| Annual IT Labor for On-Prem Support -<br>Enterprise Systems | IT Service Provided   | Average<br>Annual<br>aded Cost |
|---|---|--------------------------------|
| Customer and Workstation Services                           | IT service desk, workstation support, app. updates, vendor access, etc.   | \$<br>90,080                   |
| Application Support   | Escalated support, troubleshooting,<br>minor modifications and enhancements,<br>database, web and interface support | \$<br>125,460                  |
| Enterprise Applications                                     | Modifications, escalated support, reports, enhancements, etc.   | \$<br>182,644                  |
| Enterprise Technology                                       | Everett only support: storage, backup, access, security   | \$<br>124,242                  |
| Enterprise Technology                                       | Yakima support/Business Continuity  | \$<br>124,242                  |
| Enterprise Records and Business Solutions                   | IT contract support, vendor   | \$<br>143,376                  |
| TOTAL   |   | \$<br>131,674                  |

| Annual Recurring SW/Hardware      |
|-----------------------------------|
| Hyper V node (2) TRP replacement  |
| Recalc Server (6) TRP Replacement |
| SQL Server TRP Replacement        |
| Center licenses                   |
| Microsoft SQL Server licensing    |

## **MSAzure Servers**

| Туре Ѕрес        |                       | Annual Cost |         |
|------------------|-----------------------|-------------|---------|
| Web Server (3)   | High Load (GIS style) | \$          | 11,160  |
| Batch (2)        | 8 core / 32GB RAM     | \$          | 8,400   |
| Workflow (1)     | 8 core / 32GB RAM     | \$          | 4,200   |
| Recalc (6)       | 16/64                 | \$          | 45,360  |
| SQL (1)          | 16/432                | \$          | 36,000  |
| Database Storage | 1.5 TB                |             |         |
|                  |                       | \$          | 105,120 |
| MS Azure Storage |                       | \$          | 4,470   |

| Annual IT Labor for On-Prem Support -<br>Enterprise Systems | IT Service Provided  |    | Average<br>Annual<br>Loaded Cost |  |  |
|---|--|----|----------------------------------|--|--|
| Customer and Workstation Services                           | IT service desk, workstation support,<br>app. updates, vendor access, etc. | \$ | 90,080                           |  |  |
| Application Support   | Escalated support, troubleshooting, minor modifications and enhancements   | \$ | 125,460                          |  |  |
| Enterprise Applications                                     | Modifications, escalated support, reports, enhancements, etc.              | \$ | 182,644                          |  |  |
| Enterprise Technology                                       | Everett only support: storage, backup, access, security                    | \$ | 124,242                          |  |  |
| Enterprise Technology                                       | Yakima support/Business Continuity   | \$ | 124,242                          |  |  |
| Enterprise Records and Business Solutions                   | IT contract support, vendor<br>management                                  | \$ | 143,376                          |  |  |
| TOTAL   |  | \$ | 131,674                          |  |  |

## Aumentum Cloud Solutions

Tuesday, September 18, 2018

11:01 AM

Scot Crismon, VP Technology TR Justin Wright, TR Cloud Architecture Nivee , TR **TR will recommend public cloud for future implementations** 

TR will recommend public cloud for future implementations

| PROJECT COSTS         |                 |
|-----------------------|-----------------|
| Item                  | SOW C           |
| Software (Licensing)  |                 |
| Professional Services | reakout below)  |
|                       | Software Custo  |
|                       | Interface Devel |

|                                | Data Conversio   |
|--------------------------------|------------------|
|                                | Other            |
| Public Access                  | One Time Fees    |
| Travel***                      | Project travel c |
| DISASTER RECOVERY LOCATION     | One time setup   |
| ON SITE LOCATION               | Servers/DB       |
| DATA CLOUD FIELD TOOL SOFTWARE |                  |
|                                | 28 licenses      |
| Project Cost Comparison        |                  |

| ANNUAL COSTS                       |                 |
|------------------------------------|-----------------|
| Item                               |                 |
| Prod/Dev/Test System Hosting       |                 |
| Subscrptn                          | Hosting** (anr  |
| Public Access Hosting Subscription | Hosting** (anr  |
| DATA CLOUD SUPPORT                 | Assessment Fie  |
| REMOTE SITE SUPPORT                | Recovery locati |
|                                    |                 |
| AUMENTUM Maintenance and Support   |                 |
| Annual Cost Comparison (Annual)    |                 |

| PROJECT COSTS |  |
|---------------|--|
| ANNUAL COSTS  |  |
| TOTAL         |  |

| SOFT COSTS          |                 |
|---------------------|-----------------|
| IT LABOR TO SUPPORT | 250 hrs vs 1000 |

These fields could be hidden, simply used to price the annualy

cost

\_\_\_\_\_l

| L  | verage<br>oaded<br>urly Cost | Average<br>Hours per<br>Week | Average<br>Hours per<br>Year | verage<br>Annual<br>Total |                                |
|----|------------------------------|------------------------------|------------------------------|---------------------------|--------------------------------|
| \$ | 43.3                         | 2                            | 104                          | \$<br>4,504               |                                |
| \$ | 60.3                         | 25                           | 1300                         | \$<br>78,416              |                                |
| \$ | 87.8                         | 20                           | 1040                         | \$<br>91,322              |                                |
| \$ | 59.7                         | 3                            | 156                          | \$<br>9,318               |                                |
| \$ | 59.7                         | 3                            | 156                          | \$<br>9,318               | NOTE: this is an optional cost |
| \$ | 68.9                         | 2.5                          | 130                          | \$<br>8,961               |                                |
| \$ | 63.3                         | 55.5                         | 2886                         | \$<br>201,839             | ]                              |

|  | Annual<br>Total |        |
|--|-----------------|--------|
|  |                 |        |
|  | \$              | 16,000 |
|  | \$              | 12,000 |
|  | \$              | 8,000  |
|  | \$              | 15,000 |
|  | \$              | 12,600 |

| Storage | (GB) |
|---------|------|
|         |      |

These fields could be hidden, simply used to price the annualy cost

| Γ       |          | L         |           |         |        |  |  |
|---------|----------|-----------|-----------|---------|--------|--|--|
| Average |          | Average   | Average   | Average |        |  |  |
| Lo      | aded     | Hours per | Hours per | Annual  |        |  |  |
| Hou     | rly Cost | Week      | Year      | Total   |        |  |  |
| \$      | 43.3     | 2         | 104       | \$      | 4,504  |  |  |
| \$      | 60.3     | 5         | 260       | \$      | 15,683 |  |  |
| \$      | 87.8     | 4         | 208       | \$      | 18,264 |  |  |
| \$      | 59.7     | 3         | 156       | \$      | 9,318  |  |  |
| \$      | 59.7     | 3         | 156       | \$      | 9,318  |  |  |
| \$      | 68.9     | 2.5       | 130       | \$      | 8,961  |  |  |
| \$      | 63.3     | 19.5      | 1014      | \$      | 66,049 |  |  |

| CURRENT        | PRIOR       |            |
|----------------|-------------|------------|
| ost (Hosted So | (On Premise | Difference |
| 166,000        | 236,500     | -70,500    |
|                |             |            |
| 427,400        | 536,200     | -108,800   |
| Included       | Included    |            |

| 5,008,673      | 5,787,973 | -779,300 |
|----------------|-----------|----------|
| 317,973        | 317,973   | 0        |
| cloud solution | 335,000   | -335,000 |
| cloud solution | 335,000   | -335,000 |
| 254,000        | 183,000   | 71,000   |
| 70,500         | 70,500    | 0        |
| 3,351,600      | 3,352,600 | -1,000   |
| 421,200        | 421,200   | 0        |

| SOW Cost   | RFP Cost | Difference |
|------------|----------|------------|
|            |          | Difference |
| 357,000    | **       | 357,000    |
| 67,000     | **       | 67,000     |
| 78,223     | 78,223   | 0          |
| on support | 50,000   | -50,000    |
| 468,240    | 250,000  | 218,240    |
| 970,463    | 378,223  | 592,240    |

| 5,008,673 | 5,787,973 |
|-----------|-----------|
| 970,463   | 378,223   |
| 5,979,136 | 6,166,196 |
|           |           |

| 89,000 - <b>67,00</b> | 89,000 | 22,000 |
|-----------------------|--------|--------|

## ESTIMATED OUTLAY - AUMENTUM PROJECT

| Expenditure Description            | Fund    | 2020            | 2021            | 2022            |
|------------------------------------|---------|-----------------|-----------------|-----------------|
| ONE-TIME FEES, HARRIS AUMENTUM     |         |                 |                 |                 |
| Software Licensing (Upgrade)       | 315     | \$<br>201,250   | \$<br>-         | \$<br>-         |
| Application Hosting Environment**  | 315     | \$<br>-         | \$<br>357,000   | \$<br>-         |
| Software Customization             | 315     | \$<br>247,000   | \$<br>-         | \$<br>-         |
| Data Conversion                    | 315     | \$<br>-         | \$<br>421,200   | \$<br>-         |
| Implementation                     | 315     | \$<br>754,760   | \$<br>710,940   | \$<br>1,509,520 |
| Travel Expenses*                   | 315     | \$<br>-         | \$<br>286,000   | \$<br>-         |
| Sales tax                          | 315     | \$<br>117,895   | \$<br>145,936   | \$<br>147,933   |
| ONE-TIME FEES, HARRIS MOBILE ASSES | SOR     |                 |                 |                 |
| Software Licensing                 | 315     | \$<br>63,687    | \$<br>-         | \$<br>-         |
| Implementation                     | 315     | \$<br>254,750   | \$<br>-         | \$<br>-         |
| Sales tax                          | 315     | \$<br>31,207    | \$<br>-         | \$<br>-         |
| ANNUAL RECURRING COST              |         |                 |                 |                 |
| Application Hosting Year 1-5**     | 002     | \$<br>-         | \$<br>-         | \$<br>371,280   |
| Software Support Year 1-5          | 002     | \$<br>-         | \$<br>-         | \$<br>535,240   |
| Mobile Assessor Support Year 1     | 315     | \$<br>66,049    | \$<br>19,125    | \$<br>-         |
| Mobile Assessor Support Year 2-6   | 002     | \$<br>-         | \$<br>79,407    | \$<br>86,958    |
| Sales tax                          | 315/002 | \$<br>6,473     | \$<br>9,656     | \$<br>97,361    |
| ANNUAL ESTIMATED OUTLAY            |         | \$<br>1,743,071 | \$<br>2,029,264 | \$<br>2,748,292 |
| FUND TOTALS                        |         |                 |                 |                 |

\*Travel Expenditures invoiced as actual costs incurred and are non-taxable. Estimate included for budge \*\*Application hosting: MSAzure platform

Source: Exhibit A, Part 1 Aumentum Cost Schedule v4.23.2020, Exhibit D, Part 2 Mobile Assessor SOW4\_I

| 2023 2024 2025 2026 |    |           |    | TO.       | TAL             |                 |    |           |
|---------------------|----|-----------|----|-----------|-----------------|-----------------|----|-----------|
|                     |    |           |    |           |                 | FUND 315        |    | FUND 002  |
| \$<br>35,250        | \$ | -         | \$ | -         | \$<br>-         | \$<br>236,500   | \$ | -         |
| \$<br>-             | \$ | -         | \$ | -         | \$<br>-         | \$<br>357,000   | \$ | -         |
| \$<br>-             | \$ | -         | \$ | -         | \$<br>-         | \$<br>247,000   | \$ | -         |
| \$<br>-             | \$ | -         | \$ | -         | \$<br>-         | \$<br>421,200   | \$ | -         |
| \$<br>377,380       | \$ | -         | \$ | -         | \$<br>-         | \$<br>3,352,600 | \$ | -         |
| \$<br>-             | \$ | -         | \$ | -         | \$<br>-         | \$<br>286,000   | \$ | -         |
| \$<br>40,438        | \$ | -         | \$ | -         | \$<br>-         | \$<br>452,201   | \$ | -         |
|                     |    |           |    |           |                 | FUND 315        |    | FUND 002  |
| \$<br>-             | \$ | -         | \$ | -         | \$<br>-         | \$<br>63,687    | \$ | -         |
| \$<br>55,900        | \$ | -         | \$ | -         | \$<br>-         | \$<br>310,650   | \$ | -         |
| \$<br>5,478         | \$ | -         | \$ | -         | \$<br>-         | \$<br>36,685    | \$ | -         |
|                     |    |           |    |           |                 |                 |    |           |
| \$<br>386,131       | \$ | 401,576   | \$ | 417,640   | \$<br>434,346   | \$<br>-         | \$ | 2,010,973 |
| \$<br>556,649       | \$ | 578,915   | \$ | 602,071   | \$<br>626,154   | \$<br>-         | \$ | 2,899,029 |
| \$<br>-             | \$ | -         | \$ | -         | \$<br>-         | \$<br>66,049    |    |           |
| \$<br>90,437        | \$ | 94,054    | \$ | 97,816    | \$<br>101,729   | \$<br>-         | \$ | 550,401   |
| \$<br>101,255       | \$ | 105,305   | \$ | 109,518   | \$<br>113,898   | \$<br>6,473     | \$ | 535,119   |
| \$<br>1,648,918     | \$ | 1,179,850 | \$ | 1,227,045 | \$<br>1,276,127 |                 |    |           |
|                     |    |           |    |           |                 | \$<br>5,836,045 | \$ | 5,995,522 |

tary purposes

Final

## COMPARISON OF CLOUD HOSTED VS. ON-PREM DEPLOYMENT: AUMENTUM

| Expenditure Description FUND                     |         | CLOUD DATA       | ON | -PREMISE DATA |
|--|---------|------------------|----|---------------|
| ONE-TIME IMPLEMENTATION COSTS                    |         |                  |    |               |
| HARRIS PROJECT IMPLEMENTATION                    | 315     | \$<br>4,960,515  | \$ | 4,960,515     |
| HARRIS MOBILE ASSESSOR IMPLEMENTATION            | 315     | \$<br>483,544    | \$ | 483,544       |
| ONE-TIME HOSTING COSTS                           |         |                  |    |               |
| HARRIS, INITIAL ENVIRONMENT                      | 315     | \$<br>391,986    | \$ | -             |
| IT EQUIPMENT, PROD, TEST, DISASTER*              | 315     | \$<br>-          | \$ | 283,230       |
| IT SOFTWARE/CONFIGURATION SVCS*                  | 315/505 | \$<br>-          | \$ | 400,000       |
| Total One-Time Costs                             |         | \$<br>5,836,045  | \$ | 6,127,289     |
| ANNUAL ONGOING COSTS                             |         |                  |    |               |
| HARRIS SOFTWARE MAINTENANCE                      | 002     | \$<br>587,694    | \$ | 587,694       |
| HARRIS MOBILE ASSESSOR MAINTENANCE               | 002     | \$<br>95,480     | \$ | 95,480        |
| HARRIS HOSTING FEES                              | 002     | \$<br>407,665    | \$ | -             |
| IT EQUIPMENT TRP                                 | 002     | \$<br>-          | \$ | 59,292        |
| IT SOFTWARE MAINTENANCE                          | 002     | \$<br>-          | \$ | 87,840        |
| REMOTE RECOVERY SITE SUPPORT*                    | 002     | \$<br>-          | \$ | 54,900        |
| IT APPLICATION SUPPORT SVCS**                    | 002     | \$<br>66,049     | \$ | 66,049        |
| IT ON PREM SYSTEM MAINTENANCE***                 | 002     | \$<br>-          | \$ | 135,790       |
| Total Annual Costs                               |         | \$<br>1,156,888  | \$ | 1,087,045     |
| Total Annual Costs, 5-YR & 4% inflator (2022-202 | 26)     | \$<br>6,266,079  | \$ | 5,887,785     |
| TOTAL IMPLEMENTATION PLUS 5-YEAR COST            |         | \$<br>12,102,125 | \$ | 12,015,074    |

Note: Equipment and professional services include sales tax at 9.8%

\*Source: Initial project design estimates

\*\*Source: Average support cost for enterprise app support

\*\*\*Source: Average support cost for on-prem enterprise app support and maintenance

| [        | DIFFERENCE |
|----------|------------|
|          |            |
|          |            |
|          |            |
|          |            |
|          |            |
| \$       | 291,244    |
|          |            |
|          |            |
|          |            |
|          |            |
|          |            |
|          |            |
|          |            |
| ć        | (270.205)  |
| \$<br>\$ | (378,295)  |
| \$       | (87,051)   |