Date: 5/06/15

Memo: Emergency Service LOS deficiencies are a Key Issue for UGA Boundary Discussion

Dear Planning Commission,

Last week testified to you about existing service deficiencies within the current city limits and why, when making your plans for growth, you should consider how the Yew Street UGA Reserve area can help ease the cost of upgrades for current citizens. Of particular importance are our life and property saving emergency services such as Police, Fire, and Emergency Medical Aid. These are very serious services. People can and do needlessly lose their life or the community can lose valuable facilities such as when the brand new Kulshan Middle School burned down near Lakeway Drive, when a city does not maintain their "level of service" or LOS. Another important LOS that works in combination with emergency response is our transportation LOS. Overtaxed, inadequate road systems not only contribute to the problem by causing more and worse accidents, but also cause delay for emergency responders to reach an event. Bellingham currently has a documented LOS deficiency in regard to emergency response, especially in the entire south eastern portion of the city - something that must be addressed during this planning update. It is an especially important issue because we have the Wade King Elementary School, full of elementary students, built in this area because the City of Bellingham, working with the Bellingham School District, was going to be developing this area to urban density with the associated urban level of fire protection services. In addition, this service issue interferes with infill development in the existing city, and puts residents at risk because responders cannot reach a call quickly.

Director Sepler, at the meeting last week, told you that upon annexation, the city must immediately provide the annexed area with the adopted LOS for emergency services. Also, the Director explained that existing deficiencies are not the responsibility of new development. From about 49 minutes into the meeting, Director Sepler explained, "Some of the issues can be deferred over time, you reach a point where you get to the level of service, remember sort of that accelerator on growth that you aren’t able to keep up and you have to make the remedy, however some costs are immediate. When you have a deficiency for emergency services. That comes on line and it's not something you can phase in over time. This is the challenge, the challenge is you can't build half a
station, so you need to build a full station, and you can't staff it half the time, you have to staff it full time, and that's where we have those big bumps that can't be distributed over time so it can be absorbed more easily."

The main points are:

A) Bellingham is not currently meeting its LOS responsibilities inside the city limits for facilities and services that are to be addressed in a plan update such as this. There is a regional deficiency in South East Bellingham that must be addressed as soon as possible. The northern Yew Street UGA must also be served within its 20 year timeframe.

B) Because Bellingham must address this time sensitive issue anyway, it would be wise for Bellingham to include areas such as the UGA Reserve that City staff has said should be in the city and that inevitably will be so they can help to pay their proportionate amount and help to share the cost of building and staffing director Sepler mentioned above. Building an emergency services station in this part of the city to serve south and south east Bellingham should be a priority - especially to bring service up to adopted LOS standards in areas such as Lakeway near Kulshan Middle School where LOS is achieved only 4% on time, or in the Lake Padden Park area where LOS is achieved only 5.88% of the time, and in the current city neighborhood of Samish where areas are only reached 11.11% of the time while the LOS is for a minimum of 90% of the time.

Below you will find mapping of the city from the Bellingham Fire Reports from 2010 through 2013. The 2014 report no longer includes mapping. You can see that over just 4 years the number of "city areas" achieving compliance have dropped from only 8 to just 4 now.

In addition, as you can see (below) on page T-10a of the Bellingham Comprehensive Plan, there are several collector routes planned through the Yew St. UGA Reserve for access both to infill development lots in the Samish neighborhood, the UGA Reserve, and for better access by Emergency Response to places such as Wade King Elementary and the Samish neighborhood.

I hope this clarifies the deficiencies the city currently has and the positive way that the Yew Street UGA Reserve can help reduce the cost per person correcting that deficiency will amount to.

Regards,

Clayton Petree

Jack Petree
Analysis of response

The National Fire Protection Association identified 4 minutes as the maximum allowable travel time standard for the first arriving fire/EMS unit and that this threshold should be met at least 90% of the time.

The response map (next page) clearly shows we provide timely response to the densest areas of the city. However, we do not provide uniform response times throughout the city, especially in the far outlying less dense areas. The sections marked “N/A” had little to no emergency responses in that area.

Interstate 5 bisecting the city, coupled with only having one fire station located east of I-5 contributes to longer response times to the east city area. Longer response times increases the likelihood of fires becoming larger, and a potential delay in life saving medical care. We will continue to analyze our response time performance to these areas, especially as pocket density increases in the outlying areas. We are trying to add staffing in these outlying stations to help mitigate the response time deficits by being able to operate safer and more effectively on critical fire and EMS emergencies until additional resources arrive.

Response Time Performance by City Area

The following map illustrates the response time performance for all areas within the city limits.
2010
4 Minute
Travel Response Time Percentage*

*Percentages are based on actual EMS calls and structure fire calls only.

2010 Incidents by Type:
- FIRE
- EMS
- OTHER

Percentage Table:
- 100%
- 63%
- 85%
- 75%
- 100%
- 89%
- 86%
- 93%
- 54%
- 44%
- 93%
- 97%
- 94%
- 73%
- 76%
- 44%
- 96%
- 92%
- 76%
- 50%
- 11%
- 82%
- 88%
- 54%
- 29%
- 86%
- 45%
- 75%
- 70%
- 74%
- 13%
- 20%
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Average City Incident Times

<table>
<thead>
<tr>
<th>Year</th>
<th>Call Processing Time</th>
<th>Turnout Time</th>
<th>Travel Time</th>
<th>On Scene Time</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008</td>
<td>2:33</td>
<td>1:34</td>
<td>6:40</td>
<td>16:43</td>
</tr>
<tr>
<td>2009</td>
<td>3:34</td>
<td>1:28</td>
<td>6:47</td>
<td>16:03</td>
</tr>
<tr>
<td>2010</td>
<td>2:09</td>
<td>1:23</td>
<td>6:25</td>
<td>14:52</td>
</tr>
<tr>
<td>2011</td>
<td>1:54</td>
<td>1:24</td>
<td>6:23</td>
<td>14:10</td>
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</tbody>
</table>

Turnout and 4 minute response time

Critical medic incidents

<table>
<thead>
<tr>
<th>Unit</th>
<th>% turnout within 60 seconds</th>
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</thead>
<tbody>
<tr>
<td>Engine 1</td>
<td>35%</td>
</tr>
<tr>
<td>Engine 2</td>
<td>18%</td>
</tr>
<tr>
<td>Engine 3</td>
<td>33%</td>
</tr>
<tr>
<td>Engine 4</td>
<td>24%</td>
</tr>
<tr>
<td>Engine 5</td>
<td>38%</td>
</tr>
<tr>
<td>Engine 6</td>
<td>30%</td>
</tr>
</tbody>
</table>

Turnout time is the time it takes from notification of the alarm until the unit begins responding (“wheels rolling”)

4 minute travel response time

First arriving to critical incidents

<table>
<thead>
<tr>
<th>Unit</th>
<th>% arrival within 4 minutes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engine 1</td>
<td>81%</td>
</tr>
<tr>
<td>Engine 2</td>
<td>75%</td>
</tr>
<tr>
<td>Engine 3</td>
<td>79%</td>
</tr>
<tr>
<td>Engine 4</td>
<td>71%</td>
</tr>
<tr>
<td>Engine 5</td>
<td>79%</td>
</tr>
<tr>
<td>Engine 6</td>
<td>67%</td>
</tr>
</tbody>
</table>

Response time is calculated from the time the unit begins traveling to the address until arrival at the scene. The percentages listed reflect the times the unit arrived as the first fire unit on scene within four minutes after beginning of the response.
City of Bellingham: 4 Minute Travel Response Time Percentage

Percentage are based on critical EMS calls and structure fire calls only.

<table>
<thead>
<tr>
<th>Quarter</th>
<th>N29</th>
<th>N30</th>
<th>N31</th>
<th>O29</th>
<th>O30</th>
<th>O31</th>
<th>O32</th>
<th>O33</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>NA</td>
<td>19.40%</td>
<td>40.00%</td>
<td>27.27%</td>
<td>58.46%</td>
<td>93.90%</td>
<td>66.67%</td>
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<td></td>
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<td>13.40%</td>
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<td>82.79%</td>
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<td>15.79%</td>
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<tr>
<td></td>
<td></td>
<td></td>
<td>81.54%</td>
<td>81.11%</td>
<td>65.63%</td>
<td>76.92%</td>
<td>18.18%</td>
<td>NA</td>
</tr>
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<td></td>
<td></td>
<td></td>
<td></td>
<td>94.03%</td>
<td>92.99%</td>
<td>92.86%</td>
<td>71.96%</td>
<td>NA</td>
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<td></td>
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<td></td>
<td>92.11%</td>
<td>81.11%</td>
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<td>76.92%</td>
<td>NA</td>
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<td>65.63%</td>
<td>76.92%</td>
<td>NA</td>
</tr>
</tbody>
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N/A indicates Zero (0) calls
City of Bellingham:
4 Minute Travel Response
Time Percentage*

Percentages are based on critical EMS calls and exclude false calls only.

2013 Emergency Response Statistics—Bellingham Fire Department & Whatcom Medic One

N/A indicates Zero (0) calls