

## Option 1: Two New Firestations

Summary of Option: Option 1 uses the model of IR&R deployment from two locations as was proposed in “Master Plan Overview” (VanCamp, 2017). Two new firestations located at [new] optimally geographic zones in the western and eastern areas of the District (Boston Harbor, Johnson Point) would be built. The headquarters function would be in a separate structure at 3449 South Bay Rd NE (site of the District Training Center).

Except for the District Training Center, all other District real property assets would be declared surplus and disposed of.

Description of Project/Facilities: Each of the firestations would have identical design and construction, of a 50-year life cycle quality Type I single-story structure, approximately 6,000 to 6,500 square feet, to house 3 apparatus and up to six responders (in individual dormitory rooms), kitchen and dayroom space, fully functional for no less than 96 hours on their own (in disaster conditions). Optional features (if indicated) would be space for public meetings at either or both sites.

The separate headquarters facility, a Type II single-story structure encompassing 2,500 to 3,000 square feet, would include office space for administrative and support staff, public meeting/classroom space, logistical support space (i.e. information technology, archives, supplies, etc.) and public reception lobby area. It would be adjacent to but separate from the other District Training Center buildings (same as current with improvements). Space for parking of 1 or 2 reserve apparatus would be provided at this location as well. The land for this building would be procured from an adjacent commercial property owner fronting South Bay or Shinke Roads.

Service: A comparison of the Option’s IR&R deployment service model is shown with the current (2017) IR&R deployment<sup>1</sup> model below:

| Station <sup>2</sup> :                     | Current 8-1 | Current 8-2 | Current 8-3 | New 8 (E) | New 8 (W) | New HQ   |
|--|-------------|-------------|-------------|-----------|-----------|----------|
| Share of call volume                       | 43%         | 20%         | 35%         | 52%       | 48%       | N/A      |
| Coverage within 5 road miles               | 96%         | 98%         | 99%         | 100%      | 100%      | N/A      |
| Deployment level (IR&R staff)              | 1+ company  | Call staff  | ≤ company   | 1 company | 1 company | HQ staff |
| At-site service level capable <sup>3</sup> | Full        | None        | (Full)      | Full      | Full      | Limited  |

All areas of the District would be within 5-road miles of the two firestations with this option.

Costs: Facility costs are segregated into two categories: 1) capital and 2) operations & maintenance. Capital costs are related to the initial cost of designing, permitting, building and commissioning a new facility or major improvements/replacements to an existing facility or facility components (e.g. roof, mechanical systems, electrical systems, architectural features, expansions, etc.). Operations & maintenance costs relate to ongoing costs to own (e.g. permits, taxes, utilities costs, etc.) or maintain (including repairs,

<sup>1</sup> Incident Readiness & Response (IR&R) staffing & apparatus, for fire suppression, emergency medical and rescue incidents per the *District Mission Statement*.

<sup>2</sup> All other current District firestations un-staffed (8-4, 8-5 and 8-6).

<sup>3</sup> Initial independent response capability for fire, emergency medical & rescue with crew staffing on hand; full capability at the current Station 8-3 when staffing permits; limited capability at new headquarters with senior staff (trained/qualified to respond).

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replacement of broken or dysfunctional components without major change to the asset and preventative actions to sustain asset life, etc.). The table below displays a summary of both operating/maintenance and ongoing capital costs (“amortization” for the purposes of pre-funding capital improvements/replacements) for the current District facilities as well as the current assessed value (as determined by the Thurston County Auditor, 2017). The District does not have current market value appraisals for its real properties.

### Current Facility Cost & Inventory Information:

|                              | <i>Staffed Stations <sup>4</sup></i> |                 | <i>Un-Staffed Stations <sup>5</sup></i> |                 | <i>Auxiliary Facilities <sup>6</sup></i> |                 |
|------------------------------|--------------------------------------|-----------------|---|-----------------|--|-----------------|
|                              | <i>Per SF</i>                        | <i>Total SF</i> | <i>Per SF</i>                           | <i>Total SF</i> | <i>Per SF</i>                            | <i>Total SF</i> |
| Operations & maintenance     | \$ 4.42                              | 25,789          | \$ 2.75                                 | 7,676           | \$ 1.13                                  | 8,497           |
| CR&R (capital amortization)  | \$ 1.14                              |                 | \$ 0.11                                 |                 | \$ 0.11                                  |                 |
| Building (only) value        | \$ 84.34                             |                 | \$ 80.81                                |                 | \$ 81.31                                 |                 |
| Land (only) value [per acre] | \$ 98,604                            | 11.4            | \$ 44,759                               | 4.6             | \$ 75,108                                | 7.9             |

Each option will have two components: 1) initial capital costs and 2) ongoing capital and operations-maintenance costs differentiated from the current information shown in the above table. **For the purposes of this evaluation, staffing and non-facility related equipment costs are not included.**

Option Capital Cost Information: Initial, “one-time” capital activities and investment “steps” would include:

- 1) Acquisition of architectural-engineering support for design development
  - a) Competitive process required by law
  - b) Establish scope of work: needs assessment, pre-design, design, permit assistance, construction oversight-management, commissioning
- 2) Search & procurement of strategically located and available parcels of land at three locations
  - a) Two parcel locations of suitable size (3-5 acres) at target locations, buildable land
  - b) Appropriate parcel adjacent to existing District Training Center
  - c) Establish equitable value and agreement for purchase
- 3) Acquisition of applicable zoning variance and permit approvals at two locations
  - a) Must obtain zoning variance prior to development of site (public hearings)
  - b) Site infrastructural permits (sewer, storm-water, well)
  - c) Construction permits (grading, building, system, etc.)
- 4) Construction of infrastructure and structure of firestation buildings at two locations
  - a) Two each: type 1 structures, single-story, 6,000-6,500 SF to house up to 6 IR&R staff, 3 apparatus, kitchen-dayroom space with occupant amenities
  - b) Public meeting space optional (decided during planning process)
  - c) Disaster resistant features, emergency power, accessibility, energy efficiency
- 5) Construction of (or remodel of existing) structure for new headquarters facility
  - a) Office space, 2,500-3,000 SF public accessible meeting space/classroom, logistical support space (i.e., IT, archives, etc.)
  - b) Location for on-duty battalion chief (office, small sleeping quarters)
  - c) Optional: space for reserve apparatus
- 6) Commissioning of new facilities and facilities systems at all locations
  - a) Punch-list and turn-over to Owner

<sup>4</sup> Staffed station costs and valuations: average of Stations 8-1 & 8-3 2016-17.

<sup>5</sup> Sub-station costs and valuations: average of Stations 8-2, 8-4, 8-5 and 8-6 2016-17.

<sup>6</sup> Auxiliary facility costs and valuations: average of Annex 8-3 and District Training Center 2016-17.

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### b) Training of District maintenance staff

#### Project Summary Cost & Schedule:

| <i>Capital Activity/Step</i>        | <i>Est Cost <sup>7</sup></i> | <i>Duration</i>   |
|-------------------------------------|------------------------------|---|
| 1) A&E services                     | \$ 1,200,000                 | <b>Months 0-36:</b> First major step in project; planning of project strategy, needs assessment, pre-design, design, land acquisition, permit acquisition, construction management and project close-out & commissioning. |
| 2) Land acquisition                 | \$ 1,210,000                 | <b>Months 4-9:</b> Process conducted with assistance of A&E, real estate professional and public transparency; independent fair market appraisal required   |
| 3) Zoning & permits                 | \$ 600,000                   | <b>Months 6-36:</b> Key milestones are a) zoning variance (may be of considerable effort & expense), b) grading & site permits, c) building permits and d) certificate of occupancy                                       |
| 4) Construction of two firestations | \$ 3,250,000                 | <b>Months 18-33:</b> Two firestations can be phased concurrently (identical design features); coordinate with HQ as efficiencies dictate  |
| 5) Construction of HQ               | \$ 750,000                   | <b>Months 18-33:</b> HQ facility may be less complicated and scheduled conveniently to support schedule for firestations construction for efficiency of contractor(s)   |
| 6) Close-out and commissioning      | \$ 150,000                   | <b>Months 30-36:</b> Ensuring compliance of all punch-list items and turn-over of documentation, training for maintenance staff   |
| 7) Contingency                      | \$ 720,000                   | Estimated at 10% of project budget  |
| <b>Total:</b>                       | <b>\$ 7,880,000</b>          |   |

These costs could be financed with debt (general obligation bonds) either voted (excess levy for property tax) or non-voted (debt paid from District normal income). Due to the size of the project, a non-voted debt would be unlikely. If voted, it is anticipated that the bonds would be repaid over a 20 year period (normal) with the excess property tax levy. There are some other financing option (Statue Treasurer LOCAL instruments, commercial loans, grants, etc.) but these are less common on large real property projects.

Ongoing facility costs after the project is complete include:

#### Estimated New Facility Cost & Inventory Information:

|                              | <i>Staffed Stations</i> |                 | <i>Auxiliary Facilities</i> |                 |
|------------------------------|-------------------------|-----------------|-----------------------------|-----------------|
|                              | <i>Per SF</i>           | <i>Total SF</i> | <i>Per SF</i>               | <i>Total SF</i> |
| Operations & maintenance     | \$ 3.50                 | 13,000          | \$ 3.00                     | 9,000           |
| CR&R (capital amortization)  | \$ 1.50                 |                 | \$ 0.80                     |                 |
| Building (only) value        | \$ 100.00               |                 | \$ 83.00                    |                 |
| Land (only) value [per acre] | \$ 130,000              | 9.0             | \$ 80,000                   | 2.5             |

**The estimates compared to current facility costs reflect a 50% decrease in overall O&M costs and 15% decrease in CR&R capital amortization costs.** The reductions in overall space (SF) and more efficient building systems accounts for most of the reductions; new features and up-to-date technology account for higher capital amortization costs.

Surplus & Disposal of Excess Real Property: As the project proceeds and current District firestation sites are not required, they can be declared surplus and disposed of. All current sites with the exception of the District Training Center can be disposed of. **The combined current assessed value is \$4.5**

<sup>7</sup> "Rough Order of Magnitude" estimates of cost based on current trade & industry information and historical experience.

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million, however, market conditions and the viability of the sale of certain parcels may affect the overall revenues received from the sales.

Feasibility: This option may be the most “dramatic” approach to a modified District deployment model, but it also:

- Presents the most efficient deployment model with regard to facilities and equipment with only two firestations;
- Involves the largest capital investment short and long term. The size of the capital project would require much stakeholder management and may depend on the nature of public support at the time of an election;
- Depends on a new location for two firestations, a situation problematic in the past;
- Would provide the District with state-of-the-art facilities, with opportunities for full standardization of building system operation & maintenance District-wide and their attendant efficiencies and economies;
- Provides the District with major assets with a full life of ahead for 30 to 50 years, durable to environmental and operational wear-and-tear;
- Raises the issue of replacing firestations that may present public concern, especially if the new location is not far from a present location (i.e. Boston Harbor Road); and
- Be disruptive within the organization since the undertaking a project of this scope for a 3 year period can divert the primary IR&R role of the organization, distract management attention and cause member discomfort and uncertainty.

Interim Measures & Alternatives/Flexibility: The Option makes a “clean-sweep” of the District’s real properties, and once it embarks on the project, the reasonable alternatives that offer flexibility would relate to the scope of the new facilities. The size and quality could be adjusted to fit changing funding, as well as scheduling of completion of new facilities and the closing of existing facilities. The primary theme would remain essentially the same.

It is entirely up to the District on how and when it disposes of its current facilities, therefore, changing circumstances may dictate delaying or changing plans to dispose of certain assets. As noted in the Costs Section above, the income from the sale of real properties should not be depended upon to finance the Option and its construction project.

Summary: the Option is “audacious” but feasible. It would require the most management attention and public interaction of any of the Options. It would have the longest time-line. It would have the largest initial capital investment, but, would have the most efficient long term capital profile (ownership cost and value). It is not clear if it would have the optimum long-term IR&R operational value; based on the document “2 or 3 Firestations?” (VanCamp, 2016) it would not in the short-term.

## Option 2: One Firestation Two Substations

Summary of Option: Option 2 uses the model of IR&R deployment from three locations as was proposed in “Master Plan Overview” (VanCamp, 2017). The headquarters firestation would remain at Station 8-1 (South Bay Road), and two sub-stations would be used: Station 8-2 (Johnson Point Road) and Station 8-4 (Zangle Road). The District would also retain and continue to develop the District Training Center on South Bay Road. All facilities would receive some level of capital upgrade.

Other current District real property not included in the Option’s project scope would be declared surplus and disposed of.

Description of Project/Facilities: Station 8-1 would be retained as the primary IR&R base and administrative headquarters for the District due to its geographically strategic location and proximity to the District Training Center. The facility would be programmed for capital upgrades that include:

- Conversion of sleeping quarters into single-occupancy dormitories;
- Conversion of the locker rooms into single-occupancy shower-rooms and lavatories;
- Segregation of the physical exercise area from the apparatus bay, with its own HVAC environment;
- Improvements to the facilities septic system for expanded capacity;
- Evaluation and 30-year renewal of the building’s roof;
- Remodel of the administrative wing to accommodate more efficient class-room, office and information technology space to meet current needs; and
- Upgrade of the vehicle exhaust capture system in the apparatus bay.

At the two sub-station locations, provision for staff occupancy for daytime and night-time use would need to be provided for. In both cases, the size of the existing District owned parcel is insufficient to support reasonable expansion, therefore, it is assumed additional land would be acquired to meet project specifications. Two primary sub-options existing for the sub-stations: 1) heavy-remodel of either or both buildings, or 2) complete replacement of either or both buildings with new buildings on the same site.

Minimum requirements for the sub-stations would include the capacity to house three apparatus, suitable housing for two IR&R staff and disaster/emergency capability to function no less than 96 hours on its own.

Sub-Option 1: Both buildings are small and generally unsuited for the purpose in their present condition. Station 8-2 was remodeled in 1999, but experiences some critical land set-back issues. Station 8-4 would need to be expanded to accommodate a third apparatus bay. For any expansion of the foot-print of either building, acquisition of additional land would be required (remodel or new building). Therefore, the capital project would include purchase of some additional adjacent land. In the case of Station 8-2, it is assuming purchase of the adjacent 2.26 acres to the immediate east of the firestation. In the case of Station 8-4, it is assuming the sub-division and purchase of 0.5 acres from the adjacent land-owner, fronting on Zangle Road. Other land options are possible but for the purposes of this option.

Remodel of Station 8-2 would include expansion for a full-sized third apparatus bay, and construction of a new wing on the east side of the building to provide 1,800 SF dormitory, kitchen, dayroom and office space for a minimum of two IR&R staff. Electrical and HVAC upgrades would be included for the entire building. Water supply and septic adjustments would also need to be made (probably with those of the newly acquired site). The house and structures on the site to the east could be retained for District purposes as well (see Interim Measures below).

## Option 2: One Firestation Two Substations

Remodel of Station 8-4 would include expansion for a full-sized third apparatus bay on the north side, and construction of a new wing on the east side or south of the building to provide 1,800 SF dormitory, kitchen, dayroom and office space for a minimum of two IR&R staff. Electrical and HVAC upgrades would be included for the entire building. Water supply and septic hook-up to the Boston Harbor Utility District would be made.

Sub-Option 2: This sub-option would feature the same purchase of additional land for each site, however, would essentially demolish the existing structure and build two identical 3,500 SF sub-stations with three full-size apparatus bays and space for a minimum of two IR&R staff. The building would be of high-quality frame construction with the capability to survive and function for no less than 96 hours on its own during a disaster/emergency. The buildings would feature energy saving/efficient environmental equipment, solar panels for electrical generation and have suitable amenities for the members housed in them.

In either case, the District Training Center would be retained and the capital project to fully develop it completed (not included in this project scope).

Service: A comparison of the Option's IR&R deployment service model is shown with the current (2017) IR&R deployment<sup>1</sup> model below:

| Station <sup>2</sup> :                     | Current 8-1 | Current 8-2 | Current 8-3 | New 8-1   | New 8-2   | New 8-4 <sup>3</sup> |
|--|-------------|-------------|-------------|-----------|-----------|----------------------|
| Share of call volume                       | 43%         | 20%         | 35%         | 65%       | 20%       | 15%                  |
| Coverage within 5 road miles               | 96%         | 98%         | 99%         | 100%      | 98%       | 100%                 |
| Deployment level (IR&R staff)              | 1+ company  | Call staff  | ≤ company   | 1 company | ≤ company | ≤ company            |
| At-site service level capable <sup>4</sup> | Full        | None        | (Full)      | Full      | (Full)    | (Full)               |

All areas of the District would be within 5-road miles of the three firestations with this option.

Costs: Facility costs are segregated into two categories: 1) capital and 2) operations & maintenance. Capital costs are related to the initial cost of designing, permitting, building and commissioning a new facility or major improvements/replacements to an existing facility or facility components (e.g. roof, mechanical systems, electrical systems, architectural features, expansions, etc.). Operations & maintenance costs relate to ongoing costs to own (e.g. permits, taxes, utilities costs, etc.) or maintain (including repairs, replacement of broken or dysfunctional components without major change to the asset and preventative actions to sustain asset life, etc.). The table below displays a summary of both operating/maintenance and ongoing capital costs ("amortization" for the purposes of pre-funding capital improvements/replacements) for the current District facilities as well as the current assessed value (as determined by the Thurston County Auditor, 2017). The District does not have current market value appraisals for its real properties.

<sup>1</sup> Incident Readiness & Response (IR&R) staffing & apparatus, for fire suppression, emergency medical and rescue incidents per the *District Mission Statement*.

<sup>2</sup> All other current District firestations un-staffed (8-4, 8-5 and 8-6).

<sup>3</sup> "Station 8-4" name used for remodeled/new sub-station to provide consistency for this document only; the actual station number assignment may change.

<sup>4</sup> Initial independent response capability for fire, emergency medical & rescue with crew staffing on hand; full capability at current Station 8-3 when staffing permits.



## Option 2: One Firestation Two Substations

Current Facility Cost & Inventory Information:

|                              | Staffed Stations <sup>5</sup> |          | Un-Staffed Stations <sup>6</sup> |          | Auxiliary Facilities <sup>7</sup> |          |
|------------------------------|-------------------------------|----------|----------------------------------|----------|-----------------------------------|----------|
|                              | Per SF                        | Total SF | Per SF                           | Total SF | Per SF                            | Total SF |
| Operations & maintenance     | \$ 4.42                       | 25,789   | \$ 2.75                          | 7,676    | \$ 1.13                           | 8,497    |
| CR&R (capital amortization)  | \$ 1.14                       |          | \$ 0.11                          |          | \$ 0.11                           |          |
| Building (only) value        | \$ 84.34                      |          | \$ 80.81                         |          | \$ 81.31                          |          |
| Land (only) value [per acre] | \$ 98,604                     | 11.4     | \$ 44,759                        | 4.6      | \$ 75,108                         | 7.9      |

Each option will have two components: 1) initial capital costs and 2) ongoing capital and operations-maintenance costs differentiated from the current information shown in the above table. **For the purposes of this evaluation, staffing and non-facility related equipment costs are not included.**

Option Capital Cost Information: Initial, “one-time” capital activities and investment “steps” would include:

- 1) Acquisition of architectural-engineering support for design development
  - a) Competitive process required by law
  - b) Establish scope of work: needs assessment, pre-design, design, permit assistance, construction oversight-management, commissioning
- 2) Needs assessment and design development for remodel of Station 8-1
  - a) Architectural modifications (room lay-out, roof upgrade)
  - b) Mechanical-electrical modifications (exhaust-capture, HVAC, IT-service)
  - c) Septic system upgrades
  - d) Project sequencing and interim operational accommodations
- 3) Needs assessment and design development for Stations 8-2 and 8-4
  - a) Evaluation of current condition of existing structures
  - b) Negotiation with adjacent land-owners for purchase of land (including independent fair market appraisal, setting terms & conditions, etc.)
  - c) Determining option of remodel or demolition/construction of either or both sub-station buildings
- 4) Final design work, permitting and planning of construction phasing
  - a) Finalize design details for Stations 8-1, 8-2 and 8-4
  - b) Site infrastructural permits for all locations as needed (storm-water, septic, water)
  - c) Construction permits (grading, building, system, etc.)
  - d) Develop phasing plan to accommodate occupancy of Station 8-1 while under construction to ensure minimal interruption of IR&R mission and member inconvenience
  - e) Establish temporary accommodations for occupancy if indicated
- 5) Construction at Station 8-1 (*does not reflect order of work*)
  - a) Sleeping quarters, lavatories, physical training room and administrative wing offices/classrooms
  - b) Exterior site work, septic tank, drain-field and control system
  - c) Testing, sealing, replacing & finishing as needed of metal roof structure
  - d) Replace vehicle exhaust capture system in the apparatus bay
- 6) Construction (or remodel) of infrastructure and structure of sub-station buildings at two locations
  - a) Two each, type 1 structures, single-story, 3,500 SF to house 2 IR&R staff, 3 apparatus, kitchen-dayroom space with occupant amenities
  - b) Disaster resistant features, emergency power, accessibility, energy efficiency

<sup>5</sup> Staffed station costs and valuations: average of Stations 8-1 & 8-3 2016-17.

<sup>6</sup> Sub-station costs and valuations: average of Stations 8-2, 8-4, 8-5 and 8-6 2016-17.

<sup>7</sup> Auxiliary facility costs and valuations: average of Annex 8-3 and District Training Center 2016-17.

## Option 2: One Firestation Two Substations

- 7) Commissioning of new facilities and facilities systems at all locations  
 a) Punch-list and turn-over to Owner

### Project Summary Cost & Schedule:

| <i>Capital Activity/Step</i>                    | <i>Est Cost <sup>8</sup></i> | <i>Duration</i>  |
|---|------------------------------|--|
| 1) A&E services                                 | \$ 1,200,000                 | <b>Months 0-33:</b> First major step in project; planning of project strategy, needs assessment, pre-design, design, land acquisition, permit acquisition, construction management and project close-out & commissioning.                                    |
| 2) Needs assessment & design for Station 8-1    | \$ 75,000                    | <b>Months 4-8:</b> Process facilitated by A&E to determine functional needs for design priorities and project planning to minimize disruption  |
| 3) Needs assessment & design for Sta's 8-2, 8-4 | \$ 770,000                   | <b>Months 4-12:</b> Process facilitated by A&E to determine functional needs for plan options (remodel or build new), design priorities and project planning to minimize disruption and inefficiencies; procurement of land for expanded building foot-print |
| 4) Final design, permits and planning           | \$ 450,000                   | <b>Months 8:</b> Key milestones are a) decision on sub-station option(s), b) grading & site permits, c) building permits and d) certificates of occupancy  |
| 5) Re-modeling at Sta 8-1                       | \$ 1,150,000                 | <b>Months 12-30:</b> Difficult construction due to work in occupied facility requiring close coordination & communications   |
| 6) Re-modeling at Stations 8-2 and 8-4 /OR/     | \$ 1,400,000                 | <b>Months 12-25:</b> Two sub-stations can be phased concurrently with each other & Sta 8-1; coordinate as efficiencies dictate ( <i>remodel of both for scenario comparison purposes</i> )   |
| 7) New construction at Stations 8-2 and 8-4     | \$ 2,000,000                 | <b>Months 12-31:</b> Two sub-stations can be phased concurrently with each other & Sta 8-1; coordinate as efficiencies dictate ( <i>new construction of both for scenario comparison purposes</i> )  |
| 8) Close-out and commissioning                  | \$ 180,000                   | <b>Months 22-33:</b> Ensuring compliance of all punch-list items and turn-over of documentation, training for maintenance staff  |
| 9) Contingency                                  | \$ 600,000                   | Estimated at 10% of project budget   |
| <b>Total:</b>                                   | <b>\$ 5,825,000</b>          | <b>Sub-station remodel option</b>  |
| <b>Total:</b>                                   | <b>\$ 6,425,000</b>          | <b>Sub-station new construction option</b>   |

These costs could be financed with debt (general obligation bonds) either voted (excess levy for property tax) or non-voted (debt paid from District normal income). Due to the size of the project, a non-voted debt would be unlikely. If voted, it is anticipated that the bonds would be repaid over a 20 year period (normal) with the excess property tax levy. There are some other financing option (Statue Treasurer LOCAL instruments, commercial loans, grants, etc.) but these are less common on large real property projects.

Ongoing facility costs after the project is complete include:

### Estimated New Facility Cost & Inventory Information:

|                              | <i>Staffed Stations</i> |                 | <i>Auxiliary Facilities</i> |                 |
|------------------------------|-------------------------|-----------------|-----------------------------|-----------------|
|                              | <i>Per SF</i>           | <i>Total SF</i> | <i>Per SF</i>               | <i>Total SF</i> |
| Operations & maintenance     | \$ 3.60                 | 22,200          | \$ 0.75                     | 6,000           |
| CR&R (capital amortization)  | \$ 1.45                 |                 | \$ 0.11                     |                 |
| Building (only) value        | \$ 95.00                |                 | \$ 78.00                    |                 |
| Land (only) value [per acre] | \$ 141,000              | 9.0             | \$ 136,000                  | 1.9             |

<sup>8</sup> "Rough Order of Magnitude" estimates of cost based on current trade & industry information and historical experience.



## Option 2: One Firestation Two Substations

**The estimates compared to current facility costs reflect a 42% decrease in overall O&M costs and 5% increase in CR&R capital amortization costs.** The reductions in overall space (SF) and installation of more efficient building systems accounts for most of the reductions; new features and up-to-date technology account for higher capital amortization costs.

Surplus & Disposal of Excess Real Property: As the project proceeds and current District firestation sites are not required, they can be declared surplus and disposed of. The current Station 8-3, Annex 8-3, Station 8-5, Station 8-6 and vacant land on Ave NE can be disposed of. **The combined current assessed value of those properties are \$ 2.2 million**, however, market conditions and the viability of the sale of certain parcels may affect the overall revenues received from the sales.

Feasibility: This option is one of three featuring a modified three firestation deployment model, and it uses three current District owned locations, and it also:

- Involves a **significant capital investment short and long term**. The size of the capital project would require much stakeholder management and may depend on the nature of public support at the time of an election;
- Would provide the District with generally **current-technology buildings** (depending on level of remodel & new construction), with opportunities for full (or partial) standardization of building system operation & maintenance District-wide and their attendant efficiencies and economies;
- Provides the District with major assets with a full life of ahead for 25 to 40 years, durable to environmental and operational wear-and-tear;
- Has the potential to be very disruptive to occupants of Station 8-1 during the remodel, however, some of this can be mitigated with good communications and pre-planning of accommodations;
- Be **disruptive within the organization** since the undertaking a project of this scope for a 3 year period can divert the primary IR&R role of the organization, distract management attention and cause member discomfort and uncertainty.

Interim Measures & Alternatives/Flexibility: This Option provides several “built-in” sub-options that could be adopted to scale the project to various funding, timeframe, operational and political considerations. The size and quality could be adjusted to fit changing funding, as well as scheduling of completion of new facilities and the closing of existing facilities. The primary theme would remain essentially the same.

Depending on project timing and if Station 8-2 land acquisition allowed, the existing home on the parcel could be used as for a District IR&R resident program before, during and after project work if so desired.

It is entirely up to the District on how and when is disposes of its current facilities, therefore, changing circumstances may dictate delaying or changing plans to dispose of certain assets. As noted in the Costs Section above, the income from the sale of real properties should not be depended upon to finance the Option and its construction project.

Summary: **the Option provides reasonable coverage within IR&R staffing limitations with the three firestation model. All firestations would receive life extending capital work creating value at all locations.**

## Option 3: One Firestation Two Substations

Summary of Option: Option 3 uses the model of IR&R deployment from three locations: retaining Station 8-1 as the headquarters and anchor IR&R staffing deployment point, and upgrade Station 8-2 as a staffed sub-station and “down-grade” Station 8-3 to a sub-station status (from current target staffing level). The District would also retain and continue to develop the District Training Center on South Bay Road. As proposed, the only capital upgrade included in this option would be at Station 8-2 to provide adequate housing for staff.

The option provides for retaining (at least for some interim period) the Station 8-4 and Ave NE vacant land sites for potential future development. Other current District real property, the Station 8-5 and 8-6 sites, would be declared surplus and disposed of.

Description of Project/Facilities: Station 8-1 would be retained at the primary IR&R base and administrative headquarters for the District due to its geographically strategic location and proximity to the District Training Center. While no specific capital upgrades were included in this option, it is assumed “normal” capital replacements would continue to occur as programmed in the District CR&R Plan.

Minimum requirements for the sub-stations would include the capacity to house three apparatus, suitable housing for two IR&R staff and disaster/emergency capability to function no less than 96 hours on its own.

At Station 8-2, provision for staff occupancy for daytime and night-time use would need to be provided for. The size of the existing District owned parcel is insufficient to support reasonable expansion, therefore, it is assumed additional land would be acquired to meet project specifications. Two primary sub-options existing for upgrading: 1) heavy-remodel of the building, or 2) complete replacement the building with a new building on the same site. For the purposes of this option, remodeling seems more in character and is the chosen method.

Station 8-2 was remodeled in 1999, but experiences some critical land set-back issues. Therefore, purchase of the adjacent 2.26 acres to the immediate east of the firestation is indicated. Other land options are possible but for the purposes of this option this parcel is used for cost estimates. The remodel would include expansion for a full-sized third apparatus bay, and construction of a new wing on the east side of the building to provide 1,800 SF dormitory, kitchen, dayroom and office space for a minimum of two IR&R staff. Electrical and HVAC upgrades would be included for the entire building. Water supply and septic adjustments would also need to be made (probably with those of the newly acquired site). The house and structures on the site to the east could be retained for District purposes as well (see Interim Measures below).

Station 8-3 would require little, if any, modification to suit its “new” role. For the long term the District should examine efficiencies by shedding some of the 13 thousand square feet of building and over 10 acres of land on the site being used for staffing two IR&R responders and three apparatus. Since other District properties are being retained per this option, the west side sub-station could be relocated to another location more suitable as a sub-station and this potentially marketable property declared surplus and disposed of.

Service: A comparison of the Option’s IR&R deployment service model is shown with the current (2017) IR&R deployment<sup>1</sup> model below:

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<sup>1</sup> Incident Readiness & Response (IR&R) staffing & apparatus, for fire suppression, emergency medical and rescue incidents per the *District Mission Statement*.

## Option 3: One Firestation Two Substations

| <i>Station 2:</i>                          | <i>Current 8-1</i> | <i>Current 8-2</i> | <i>Current 8-3</i> | <i>(New) 8-1</i> | <i>New 8-2</i> | <i>(New) 8-3</i> |
|--|--------------------|--------------------|--------------------|------------------|----------------|------------------|
| Share of call volume                       | 43%                | 20%                | 35%                | 43%              | 20%            | 35%              |
| Coverage within 5 road miles               | 96%                | 98%                | 99%                | 100%             | 98%            | 99%              |
| Deployment level (IR&R staff)              | 1+ company         | Call staff         | ≤ company          | 1 company        | ≤ company      | ≤ company        |
| At-site service level capable <sup>3</sup> | Full               | None               | (Full)             | Full             | (Full)         | (Full)           |

Coverage: 98% of the District would be within 5-road miles of the three firestations for this option.

**Costs:** Facility costs are segregated into two categories: 1) capital and 2) operations & maintenance. Capital costs are related to the initial cost of designing, permitting, building and commissioning a new facility or major improvements/replacements to an existing facility or facility components (e.g. roof, mechanical systems, electrical systems, architectural features, expansions, etc.). Operations & maintenance costs relate to ongoing costs to own (e.g. permits, taxes, utilities costs, etc.) or maintain (including repairs, replacement of broken or dysfunctional components without major change to the asset and preventative actions to sustain asset life, etc.). The table below displays a summary of both operating/maintenance and ongoing capital costs (“amortization” for the purposes of pre-funding capital improvements/replacements) for the current District facilities as well as the current assessed value (as determined by the Thurston County Auditor, 2017). The District does not have current market value appraisals for its real properties.

### Current Facility Cost & Inventory Information:

|                              | <i>Staffed Stations <sup>4</sup></i> |                 | <i>Un-Staffed Stations <sup>5</sup></i> |                 | <i>Auxiliary Facilities <sup>6</sup></i> |                 |
|------------------------------|--------------------------------------|-----------------|---|-----------------|--|-----------------|
|                              | <i>Per SF</i>                        | <i>Total SF</i> | <i>Per SF</i>                           | <i>Total SF</i> | <i>Per SF</i>                            | <i>Total SF</i> |
| Operations & maintenance     | \$ 4.42                              | 25,789          | \$ 2.75                                 | 7,676           | \$ 1.13                                  | 8,497           |
| CR&R (capital amortization)  | \$ 1.14                              |                 | \$ 0.11                                 |                 | \$ 0.11                                  |                 |
| Building (only) value        | \$ 84.34                             |                 | \$ 80.81                                |                 | \$ 81.31                                 |                 |
| Land (only) value [per acre] | \$ 98,604                            | 11.4            | \$ 44,759                               | 4.6             | \$ 75,108                                | 7.9             |

Each option will have two components: 1) initial capital costs and 2) ongoing capital and operations-maintenance costs differentiated from the current information shown in the above table. **For the purposes of this evaluation, staffing and non-facility related equipment costs are not included.**

### Option Capital Cost Information:

Initial, “one-time” capital activities and investment “steps” would include:

- 1) Acquisition of architectural-engineering support for design development for Sta 8-2
  - a) Competitive process required by law
  - b) Establish scope of work: needs assessment, pre-design, design, permit assistance, construction oversight-management, commissioning
- 2) Needs assessment and design development for remodel of Station 8-2

<sup>2</sup> All other current District firestations un-staffed (8-4, 8-5 and 8-6).

<sup>3</sup> Initial independent response capability for fire, emergency medical & rescue with crew staffing on hand; full capability at current Station 8-3 when staffing permits.

<sup>4</sup> Staffed station costs and valuations: average of Stations 8-1 & 8-3 2016-17.

<sup>5</sup> Sub-station costs and valuations: average of Stations 8-2, 8-4, 8-5 and 8-6 2016-17.

<sup>6</sup> Auxiliary facility costs and valuations: average of Annex 8-3 and District Training Center 2016-17.

## Option 3: One Firestation Two Substations

- a) Architectural modifications (room lay-out, roof upgrade)
- b) Mechanical-electrical modifications (exhaust-capture, HVAC, IT-service)
- c) Septic system and well upgrades
- 3) Final design work, permitting and planning of construction phasing for Sta 8-2
  - a) Finalize design details
  - b) Site infrastructural permits for all locations as needed (storm-water, septic, water)
  - c) Construction permits (grading, building, system, etc.)
- 4) Construction of infrastructure and structure of sub-station buildings at Sta 8-2
  - a) Remodel scope of work: single-story, 3,500 SF to house 2 IR&R staff, 3 apparatus, kitchen-dayroom space with occupant amenities
  - b) Disaster resistant features, emergency power, accessibility, energy efficiency
- 5) Commissioning of new facilities and facilities systems at all locations
  - a) Punch-list and turn-over to Owner

### Project Summary Cost & Schedule:

| <i>Capital Activity/Step</i>                      | <i>Est Cost <sup>7</sup></i> | <i>Duration</i>  |
|---|------------------------------|--|
| 1) A&E services for Sta 8-2 remodel               | \$ 250,000                   | <b>Months 0-26:</b> First major step in project; planning of project strategy, needs assessment, pre-design, design, land acquisition, permit acquisition, construction management and project close-out & commissioning.                                    |
| 2) Needs assessment & design for Sta 8-2          | \$ 450,000                   | <b>Months 3-11:</b> Process facilitated by A&E to determine functional needs for plan options (remodel or build new), design priorities and project planning to minimize disruption and inefficiencies; procurement of land for expanded building foot-print |
| 3) Final design, permits and planning for Sta 8-2 | \$ 150,000                   | <b>Months 6-25:</b> Key milestones are a) decision on sub-station option(s), b) grading & site permits, c) building permits and d) certificates of occupancy   |
| 4) Re-modeling at Sta 8-2                         | \$ 650,000                   | <b>Months 10--25:</b> Construction work per project plan   |
| 5) Close-out and commissioning                    | \$ 60,000                    | <b>Months 22-26:</b> Ensuring compliance of all punch-list items and turn-over of documentation, training for maintenance staff  |
| 6) Contingency                                    | \$ 150,000                   | Estimated at 10% of project budget   |
| <b>Total:</b>                                     | <b>\$ 2,110,000</b>          |  |

These costs could be financed with debt (general obligation bonds) either voted (excess levy for property tax) or non-voted (debt paid from District normal income). Due to the size of the project, a non-voted debt would be unlikely. If voted, it is anticipated that the bonds would be repaid over a 20 year period (normal) with the excess property tax levy. There are some other financing option (Statue Treasurer LOCAL instruments, commercial loans, grants, etc.) but these are less common on large real property projects.

Ongoing facility costs after the project is complete include:

### Estimated New Facility Cost & Inventory Information:

|                              | <i>Staffed Stations</i> |                 | <i>Auxiliary Facilities</i> |                 | <i>(Retained Properties)</i> |                 |
|------------------------------|-------------------------|-----------------|-----------------------------|-----------------|------------------------------|-----------------|
|                              | <i>Per SF</i>           | <i>Total SF</i> | <i>Per SF</i>               | <i>Total SF</i> | <i>Per SF</i>                | <i>Total SF</i> |
| Operations & maintenance     | \$ 6.59                 | 29,300          | \$ 1.13                     | 8,497           | \$ 1.23                      | 1,352           |
| CR&R (capital amortization)  | \$ 1.25                 |                 | \$ 0.11                     |                 | \$ 0.04                      |                 |
| Building (only) value        | \$ 86.00                |                 | \$ 81.81                    |                 | \$ 83.58                     |                 |
| Land (only) value [per acre] | \$ 90,300               | 14.1            | \$ 75,108                   | 7.9             | \$ 62,700                    | 3.9             |

<sup>7</sup> "Rough Order of Magnitude" estimates of cost based on current trade & industry information and historical experience.

## Option 3: One Firestation Two Substations

**The estimates compared to current facility costs reflect a 41% increase in overall O&M costs and 20% increase in CR&R capital amortization costs.** The continued retention of currently unused properties and inefficient use of a large firestation as a sub-station contribution to these increased costs.

Surplus & Disposal of Excess Real Property: While this option is a three station deployment model, a total of five firestation site properties are retained/used. In addition, to use the Johnson Point site, additional land is required to develop the site. By re-sizing the west-side substation site in one of many ways, and surplus/disposing of all other un-needed District properties, ongoing O&M and CR&R costs could be reduced and revenues of \$3 to 5 million could potentially be realized.

Feasibility: This option is one of three featuring a modified three firestation deployment model, and it uses three current District owned locations, and it also:

- Involves a **relatively modest capital investment short and long term**. The size of the capital project would require stakeholder management and attention to detail, but not to the level of Options 1 and 2;
- Would provide the District with one generally **current-technology building** (depending on level of remodel construction) at Station 8-2;
- Relies primarily on firestations in their present condition (*good & bad*);
- Features a broad set of alternative actions by retaining current properties;
- Minimizes the disruptive within the organization since the undertaking of the project is of a much more modest scope.

Interim Measures & Alternatives/Flexibility: This option provides several alternative plans of action that could be adopted to scale the project to various funding, timeframe, operational and political considerations. The size and quality could be adjusted to fit changing funding, as well as scheduling of completion of new facilities and the closing of existing facilities. One main consideration is the ongoing costs (direct and indirect) for retention of assets that are no longer necessary for IR&R operations.

It is entirely up to the District on how and when it disposes of its current facilities, therefore, changing circumstances may dictate delaying or changing plans to dispose of certain assets. As noted in the Costs Section above, the income from the sale of real properties should not be depended upon to finance the Option and its construction project.

Summary: **the Option provides reasonable coverage within IR&R staffing limitations with the three firestation model.**

## Option 4: Two Firestations (1 New)

Summary of Option: Option 4 uses a “hybrid” of the Option 1 model of IR&R deployment from two locations as was proposed in “Master Plan Overview” (VanCamp, 2017). The two firestations include the current Station 8-3, which would become the new headquarters, and a second smaller firestation located at optimally geographic zones in the eastern areas of the District (Johnson Point). The District Training Center would remain at 3449 South Bay Rd NE (and continue to be developed under a separate capital program). All other District real property assets would be declared surplus and disposed of.

Description of Project/Facilities: **Station 8-3** would be converted to the primary IR&R base and administrative headquarters for the District. The facility would be programmed for **capital upgrades** that include:

- Conversion of the lay-out to a single-story occupancy, requiring broadening of the building footprint and lot adjustment;
- Construction of ADA compliant entry lobby area, public meeting space, office space and public-access restroom facilities;
- Construction of staff kitchen and dayroom space with amenities;
- Construction of new single-occupancy dormitory-style sleeping quarters;
- Upgrading staff locker rooms into single-occupancy shower-rooms and lavatories;
- Upgrades of building HVAC, water treatment & heating, fire protection & detection, information technology and lighting systems;
- Improvements to the facilities septic system for expanded capacity;
- Evaluation and 30-year renewal of the building’s roof;
- Remodel of the administrative wing to accommodate new more class-room, office and information technology space to meet current needs;
- Indicated roof, interior finishes, HVAC-lighting-fire protection/detection upgrades in the Annex Building;
- Site parking lot and storm-water drainage improvements as needed; and
- Upgrade of the vehicle exhaust capture system in the apparatus bay.

It is assumed the **Annex Building** would retain its current function of PT area for members, secured storage space and light maintenance for PPE and other equipment as needed. Upgrades to this building would primarily be limited to those needed to meet life cycle requirements and current building and fire codes as this is not a public-access facility.

Land for the eastside firestation would need to be located and procured (see Option 2 for more details).

The **eastside firestation** would have the design and construction of a 50-year life cycle quality Type I single-story structure, approximately 6,000 to 6,500 square feet, to house 3 apparatus and up to six responders (in individual dormitory rooms), kitchen and dayroom space, fully functional for no less than 96 hours on their own (in disaster conditions).

Service: A comparison of the Option’s IR&R deployment service model is shown with the current (2017) IR&R deployment<sup>1</sup> model below:

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<sup>1</sup> Incident Readiness & Response (IR&R) staffing & apparatus, for fire suppression, emergency medical and rescue incidents per the *District Mission Statement*.



## Option 4: Two Firestations (1 New)

| <i>Station <sup>2</sup>:</i>               | <i>Current 8-1</i> | <i>Current 8-2</i> | <i>Current 8-3</i> | <i>New 8 (E)</i> | <i>(New) 8-3</i> |
|--|--------------------|--------------------|--------------------|------------------|------------------|
| Share of call volume                       | 43%                | 20%                | 35%                | 45%              | 55%              |
| Coverage within 5 road miles               | 96%                | 98%                | 99%                | 100%             | 99%              |
| Deployment level (IR&R staff)              | 1+ company         | Call staff         | ≤ company          | 1 company        | 1 company        |
| At-site service level capable <sup>3</sup> | Full               | None               | (Full)             | Full             | Full             |

All areas of the District would be within 5-road miles of the two firestations for this option.

**COSTS:** Facility costs are segregated into two categories: 1) capital and 2) operations & maintenance. Capital costs are related to the initial cost of designing, permitting, building and commissioning a new facility or major improvements/replacements to an existing facility or facility components (e.g. roof, mechanical systems, electrical systems, architectural features, expansions, etc.). Operations & maintenance costs relate to ongoing costs to own (e.g. permits, taxes, utilities costs, etc.) or maintain (including repairs, replacement of broken or dysfunctional components without major change to the asset and preventative actions to sustain asset life, etc.). The table below displays a summary of both operating/maintenance and ongoing capital costs (“amortization” for the purposes of pre-funding capital improvements/replacements) for the current District facilities as well as the current assessed value (as determined by the Thurston County Auditor, 2017). The District does not have current market value appraisals for its real properties.

### Current Facility Cost & Inventory Information:

|                              | <i>Staffed Stations <sup>4</sup></i> |                 | <i>Un-Staffed Stations <sup>5</sup></i> |                 | <i>Auxiliary Facilities <sup>6</sup></i> |                 |
|------------------------------|--------------------------------------|-----------------|---|-----------------|--|-----------------|
|                              | <i>Per SF</i>                        | <i>Total SF</i> | <i>Per SF</i>                           | <i>Total SF</i> | <i>Per SF</i>                            | <i>Total SF</i> |
| Operations & maintenance     | \$ 4.42                              | 25,789          | \$ 2.75                                 | 7,676           | \$ 1.13                                  | 8,497           |
| CR&R (capital amortization)  | \$ 1.14                              |                 | \$ 0.11                                 |                 | \$ 0.11                                  |                 |
| Building (only) value        | \$ 84.34                             |                 | \$ 80.81                                |                 | \$ 81.31                                 |                 |
| Land (only) value [per acre] | \$ 98,604                            | 11.4            | \$ 44,759                               | 4.6             | \$ 75,108                                | 7.9             |

Each option will have two components: 1) initial capital costs and 2) ongoing capital and operations-maintenance costs differentiated from the current information shown in the above table. **For the purposes of this evaluation, staffing and non-facility related equipment costs are not included.**

### Option Capital Cost Information:

Initial, “one-time” capital activities and investment “steps” would include:

- 1) Acquisition of architectural-engineering support for design development
  - a) Competitive process required by law
  - b) Establish scope of work: needs assessment, pre-design, design, permit assistance, construction oversight-management, commissioning
- 2) Search & procurement of strategically located and available parcel of land on Johnson Point
  - a) Strategically located and of suitable size (3-5 acres) at target locations, buildable land

<sup>2</sup> All other current District firestations un-staffed (8-4, 8-5 and 8-6).

<sup>3</sup> Initial independent response capability for fire, emergency medical & rescue with crew staffing on hand; full capability at current Station 8-3 when staffing permits.

<sup>4</sup> Staffed station costs and valuations: average of Stations 8-1 & 8-3 2016-17.

<sup>5</sup> Sub-station costs and valuations: average of Stations 8-2, 8-4, 8-5 and 8-6 2016-17.

<sup>6</sup> Auxiliary facility costs and valuations: average of Annex 8-3 and District Training Center 2016-17.

## Option 4: Two Firestations (1 New)

- b) Establish equitable value and agreement for purchase
- 3) Acquisition of applicable zoning variance and permit approvals
  - a) Must obtain zoning variance prior to development of east-side firestation site (public hearings)
  - b) Site infrastructural permits (sewer, storm-water, well) both locations
  - c) Construction permits (grading, building, system, etc.) both locations
- 4) Construction of infrastructure and structure of firestation buildings at east-side firestation
  - a) Type 1 structures, single-story, 6,000-6,500 SF to house up to 6 IR&R staff, 3 apparatus, kitchen-dayroom space with occupant amenities
  - b) Disaster resistant features, emergency power, accessibility, energy efficiency
- 5) Remodel of Station 8-3 and Annex structures
  - a) Public accessible meeting space/classroom, logistical support space: 3,000 SF
  - b) Office space, dayroom, kitchen and miscellaneous staff space: 4,200 SF
  - c) Staff dormitory space & shower rooms space: 3,200 SF
  - d) Mechanical, apparatus and other space: 5,000 SF
  - e) Improvements to Annex Building 2,500 SF
  - f) Site-work improvements: pavement & storm-water management: 30,000 SF
  - g) Optional: space for reserve apparatus
- 6) Commissioning of new facilities and facilities systems at all locations
  - a) Punch-list and turn-over to Owner
  - b) Training of District maintenance staff

### Project Summary Cost & Schedule:

| <i>Capital Activity/Step</i>                 | <i>Est Cost <sup>7</sup></i> | <i>Duration</i>   |
|--|------------------------------|---|
| 1) A&E services                              | \$ 1,200,000                 | <b>Months 0-36:</b> First major step in project; planning of project strategy, needs assessment, pre-design, design, land acquisition, permit acquisition, construction management and project close-out & commissioning. |
| 2) Land acquisition                          | \$ 650,000                   | <b>Months 4-12:</b> Process conducted with assistance of A&E, real estate professional and public transparency; independent fair market appraisal required  |
| 3) Zoning & permits                          | \$ 450,000                   | <b>Months 6-36:</b> Key milestones are a) zoning variance (may be of considerable effort & expense), b) grading & site permits, c) building permits and d) certificate of occupancy                                       |
| 4) Construction of new east-side firestation | \$ 1,800,000                 | <b>Months 18-33:</b> Firestation work can be coordinate with HQ as efficiencies dictate (less complicated)  |
| 5) Remodel of Sta 8-3 and Annex Building     | \$ 2,150,000                 | <b>Months 18-33:</b> Difficult construction due to work in occupied facility requiring close coordination & communications  |
| 6) Close-out and commissioning               | \$ 250,000                   | <b>Months 30-36:</b> Ensuring compliance of all punch-list items and turn-over of documentation, training for maintenance staff   |
| 7) Contingency                               | \$ 550,000                   | Estimated at 10% of project budget  |
| <b>Total:</b>                                | <b>\$ 7,050,000</b>          |   |

These costs could be financed with debt (general obligation bonds) either voted (excess levy for property tax) or non-voted (debt paid from District normal income). Due to the size of the project, a non-voted debt would be unlikely. If voted, it is anticipated that the bonds would be repaid over a 20 year period (normal) with the excess property tax levy. There are some other financing option (Statue Treasurer LOCAL instruments, commercial loans, grants, etc.) but these are less common on large real property projects.

Ongoing facility costs after the project is complete include:

<sup>7</sup> "Rough Order of Magnitude" estimates of cost based on current trade & industry information and historical experience.

## Option 4: Two Firestations (1 New)

Estimated New Facility Cost & Inventory Information:

|                              | Staffed Stations |          | Auxiliary Facilities |          |
|------------------------------|------------------|----------|----------------------|----------|
|                              | Per SF           | Total SF | Per SF               | Total SF |
| Operations & maintenance     | \$ 3.60          | 21,900   | \$ 1.13              | 8,497    |
| CR&R (capital amortization)  | \$ 1.45          |          | \$ 0.11              |          |
| Building (only) value        | \$ 95.00         |          | \$ 81.31             |          |
| Land (only) value [per acre] | \$ 132,000       | 10.1     | \$ 75,108            | 7.9      |

**The estimates compared to current facility costs reflect a 39% decrease in overall O&M costs and 5% increase in CR&R capital amortization costs.** The reductions in overall space (SF) and more efficient building systems accounts for most of the reductions; new features and up-to-date technology account for higher capital amortization costs.

Surplus & Disposal of Excess Real Property: As the project proceeds and current District firestation sites are not required, they can be declared surplus and disposed of. Stations 8-1, 8-2, 8-4, 8-5, 8-6 and the vacant land at Ave NE can be disposed of. The combined current assessed value of these properties is \$3.9 million, however, market conditions and the viability of the sale of certain parcels may affect the overall revenues received from the sales. The Station 8-1 could be a particularly marketable property as it is the only parcel within a rural commercial zoning.

Feasibility: This option, like Option 1, is a “dramatic” approach to a modified District deployment model, but it also:

- Presents the **most efficient deployment** model with regard to facilities and equipment with only two firestations;
- Involves the **second largest capital investment** (behind Option 1) short and long term. The size of the capital project would require much stakeholder management and may depend on the nature of public support at the time of an election;
- Depends on a new location for new east-side firestation, a situation problematic in the past;
- Would provide the District with **state-of-the-art facilities**, with opportunities for full standardization of building system operation & maintenance District-wide and their attendant efficiencies and economies;
- Provides the District with major assets with a full life of ahead for 30 to 50 years, durable to environmental and operational wear-and-tear;
- Raises the issue of replacing the main firestation at South Bay that may present **public concern**, especially since the new location of the east-side firestation is further north; and
- Be **disruptive within the organization** since the undertaking a project of this scope for a 3 year period can divert the primary IR&R role of the organization, distract management attention and cause member discomfort and uncertainty.

Interim Measures & Alternatives/Flexibility: Similar to Option 1, this option makes a “clean-sweep” of the District’s real properties, and once it embarks on the project, the reasonable alternatives that offer flexibility would relate to the scope of the new facilities. The size and quality could be adjusted to fit changing funding, as well as scheduling of completion of new facilities and the closing of existing facilities. The primary theme would remain essentially the same.

It is entirely up to the District on how and when is disposes of its current facilities, therefore, changing circumstanced may dictate delaying or changing plans to dispose of certain assets. As noted in the Costs Section above, the income from the sale of real properties should not be depended upon to finance the Option and its construction project.

## Option 4: Two Firestations (1 New)

Summary: the Option is “audacious” but feasible. It would require the almost management attention and public interaction as Option 1. It would have a similar time-line as Option 1, about 3 years. It would have the second largest initial capital investment, but, would have an efficient long term capital profile (ownership cost and value). It is not clear if it would have the optimum long-term IR&R operational value; based on the document “2 or 3 Firestations?” (VanCamp, 2016) it would not in the short-term.

## Option 8: One Firestation Two New Sub-stations

Summary of Option: Option 8 uses a “hybrid” of the IR&R deployment model from three locations as was proposed in “Master Plan Overview” (VanCamp, 2017). Station 8-1 would be retained as the headquarters and anchor IR&R staffing deployment point, and two new sub-stations at new locations would be constructed. The District owned land on Ave NE would be used for the east-side sub-station and new land located at optimally geographic zones in the western Boston Harbor area would be procured. The District would also retain and continue to develop the District Training Center on South Bay Road.

Description of Project/Facilities: **Station 8-1** would be retained at the primary IR&R base and administrative headquarters for the District due to its geographically strategic location and proximity to the District Training Center. While no specific capital upgrades were included in this option, it is assumed “normal” capital replacements would continue to occur as programmed in the District CR&R Plan.

Minimum requirements for the **sub-stations** would include the capacity to house three apparatus, suitable housing for two IR&R staff and disaster/emergency capability to function no less than 96 hours on its own. Each of the sub-stations would have identical design and construction, of a 50-year life cycle quality Type I single-story structure, approximately 3,500 square feet.

Service: A comparison of the Option’s IR&R deployment service model is shown with the current (2017) IR&R deployment<sup>1</sup> model below:

| Station <sup>2</sup> :                     | Current 8-1 | Current 8-2 | Current 8-3 | (New) 8-1 | New 8 (W) | New 8 (E) |
|--|-------------|-------------|-------------|-----------|-----------|-----------|
| Share of call volume                       | 43%         | 20%         | 35%         | 50%       | 30%       | 20%       |
| Coverage within 5 road miles               | 96%         | 98%         | 99%         | 100%      | 100%      | 100%      |
| Deployment level (IR&R staff)              | 1+ company  | Call staff  | ≤ company   | 1 company | ≤ company | ≤ company |
| At-site service level capable <sup>3</sup> | Full        | None        | (Full)      | Full      | (Full)    | (Full)    |

All areas of the District would be within 5-road miles of the two firestations for this option.

Costs: Facility costs are segregated into two categories: 1) capital and 2) operations & maintenance. Capital costs are related to the initial cost of designing, permitting, building and commissioning a new facility or major improvements/replacements to an existing facility or facility components (e.g. roof, mechanical systems, electrical systems, architectural features, expansions, etc.). Operations & maintenance costs relate to ongoing costs to own (e.g. permits, taxes, utilities costs, etc.) or maintain (including repairs, replacement of broken or dysfunctional components without major change to the asset and preventative actions to sustain asset life, etc.). The table below displays a summary of both operating/maintenance and ongoing capital costs (“amortization” for the purposes of pre-funding capital improvements/replacements) for the current District facilities as well as the current assessed value (as determined by the Thurston County Auditor, 2017). The District does not have current market value appraisals for its real properties.

### Current Facility Cost & Inventory Information:

<sup>1</sup> Incident Readiness & Response (IR&R) staffing & apparatus, for fire suppression, emergency medical and rescue incidents per the *District Mission Statement*.

<sup>2</sup> All other current District firestations un-staffed (8-4, 8-5 and 8-6).

<sup>3</sup> Initial independent response capability for fire, emergency medical & rescue with crew staffing on hand; full capability at current Station 8-3 when staffing permits.

## Option 8: One Firestation Two New Sub-stations

|                              | <i>Staffed Stations <sup>4</sup></i> |                 | <i>Un-Staffed Stations <sup>5</sup></i> |                 | <i>Auxiliary Facilities <sup>6</sup></i> |                 |
|------------------------------|--------------------------------------|-----------------|---|-----------------|--|-----------------|
|                              | <i>Per SF</i>                        | <i>Total SF</i> | <i>Per SF</i>                           | <i>Total SF</i> | <i>Per SF</i>                            | <i>Total SF</i> |
| Operations & maintenance     | \$ 4.42                              | 25,789          | \$ 2.75                                 | 7,676           | \$ 1.13                                  | 8,497           |
| CR&R (capital amortization)  | \$ 1.14                              |                 | \$ 0.11                                 |                 | \$ 0.11                                  |                 |
| Building (only) value        | \$ 84.34                             |                 | \$ 80.81                                |                 | \$ 81.31                                 |                 |
| Land (only) value [per acre] | \$ 98,604                            | 11.4            | \$ 44,759                               | 4.6             | \$ 75,108                                | 7.9             |

Each option will have two components: 1) initial capital costs and 2) ongoing capital and operations-maintenance costs differentiated from the current information shown in the above table. **For the purposes of this evaluation, staffing and non-facility related equipment costs are not included.**

### Option Capital Cost Information:

Initial, “one-time” capital activities and investment “steps” would include:

- 1) Acquisition of architectural-engineering support for design development
  - a) Competitive process required by law
  - b) Establish scope of work: needs assessment, pre-design, design, permit assistance, construction oversight-management, commissioning
- 2) Search & procurement of strategically located and available parcels of land at Boston Harbor
  - a) Parcel locations of suitable size (3-5 acres) at Boston Harbor area, buildable land
  - b) Establish equitable value and agreement for purchase
- 3) Acquisition of applicable zoning variance and permit approvals at two locations (NOTE: variance at Ave NE site will need to be “renewed”)
  - a) Must obtain zoning variance prior to development of site (public hearings)
  - b) Site infrastructural permits (sewer, storm-water, well at Boston Harbor site)
  - c) Construction permits (grading, building, system, etc.)
- 4) Construction of infrastructure and structure of firestation buildings at two locations
  - a) Two each: type 1 structures, single-story, 3,500 SF to house up to 4 IR&R staff, 3 apparatus, kitchen-dayroom space with occupant amenities
  - b) Disaster resistant features, emergency power, accessibility, energy efficiency
- 5) Commissioning of new facilities and facilities systems at all locations
  - a) Punch-list and turn-over to Owner
  - b) Training of District maintenance staff

### Project Summary Cost & Schedule:

| <i>Capital Activity/Step</i> | <i>Est Cost <sup>7</sup></i> | <i>Duration</i>   |
|------------------------------|------------------------------|---|
| 1) A&E services              | \$ 1,000,000                 | <b>Months 0-30:</b> First major step in project; planning of project strategy, needs assessment, pre-design, design, land acquisition, permit acquisition, construction management and project close-out & commissioning. |
| 2) Land acquisition          | \$ 800,000                   | <b>Months 4-9:</b> Process conducted with assistance of A&E, real estate professional and public transparency; independent fair market appraisal required   |

<sup>4</sup> Staffed station costs and valuations: average of Stations 8-1 & 8-3 2016-17.

<sup>5</sup> Sub-station costs and valuations: average of Stations 8-2, 8-4, 8-5 and 8-6 2016-17.

<sup>6</sup> Auxiliary facility costs and valuations: average of Annex 8-3 and District Training Center 2016-17.

<sup>7</sup> “Rough Order of Magnitude” estimates of cost based on current trade & industry information and historical experience.



## Option 8: One Firestation Two New Sub-stations

| <i>Capital Activity/Step</i>        | <i>Est Cost <sup>8</sup></i> | <i>Duration</i>   |
|-------------------------------------|------------------------------|---|
| 3) Zoning & permits                 | \$ 600,000                   | <b>Months 6-30:</b> Key milestones are a) zoning variance (may be of considerable effort & expense), b) grading & site permits, c) building permits and d) certificate of occupancy |
| 4) Construction of two sub-stations | \$ 3,000,000                 | <b>Months 18-28:</b> Two firestations can be phased concurrently (identical design features); coordinate with HQ as efficiencies dictate  |
| 5) Close-out and commissioning      | \$ 150,000                   | <b>Months 26-30:</b> Ensuring compliance of all punch-list items and turn-over of documentation, training for maintenance staff   |
| 6) Contingency                      | \$ 500,000                   | Estimated at 10% of project budget  |
| <b>Total:</b>                       | <b>\$ 6,050,000</b>          |   |

These costs could be financed with debt (general obligation bonds) either voted (excess levy for property tax) or non-voted (debt paid from District normal income). Due to the size of the project, a non-voted debt would be unlikely. If voted, it is anticipated that the bonds would be repaid over a 20 year period (normal) with the excess property tax levy. There are some other financing option (Statue Treasurer LOCAL instruments, commercial loans, grants, etc.) but these are less common on large real property projects.

Ongoing facility costs after the project is complete include:

Estimated New Facility Cost & Inventory Information:

|                              | <i>Staffed Stations</i> |                 | <i>Auxiliary Facilities</i> |                 |
|------------------------------|-------------------------|-----------------|-----------------------------|-----------------|
|                              | <i>Per SF</i>           | <i>Total SF</i> | <i>Per SF</i>               | <i>Total SF</i> |
| Operations & maintenance     | \$ 4.00                 | 22,161          | \$ 0.75                     | 6,000           |
| CR&R (capital amortization)  | \$ 1.20                 |                 | \$ 0.11                     |                 |
| Building (only) value        | \$ 91.00                |                 | \$ 78.00                    |                 |
| Land (only) value [per acre] | \$ 177,300              | 11.4            | \$ 136,000                  | 1.9             |

**The estimates compared to current facility costs reflect a 35% decrease in overall O&M costs and 12% decrease in CR&R capital amortization costs.** The reductions in overall space (SF) and more efficient building systems accounts for most of the reductions; new features and up-to-date technology account for higher capital amortization costs. Capital upgrades in Station 8-1 as proposed in Option 2 (approximately \$1.6 to \$1.9 million additional to this option) could reduce O&M costs approximately another estimated 7%.

Surplus & Disposal of Excess Real Property: As the project proceeds and current District firestation sites are not required, they can be declared surplus and disposed of. Current District properties Stations 8-2, Station and Annex 8-3, Stations 8-4, 8-5 and 8-6 can be disposed of. The combined current assessed value is \$2.3 million, however, market conditions and the viability of the sale of certain parcels may affect the overall revenues received from the sales.

**Feasibility:** This option is one of three featuring a modified three firestation deployment model, and it uses two current District owned locations, and it also:

- Involves a **significant capital investment short and long term**. The size of the capital project would require much stakeholder management and may depend on the nature of public support at the time of an election;

<sup>8</sup> "Rough Order of Magnitude" estimates of cost based on current trade & industry information and historical experience.

## Option 8: One Firestation Two New Sub-stations

- Would provide the District with generally **current-technology sub-stations** with opportunities for partial standardization of building system operation & maintenance District-wide and their attendant efficiencies and economies;
- Provides the District with major assets with a full life of ahead for 25 to 40 years, durable to environmental and operational wear-and-tear;
- Would not be as disruptive within the organization as other options since it involves new constructions on sites not currently being occupied, however, the undertaking of a project of this scope for a 3 year period can divert the primary IR&R role of the organization and distract management attention.

Interim Measures & Alternatives/Flexibility: This Option could allow for alternatives that could be adopted to scale the project to various funding, timeframe, operational and political considerations. The size and quality could be adjusted to fit changing funding, as well as scheduling of completion of new facilities and the closing of existing facilities. The primary theme would remain essentially the same.

It is entirely up to the District on how and when is disposes of its current facilities, therefore, changing circumstanced may dictate delaying or changing plans to dispose of certain assets. As noted in the Costs Section above, the income from the sale of real properties should not be depended upon to finance the Option and its construction project.

Summary: **the Option provides reasonable coverage within IR&R staffing limitations with the three firestation model. The District would also have two of its three firestations in brand new order and in the right location at the end of the project.**

## FD8 CAPITAL PLANNING OPTIONS ANALYSIS "Box Score"

|                                  | IR&R FTE<br>per KSF <sup>(1)</sup> | O&M Cost<br>per SF | CR&R Cost<br>per SF | Bldg Value<br>per SF | Building<br>Total SF | Land Value<br>per Acre | Land Total<br>Acres | O&M-CR&R<br>Cost Adj <sup>(2)</sup> | Project<br>Cost <sup>(3)</sup> | Staffed Station Service Metrics by Station <sup>(4)</sup> |                     |                    |                         |
|----------------------------------|------------------------------------|--------------------|---------------------|----------------------|----------------------|------------------------|---------------------|-------------------------------------|--------------------------------|---|---------------------|--------------------|-------------------------|
|                                  |                                    |                    |                     |                      |                      |                        |                     |                                     |                                | % Call Vol  | 5 mi Covg           | Co Lev Stfg        | IR&R Capy               |
| Current                          |                                    |                    |                     |                      |                      |                        |                     |                                     |                                |   |                     |                    |                         |
| Staffed Firestation:             | 0.214                              | \$4.42             | \$1.14              | \$84.34              | 25,789               | \$98,604               | 11.4                | 100%                                |                                | 43%, 20%,<br>35%  | 96%, 98%,<br>99%    | 1+, (Call),<br>≤ 1 | Full, None,<br>(Full)   |
| Unstaffed Firestation:           |                                    | \$2.75             | \$0.11              | \$80.81              | 7,676                | \$44,759               | 4.6                 | 100%                                |                                |   |                     |                    |                         |
| Auxillary (Training Ctr, Annex): |                                    | \$1.13             | \$0.11              | \$81.31              | 8,497                | \$75,108               | 7.9                 |                                     |                                |   |                     |                    |                         |
| Option 1                         |                                    |                    |                     |                      |                      |                        |                     |                                     |                                |   |                     |                    |                         |
| Staffed Firestation:             | 0.409                              | \$3.50             | \$1.50              | \$100.00             | 13,000               | \$130,000              | 9.0                 | 50.1%                               | \$ 7,880,000                   | 52%, 48%  | 100%, 100%          | 1, 1               | Full, Full              |
| Auxillary (Training Ctr-HQ):     |                                    | \$3.00             | \$0.80              | \$83.00              | 9,000                | \$80,000               | 2.5                 | 85.4%                               |                                |   |                     |                    |                         |
| Option 2                         |                                    |                    |                     |                      |                      |                        |                     |                                     |                                |   |                     |                    |                         |
| Staffed Firestation:             | 0.321                              | \$3.60             | \$1.45              | \$95.00              | 22,200               | \$141,000              | 9.0                 | 58.4%                               | \$ 5,825,000                   | 65%, 20%,<br>15%  | 100%, 98%,<br>100%  | 1, ≤ 1, ≤ 1        | Full, (Full),<br>(Full) |
| Auxillary (Training Ctr):        |                                    | \$0.75             | \$0.11              | \$78.00              | 6,000                | \$136,000              | 1.9                 | 105.1%                              |                                |   |                     |                    |                         |
| Option 3                         |                                    |                    |                     |                      |                      |                        |                     |                                     |                                |   |                     |                    |                         |
| Staffed Firestation:             | 0.230                              | \$6.59             | \$1.59              | \$86.00              | 29,300               | \$90,300               | 14.1                | 141.3%                              | \$ 2,110,000                   | 43%, 20%,<br>35%  | 100%, 98%,<br>99%   | 1, ≤ 1, ≤ 1        | Full, (Full),<br>(Full) |
| Auxillary (Training Ctr, Annex): |                                    | \$1.13             | \$0.11              | \$81.81              | 8,497                | \$75,108               | 7.9                 | 120.2%                              |                                |   |                     |                    |                         |
| Retained Properties:             |                                    | \$1.23             | \$0.04              | \$83.58              | 1,352                | \$62,700               | 3.9                 |                                     |                                |   |                     |                    |                         |
| Option 4                         |                                    |                    |                     |                      |                      |                        |                     |                                     |                                |   |                     |                    |                         |
| Staffed Firestation:             | 0.296                              | \$3.60             | \$1.45              | \$95.00              | 21,900               | \$132,000              | 10.1                | 61.1%                               | \$ 7,050,000                   | 45%, 55%  | 100%, 99%           | 1, 1               | Full, Full              |
| Auxillary (Training Ctr, Annex): |                                    | \$1.13             | \$0.11              | \$81.31              | 8,497                | \$75,108               | 7.9                 | 104.5%                              |                                |   |                     |                    |                         |
| Option 8                         |                                    |                    |                     |                      |                      |                        |                     |                                     |                                |   |                     |                    |                         |
| Staffed Firestation:             | 0.320                              | \$4.00             | \$1.20              | \$91.00              | 22,161               | \$177,300              | 11.4                | 64.4%                               | \$ 6,050,000                   | 50%, 30%,<br>20%  | 100%, 100%,<br>100% | 1, ≤ 1, ≤ 1        | Full, (Full),<br>(Full) |
| Auxillary (Training Ctr):        |                                    | \$0.75             | \$0.11              | \$78.00              | 6,000                | \$136,000              | 1.9                 | 88.0%                               |                                |   |                     |                    |                         |

**NOTES:** (1) IR&R FTEs per 1,000 sf of structure; indicator of real property efficiency: 9 FTEs (1 BC, 2 COs, 6 FF-EMTs) divided by "Building Total SF"  
*"Higher the number (ratio) the better (more efficient)"*

(2) Comparison of options with current; top number O&M, bottom number CR&R

(3) Capital costs for one-time project costs, refer to Option Narrative for specific details, for comparison purposes only

(4) Figures for each station in option, refer to Option Narrative for specific station, for comparison purposes only