 Some form of agreement may be required Coordinated marketing could eliminate confusion | <ul style="list-style-type: none"> Same as Regional Call Center in Option 2 Extensive negotiation and a willingness on the part of 211 would be required The goals of 211 and 311 are somewhat different | | <ul style="list-style-type: none"> Providers may not have to participate, but no indication that some level will not be available Technical staff required to keep current with new COs and cell towers Need adequate agency capacity to accept routed calls | <ul style="list-style-type: none"> There are serious questions about the willingness of providers and legality of leveraging this solution Need adequate agency capacity to accept routed calls |

Notes All solutions require adequate operator capacity at member agencies to receive transferred calls. This is primarily an issue for options one and five. If agencies opt to provide a call center for hand off (primarily an issue in one and five), those costs are not represented in this matrix.

Legend \$ sign indicators are a representation of order of magnitude. For start up costs, \$ represents costs in the neighborhood of \$1,000 - \$30,000 while 10 \$s would indicate \$6 - 7 Million. For annual costs, \$ represents costs in the neighborhood of \$200,000 while 10 \$s would indicate \$6 - 7 Million.