Staffing Planning Assumptions

NOTE: These assumptions are built upon and refer to previous work including the Citizen Advisory Task Force Report (June 2012), District Mission, Vision, Values, and 2016 Goal Statements (February 2016), District Target Levels of Service standards (2010), Emergency Service Integration Plan-Section 7 IR&R Deployment Strategy (February 2014), comprehensive evaluations of volunteer staffing options (February 2012, October 2015, September 2016) and the “2 or 3 Firestations?” white-paper (September 2016). While some of the documents have not been officially adopted, they have generally been accepted, especially for purposes of creating a set of assumptions for this document.

1) COMMUNITY DEMOGRAPHICS:

A--POPULATION: Low-density rural area, low growth population trending, located adjacent to high growth urban areas. The current zoning of the lands within the District are characteristic of low density (rural) residential occupancies, with pockets of commercial occupancies. According to Thurston Regional Planning Council (TRPC), there is very limited capacity for further development of land due to environmental (critical areas) and pre-existing zoned occupancy. This is reflected in the estimated population growth figures from 2016:

<table>
<thead>
<tr>
<th></th>
<th>2020</th>
<th>2030</th>
<th>2040</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thurston County (rural)</td>
<td>4%</td>
<td>13%</td>
<td>21%</td>
</tr>
<tr>
<td>Thurston County (total)</td>
<td>11%</td>
<td>31%</td>
<td>48%</td>
</tr>
<tr>
<td>City of Olympia</td>
<td>7%</td>
<td>27%</td>
<td>39%</td>
</tr>
<tr>
<td>City of Lacey</td>
<td>11%</td>
<td>40%</td>
<td>68%</td>
</tr>
<tr>
<td>Fire District 8</td>
<td>6%</td>
<td>10%</td>
<td>15%</td>
</tr>
<tr>
<td>FDB population (estimate)</td>
<td>11,750</td>
<td>12,190</td>
<td>12,670</td>
</tr>
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</table>

The growth listed for the District is within the rural areas only (outside Urban Growth Areas of Olympia & Lacey, which constitute approximately 3% to 8% of the total population). Being immediately adjacent to urban (high growth) areas, it can be expected that the values of properties will appreciate in value at a rate much higher than many other areas of the county (“supply versus demand”) with little net increase in population. Also, the natural environment of the area (extensive frontage on the Puget Sound, low-density forested properties) will attract further infrastructural investment (“gentrification” of older properties) over time.

B--RISK: Relatively low community fire and EMS risk within the District area. Within the District, community risk based on current (reference 2003-2005 FDB community risk assessment work and updates) and projected future development reveal the following characteristics:

- Limited commercial, public and assembly occupancies present, therefore, limited and low population concentrations;
- No significant industrial or agricultural occupancies, no major transportation network infrastructure (highways, pipeline, railroad), however, some maritime traffic navigating through the Puget Sound, therefore, little presence of chemical, biological, explosive, radioactive or otherwise hazardous materials; and
- Most of the residential housing is single-family, much of it of a higher market rate value, therefore, a generally lower fire-safety risk present.
This produces a generally overall low fire protection risk for the District’s area.

**C--DEMOGRAPHICS:** Relatively older, more affluent population. The population, according to most recent census information (TRPC) reveals:

<table>
<thead>
<tr>
<th></th>
<th>Washington</th>
<th>Thurston County</th>
<th>FD8</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average household size</td>
<td>2.53</td>
<td>2.50</td>
<td>2.60</td>
</tr>
<tr>
<td>Median age of occupant</td>
<td>37.3</td>
<td>38.5</td>
<td>43.5</td>
</tr>
<tr>
<td>Median household income</td>
<td>$62,108</td>
<td>$66,993</td>
<td>$91,083</td>
</tr>
</tbody>
</table>

Showing a generally older and higher income population. With an aging population, the potential for increased risk for age related EMS response is apparent. Also, existing concentrations of elderly population will continue to be sources of demand for EMS services.

2) INCIDENT READINESS & RESPONSE OPERATIONS:

**A--TRENDS:** Estimated slow growth in EMS response activity, diminishing (lower) share of other types of hazards (primarily fire). While noted above, the relative risk for fire suppression and EMS activity is low for occupancies within the District, planning assumptions must also account for increases in response activity. Historically, the trends (adjusted for statistics from per-merger Fire District 7) have followed:

- EMS responses increasing annually at 4% average rate
- Fire suppression responses and other (public safety, service calls, etc.) decreasing at 1% average rate (relative)
- Average share of incidents, EMS: 76%
- Average share of incidents, fire: 8%
- Average share of incidents, public safety (e.g. down power lines, open burning permit violations, non-emergency assistance): 12%
- Average share of incidents, false alarms: 4%

**B--DEPLOYMENT:** Firestation-based EMS and fire IR&R service. Units to be deployed and respond based upon adopted **District Mission, Vision, Goal(s) and Target Levels of Service** standards. The following basis assumptions will be used for planning purposes:

- District IR&R resources (apparatus & primary staffing) will respond from two firestations (refer to “2 or 3 Firestations?” white-paper recommendations);
- Implementation of interim measures that will be necessary for immediate coverage of the Johnson Point and Fishtrap Loop areas;
- IR&R staff will primarily respond from the firestations, which will be equipped with living quarters (supplemented by others who may respond from home or other locations);
- Each firestation will house apparatus including a minimum of one certified Type 1 engine (with BLS capability), one certified Type 2 tender and one ambulance-type BLS aid unit for staffing planning (and WSRB rating) purposes;
- IR&R staff to be qualified to Thurston County EMT-D standards for EMS and Thurston County Training Officer “standards” (FF-1, HazMat Ops) for fire suppression

**C--EMS:** EMS will continue to emerge as the key service delivery requirement in the future. EMS operations are for the most part controlled by the Thurston County Medical Program Director and
Thurston County Medic One. Some basic assumptions for EMS for the District, based on ongoing activities in Thurston County are:

- It can be assumed EMS responses will have a correlation with population increases, however, the overall mix of type of responses has been changing to more medical related (to an aging clientele);
- Increased District involvement in transporting BLS patients to health-care facilities;
- Increased field pre-hospital skill-level requirements for Thurston County EMTs, with increased emphasis on ongoing skills maintenance training (especially important with relatively low incident volume/exposure for the District);
- Increased integration of BLS operations into Thurston County-Medic One and Thurston County ALS operations, with direct joint funding for both ALS and (increased) BLS (with commensurate accountability);
- Increased emphasis on direct involvement with the community in preventative healthcare activities (e.g. blood-pressure, fall-prevention, accident prevention, etc.); and
- Acceptance in strategic planning of EMS as primary mission to community, both by share of activity and community feed-back: this must be considered during planning efforts.

D--MUTUAL AID: The District IR&R Program must remain interoperable with its neighbors, as part of a larger community service network. The District is basically an “island” between the Puget Sound and the rest of the county separated by the urban areas of Olympia and Lacey. The District is solely reliant upon both for primary mutual aid, and responsible for primary mutual aid to both. Historically:

- The District has received mutual aid (both automatic & requested): 10% of total calls
- The District has provided mutual aid (both automatic & requested): 14% of total calls

Most of the mutual aid consists of auto-aid for FD3 in the South Bay Road (first-due between Olympia City limits and 26th Ave NE) and the Marvin Road-Hawks Prairie Road area (annexed into the City of Lacey). In turn, FD3 provides critical first-due coverage to the District in its eastern area in the northern Marvin Road and Tolmie areas from Station 3-5 on Willamette Drive. Most of the mutual aid is EMS related, however, reconfigured initial response packages for structure fires (more robust list of resources including tenders) has increased the number out-of-area fire responses as well. In fact, as part of the WSRB rating plan for both Olympia and Lacey, District resources are counted as augmenting the fire suppression contingent.

With the higher rate of population growth in both Olympia and Lacey (than in the District, refer to 1A-Population above), it is expected that the requirements for providing mutual aid in the future will increase.

E--TRAINING & COMPETENCY: Training levels will be largely based on externally-driven requirements and standards. In order for District IR&R staff to remain competent in their skills to meet service demands listed above, members must be able to successfully complete training that includes:

- For EMS responders, be trained (and maintain ongoing training) at Thurston County EMT-D standards of the Thurston County Medic One and Thurston County Medic Program Director;
- For firefighters, be trained (and maintain ongoing training) at Thurston County Training Officer “standards” (FF-1, HazMat Ops, NWCG Wildland FF);
- For apparatus operators, be trained (and maintain ongoing training) at Washington State emergency vehicle incident prevention and District skills standards;
- For all IR&R members, receive and successfully complete regular training as may be required by the Health & Safety Program, State of Washington and Federal Government;
- All IR&R members will be expected to remain current in their training/certifications in order to be assigned IR&R duties;
- These training requirements have naturally limited the numbers of volunteers willing and able to volunteer for IR&R duties: unfortunately, responder competency is not an option.

3) **CURRENT ENVIRONMENTAL FACTORS:**

**A--ORGANIZATIONAL:** Other factors affecting future staffing planning options include:

- With very limited choices for future merger/consolidations (two: Olympia, Lacey), neither department is in a position nor is desirous to effect a merger/consolidation at this time. Therefore, for long-term strategic planning purposes, assume that the District will continue to exist as an independent agency;
- Even though it will be independent, it will continue to be affected by the urban growth impacts of both Olympia and Lacey with collateral traffic and property investment (property re-development and valuation increases);
- IR&R resources will be tasked to support urban levels of service more and more, requiring District resources to be trained, equipped and operate in an interoperable fashion with Olympia and Lacey FD’s (including exposure to large commercial/industrial occupancies, larger scale EMS incidents, higher frequency of critical events);
- **Service demands placed on current career and volunteer IR&R staff will not subside, but, will increase.** This is predicted based on the operational issues discussed above. Also, time commitments for volunteer supervisors and managers will by necessity increase, creating the dilemma of supply versus demand discussed below.
- **The current volunteer staffing model doesn’t work anymore.** Models estimating the staffing levels for one, two and three firestations (“Staffing Benchmarks” September 2016) for increasing the volunteer roster, as well as maintaining numbers due to attrition, revealed levels unachievable with the current methodology and staffing plan. Both the overall demand (number of volunteers needed to fill vacancies and future slots) and supply (shrinking due to many reasons including economy and more competition from other fire departments).