DATE: 12/26/18  
TO: 911 Emergency Response Advisory Committee  
FROM: Rishma Khimji, Director of Technology, City of Reno Department of Information Technology, khimjir@reno.gov, 775-334-2026  
THROUGH:  
SUBJECT: Request for reimbursement and technical resources supporting E911 GIS services for fiscal year 2018/2019 in an amount not to exceed $175,212.

**SUMMARY**

The City of Reno is requesting reimbursement for salary and benefits of one E-911 GIS technician and ½ salary and benefits of a GIS Analyst position to support E-911 GIS services relating to 911 Emergency Communications. This includes all City of Reno bargaining unit and/or Charter/Code changes to salary and/or benefits such as increases for cost of living and/or performance raises.

The City of Reno GIS Analyst staff has supported E911 GIS data maintenance in several important ways. They perform advanced Quality Control audits of data, and analyze complex GIS data problems appearing as errors in the CAD System. As you are aware, there are many inconsistencies in the address data in the Truckee Meadows region, and these require the more advanced GIS technical skills of a GIS Analyst to review and map correctly.

The requested funded positions perform the following duties:

1. Update and Maintain E911 GIS and Tabular Data
   - Update and Edit centerline files and their associated attributes.
   - Update and Edit polygon boundary files and their associated attributes.
   - Correct existing records when errors are discovered or reported.
   - Using Text Editor Software, update and maintain several dispatch tables associated with the E911 GIS data.
   - Correspond with various county and city staff to analyze new street centerlines, address ranges, change of address notifications, etc.

2. Create an Address Point database to define address ranges
   - Update and maintain an Address Point database using Ortho-photography and drive-by field analysis.

3. Perform Data Analysis, Quality Control, and Address Research
   - Research and troubleshoot address or jurisdiction errors reported in the Tiburon CAD (Computer Aided Dispatch) system.
   - Use point-to-line diagrams to identify inconsistencies between address ranges and address points
   - Research errors reported via E911 web request forms and correct, if needed.
- Perform Quality Control on updates made to the Dispatch System via error reports and “location verifications”.

4. Solve Problems Mapping Inconsistent Addresses
   - Create “false segments or intersections” to make the dispatch system work, as requested.

5. Perform Data Processing and Data Conversions
   - Run and execute the Tiburon GCT (Geographic Conversion Toolkit) Import and Export procedures.
   - Convert a “commonplace” text file to database format for viewing in the E911 web request form.

6. Document Response District Data Configuration Changes
   - Meet with public safety staff to re-define boundaries.
   - Analyze and communicate any dispatch system conflicts due to proposed changes.
   - Perform changes to the RAM (Response Area Management) table in CAD.
   - Update centerline and boundary files affected by response district changes.

7. Works on developing test plans, project plans and implementation plans for all software and hardware upgrades that are GIS related, such as Maverick Maps for MobileCOM, Dispatch and RMS.

**NRS APPLICABLE:**

NRS 244A.7645 Provides approval of costs associated with maintenance, upgrade and replacement of equipment necessary for the operation of the enhanced telephone system.

The following is a complete definition of the NRS 244A.7645, with applicable sections highlighted:

NRS 244A.7645 Establishment of advisory committee to develop plan to enhance or improve telephone system; creation of special revenue fund; use of money in fund.

1. If a surcharge is imposed pursuant to NRS 244A.7643 in a county whose population is 100,000 or more but less than 700,000, the board of county commissioners of that county shall establish by ordinance an advisory committee to develop a plan to enhance the telephone system for reporting an emergency in that county and to oversee any money allocated for that purpose. The advisory committee must consist of not less than five members who:
   (a) Are residents of the county;
   (b) Possess knowledge concerning telephone systems for reporting emergencies; and
   (c) Are not elected public officers.

2. If a surcharge is imposed pursuant to NRS 244A.7643 in a county whose population is less than 100,000, the board of county commissioners of that county shall establish by ordinance an advisory committee to develop a plan to enhance or improve the
telephone system for reporting an emergency in that county and to oversee any money allocated for that purpose. The advisory committee must:
   
   (a) Consist of not less than five members who:
       
       (1) Are residents of the county;
       
       (2) Possess knowledge concerning telephone systems for reporting emergencies;
       
       (3) Are not elected public officers; and
   
   (b) Include a representative of an incumbent local exchange carrier which provides service to persons in that county. As used in this paragraph, “incumbent local exchange carrier” has the meaning ascribed to it in 47 U.S.C. § 251(h)(1), as that section existed on October 1, 1999, and includes a local exchange carrier that is treated as an incumbent local exchange carrier pursuant to that section.

3. If a surcharge is imposed in a county pursuant to NRS 244A.7643, the board of county commissioners of that county shall create a special revenue fund of the county for the deposit of the money collected pursuant to NRS 244A.7643. The money in the fund must be used only:

   (a) In a county whose population is 45,000 or more but less than 700,000, to enhance the telephone system for reporting an emergency, including only:
       
       (1) Paying recurring and nonrecurring charges for telecommunication services necessary for the operation of the enhanced telephone system;
       
       (2) Paying costs for personnel and training associated with the routine maintenance and updating of the database for the system;
       
       (3) Purchasing, leasing or renting the equipment and software necessary to operate the enhanced telephone system, including, without limitation, equipment and software that identify the number or location from which a call is made; and
       
       (4) Paying costs associated with any maintenance, upgrade and replacement of equipment and software necessary for the operation of the enhanced telephone system.

   (b) In a county whose population is less than 45,000, to improve the telephone system for reporting an emergency in the county.

4. If the balance in the fund created in a county whose population is 45,000 or more but less than 700,000 pursuant to subsection 3 which has not been committed for expenditure exceeds $1,000,000 at the end of any fiscal year, the board of county commissioners shall reduce the amount of the surcharge imposed during the next fiscal year by the amount necessary to ensure that the unencumbered balance in the fund at the end of the next fiscal year does not exceed $1,000,000.

5. If the balance in the fund created in a county whose population is less than 45,000 pursuant to subsection 3 which has not been committed for expenditure exceeds $500,000 at the end of any fiscal year, the board of county commissioners shall reduce the amount of the surcharge imposed during the next fiscal year by the amount necessary to ensure that the unencumbered balance in the fund at the end of the next fiscal year does not exceed $500,000.


STAKEHOLDER REVIEW(s)
Stakeholders are the primary PSAP agencies including City of Reno Emergency Communications, City of Sparks Emergency Communications and Washoe County Emergency Communications.

**PREVIOUS ACTION**

In fiscal year 2010/2011, 2011/2012, 2012/2013, 2013/2014, 2014/2015, 2015/2016 and fiscal year 2016/2017, the E-911 Board authorized reimbursement to the City of Reno for E-911 GIS services performed by the E-911 GIS Technician and ½ salary and benefits for one GIS Analyst. The total authorized amount in fiscal year 2011/2012 was $140,085. The total authorized amount in fiscal year 2012/2013 was $139,410. The total authorized amount in fiscal year 2013/2014 was $139,410. The total authorized amount in fiscal year 2014/2015 was $147,163. The total authorized amount in fiscal year 2015/2016 was $147,163. The total authorized in fiscal year 2017/2018 was $164,021.

**FISCAL IMPACT**

Projected FY 2018/2019 Salaries and Benefits for a E-911 GIS Technician and ½ of GIS Analyst are detailed below:

<table>
<thead>
<tr>
<th>Position</th>
<th>Salary</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>E911 GIS Technician</td>
<td>$72,290.50</td>
<td>$34,515.04</td>
</tr>
<tr>
<td>½ GIS Analyst</td>
<td>$47,507.27</td>
<td>$20,899.09</td>
</tr>
</tbody>
</table>

Total E911 Board reimbursement is $175,212.

**RECOMMENDATION**

It is recommended that the E911 Emergency Response Advisory Committee approve the request for reimbursement and technical resources supporting E911 GIS services for fiscal year 2018/2019 in an amount not to exceed $175,212.

**POSSIBLE MOTION**

Motion to approve funding for reimbursement and technical resources supporting E911 GIS services for fiscal year 2018/2019 in an amount not to exceed $175,212.