Public Works
Locality Comparison

October 25, 2016
Divisions

• Operations
• Engineering
• Solid Waste

§ 7.06. - Public works department.
A. Department generally. There shall be a public works department which shall consist of a public works director and such other officers and employees as may be provided for by council. The department shall be divided into three divisions, a street and maintenance division, an engineering division and a solid waste division. Each division or subdivision shall be headed by a division or subdivision superintendent or manager. The public works director may serve as superintendent or manager of the street and maintenance division or the engineering division, but not both.
Functions

- Engineering
  - Capital Improvement Projects
  - MS4 Stormwater Program
  - Stormwater Permitting
  - Site Plan Review
  - Work in Right-of-Way & Driveway Permitting
  - Drainage Improvements
  - Signal Upgrades & Repairs
  - Bridge Maintenance & Repairs
Engineering Organizational Chart

City Engineer

Office Manager 1/3

Civil Engineer

Engineering Tech II - Design

Engineering Tech II - Survey
Functions

• Operations – Street Maintenance
  • Stormwater Management
  • Pavement Management
  • Sidewalk Rehabilitation
  • Snow Removal
  • Storm Damage/Trees
Functions

• Operations - Fleet Maintenance
  • Maintenance/Repair of Tagged Vehicles
  • Maintenance/Repair of pieces of equipment
  • In addition to City vehicles, maintain vehicles for Social Services and Sheriff’s Office
• Fuel Management
Functions

• Operations – Traffic Division
  • Fabricate, Installation, and Maintain City’s Signs
  • Traffic Control for Special Events
• Pavement Markings
• Vehicle Markings
Functions

• Operations - Building Maintenance
  • Maintenance and Repair of City’s Buildings
• Parking Lots
• Janitorial Services
Functions

• Operations – Parks and Recreation
  • Sugar Hollow Maintenance
  • Maintenance of 17 other parks
  • Ball Field Maintenance
  • Right of Way Mowing
  • School Grounds Maintenance
  • Miscellaneous Maintenance
Operations Organizational Chart

- Operations Manager
  - Street Foreman
    - MEO II (2)
    - MEO I (4)
    - Laborers (7)
  - Traffic Foreman
    - Traffic Tech II
    - Traffic Tech I
  - Fleet Manager
    - Mechanics (4)
    - Mechanic Helper
  - Office Manager
    - Secretary (Shared)
    - Mechanic Helper
  - Building Maintenance
    - Receptionist (Part-Time)
    - Building Maintenance Tech (Frozen)
    - Janitor (Full-Time)
    - Janitors (3) (Part-Time)
  - Parks & Rec Ops Superintendent
    - Crew Leaders (2)
    - Groundskeeper
    - MEO I (7)
    - Park Techs (4)
Functions

• Solid Waste
  • Collections
  • Disposal
Funding Sources

• Public Works receives funding from the following sources
  • Federal
  • State
  • Local
Federal Funding

• Federal Transportation
  • Funding for Capital Projects
  • Passed through VDOT

• Examples
  • Lee Highway Exit 7 Widening
  • Linden Drive Sidewalk
  • Pedestrian Signals at Commonwealth/Euclid
State Funding

• VDOT Maintenance
  • Annual funding based on number of lane miles and category of road.

• VDOT Primary Extension/State of Good Repair
  • Annual application process for paving projects along major routes as well as bridge work

• VDOT Smart Scale
  • Biannual application process for capital roadway improvements

• VDOT Safety Funding
  • Annual application process for highway and pedestrian safety improvements
Local Funding

- General Fund
  - 41010
- Recovered Costs
  - Insurance
  - Reimbursement
  - Sale of Equipment
- Permit Fees
  - Site Plan associated permits and VSMP
# Public Works Expenses FY2016

<table>
<thead>
<tr>
<th>Dept.</th>
<th>Salary</th>
<th>Fringe</th>
<th>Maint. of Property</th>
<th>Operating</th>
<th>Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering &amp; non-VDOT Operations</td>
<td>$536,953</td>
<td>$205,473</td>
<td>$20,251</td>
<td>$184,136</td>
<td>$10,489</td>
</tr>
<tr>
<td>VDOT Maintenance</td>
<td>$596,734</td>
<td>$280,521</td>
<td>$1,066,294</td>
<td>$937,824</td>
<td>$112,172</td>
</tr>
<tr>
<td>Fleet Maintenance</td>
<td>$123,475</td>
<td>$71,764</td>
<td>$0</td>
<td>$59,545</td>
<td>$5,381</td>
</tr>
<tr>
<td>Maint of Buildings</td>
<td>$76,783</td>
<td>$29,516</td>
<td>$101,226</td>
<td>$154,311</td>
<td>$2,853</td>
</tr>
</tbody>
</table>
**Peer Comparison**

### Governmental Expenditures by Function

<table>
<thead>
<tr>
<th></th>
<th>Population (Rounded)</th>
<th>Land Area (Square Miles)</th>
<th>Median Income</th>
<th>Per Capital Income</th>
<th>Total Locality Income (Per Capital Income x Population)</th>
<th>Expenses (from Audit)</th>
<th>FTES (info from budget)</th>
<th>% of Locality Income</th>
<th>% of Total Expenses</th>
<th>Expense Per Capital</th>
<th>Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Salem</strong></td>
<td>25,483</td>
<td>14.52</td>
<td>$50,590</td>
<td>$27,559</td>
<td>702,285,997</td>
<td>10,709,120</td>
<td>88.00</td>
<td>1.52%</td>
<td>15.29%</td>
<td>420</td>
<td></td>
</tr>
<tr>
<td><strong>Staunton</strong></td>
<td>24,538</td>
<td>20.00</td>
<td>$39,982</td>
<td>$25,255</td>
<td>619,707,190</td>
<td>6,048,808</td>
<td>39.00</td>
<td>0.98%</td>
<td>11.80%</td>
<td>247</td>
<td>Compare based on population &amp; land area</td>
</tr>
<tr>
<td>*<em>Hopewell</em></td>
<td>22,375</td>
<td>10.28</td>
<td>$39,156</td>
<td>$21,041</td>
<td>470,792,375</td>
<td>3,927,276</td>
<td>41.00</td>
<td>0.83%</td>
<td>6.97%</td>
<td>176</td>
<td></td>
</tr>
<tr>
<td><strong>Waynesboro</strong></td>
<td>21,269</td>
<td>15.21</td>
<td>$45,499</td>
<td>$21,515</td>
<td>457,602,535</td>
<td>6,585,131</td>
<td>37.25</td>
<td>1.44%</td>
<td>11.63%</td>
<td>310</td>
<td>Compare based on population &amp; land area</td>
</tr>
<tr>
<td><strong>Bristol</strong></td>
<td>17,690</td>
<td>13.17</td>
<td>$33,616</td>
<td>$20,574</td>
<td>363,954,060</td>
<td>4,920,842</td>
<td>31.00</td>
<td>1.35%</td>
<td>9.70%</td>
<td>278</td>
<td></td>
</tr>
<tr>
<td><strong>Radford</strong></td>
<td>17,441</td>
<td>9.63</td>
<td>$30,714</td>
<td>$15,509</td>
<td>270,492,469</td>
<td>3,375,454</td>
<td>22.50</td>
<td>1.25%</td>
<td>11.08%</td>
<td>194</td>
<td></td>
</tr>
<tr>
<td><strong>Colonial Heights</strong></td>
<td>17,411</td>
<td>7.80</td>
<td>$52,529</td>
<td>$28,282</td>
<td>492,417,902</td>
<td>4,079,575</td>
<td>4.00</td>
<td>0.83%</td>
<td>7.10%</td>
<td>234</td>
<td></td>
</tr>
<tr>
<td><strong>Martinsville</strong></td>
<td>13,821</td>
<td>11.00</td>
<td>$27,746</td>
<td>$19,663</td>
<td>271,762,323</td>
<td>4,403,469</td>
<td>43.00</td>
<td>1.62%</td>
<td>12.16%</td>
<td>319</td>
<td>Compare based on population &amp; land area</td>
</tr>
<tr>
<td><strong>Galax</strong></td>
<td>7,034</td>
<td>8.20</td>
<td>$30,430</td>
<td>$20,081</td>
<td>141,249,754</td>
<td>2,441,402</td>
<td>43.00</td>
<td>1.73%</td>
<td>12.91%</td>
<td>347</td>
<td></td>
</tr>
</tbody>
</table>

*FP2014 CAFR

**Per Capital Income is average earned per person; calculated by dividing the city's total income by its total population.
Peer Comparison - Infrastructure

<table>
<thead>
<tr>
<th>City</th>
<th>Area Square Miles</th>
<th>Population</th>
<th>People/Square Mile</th>
<th>Median Income</th>
<th>Lane Miles</th>
<th>Bridges</th>
<th>Culverts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>13.17</td>
<td>17,690</td>
<td>1,343</td>
<td>$33,616</td>
<td>257</td>
<td>40</td>
<td>18</td>
</tr>
<tr>
<td>Martinsville</td>
<td>11.0</td>
<td>13,821</td>
<td>1,256</td>
<td>$27,746</td>
<td>222</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Staunton</td>
<td>20.0</td>
<td>24,538</td>
<td>1,227</td>
<td>$39,982</td>
<td>285</td>
<td>11</td>
<td>8</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>15.21</td>
<td>21,269</td>
<td>1,399</td>
<td>$45,499</td>
<td>268</td>
<td>20</td>
<td>10</td>
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</tbody>
</table>
## Peer Comparison - Services

<table>
<thead>
<tr>
<th>City</th>
<th>Equipment Maintained</th>
<th>R/W Maintained</th>
<th>Number Buildings Maintained</th>
<th>Scope of Buildings Maintained</th>
<th>Water &amp; Sewer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>&gt;500</td>
<td>Yes</td>
<td>20</td>
<td>General Custodial</td>
<td>No</td>
</tr>
<tr>
<td>Martinsville</td>
<td>&gt;400</td>
<td>Yes</td>
<td>10</td>
<td>General Custodial</td>
<td>Yes</td>
</tr>
<tr>
<td>Staunton</td>
<td>569</td>
<td>Yes</td>
<td>19</td>
<td>General Custodial</td>
<td>Yes</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>&gt;400</td>
<td>Yes</td>
<td>6</td>
<td>General Custodial</td>
<td>Yes</td>
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</tbody>
</table>
# Peer Comparison - Stormwater

<table>
<thead>
<tr>
<th>City</th>
<th>MS4</th>
<th>5-Year Plan</th>
<th>Annual Report</th>
<th>VSMP Authority</th>
<th>VSMP Permits Issued</th>
<th>Outfalls</th>
<th>BMP</th>
<th>Stormwater Utility</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>2003</td>
<td>External</td>
<td>External</td>
<td>Yes</td>
<td>11</td>
<td>409</td>
<td>56</td>
<td>No</td>
</tr>
<tr>
<td>Martinsville</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>N/A</td>
<td>2</td>
<td>N/A</td>
<td>N/A</td>
<td>No</td>
</tr>
<tr>
<td>Staunton</td>
<td>2013</td>
<td>External</td>
<td>Internal</td>
<td>Yes</td>
<td>4</td>
<td>300</td>
<td>220</td>
<td>Yes</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>2013</td>
<td>External</td>
<td>External</td>
<td>Yes</td>
<td>5</td>
<td>150</td>
<td>170</td>
<td>Yes</td>
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## Peer Comparison – VDOT projects

<table>
<thead>
<tr>
<th>City</th>
<th>Locally Administer VDOT</th>
<th>HB2 Projects Funded</th>
<th>Smart Scale Projects</th>
<th>In-house Design</th>
<th>In-house Inspection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>Yes</td>
<td>2</td>
<td>2</td>
<td>All</td>
<td>Small</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$15.3 million</td>
<td>$24.5 million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Martinsville</td>
<td>Some Small</td>
<td>0</td>
<td>0</td>
<td>Small</td>
<td>Small</td>
</tr>
<tr>
<td>Staunton</td>
<td>Yes</td>
<td>0</td>
<td>3</td>
<td>Small</td>
<td>Small</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>$9.6 million</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Waynesboro</td>
<td>Yes</td>
<td>1</td>
<td>1</td>
<td>Small</td>
<td>Small</td>
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<tr>
<td></td>
<td></td>
<td>$10.6 million</td>
<td>$11.6 million</td>
<td></td>
<td></td>
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</tbody>
</table>
## Peer Comparison - Personnel

<table>
<thead>
<tr>
<th>City</th>
<th>Engineering Staff</th>
<th>Street Staff</th>
<th>Fleet Staff</th>
<th>Building Maintenance Staff</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>4</td>
<td>17</td>
<td>6</td>
<td>2 3 part-time</td>
</tr>
<tr>
<td>Martinsville</td>
<td>3</td>
<td>30</td>
<td>8</td>
<td>2 ? part-time</td>
</tr>
<tr>
<td>Staunton</td>
<td>5</td>
<td>16</td>
<td>13</td>
<td>5 8 part-time</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>8</td>
<td>18</td>
<td>7</td>
<td>2 ? part-time</td>
</tr>
</tbody>
</table>
## Laborer Pay Ranges per Locality

### Maximum
- Laborer Martinsville, 38,285.00
- Laborer Waynesboro, 36,597.00
- Laborer Staunton, 36,300.00
- Laborer Bristol, 33,137.00

### Mid
- Laborer Martinsville, 31,904.00
- Laborer Waynesboro, 30,104.00
- Laborer Staunton, 29,494.00
- Laborer Bristol, 28,805.00

### Minimum
- Laborer Martinsville, 25,524.00
- Laborer Waynesboro, 23,611.00
- Laborer Staunton, 22,687.00
- Laborer Bristol, 24,474.00
MEO I Pay Ranges per Locality

Maximum
- MEO I Martinsville, 38,285.00
- MEO I Waynesboro, 36,597.00
- MEO I Staunton, 40,072.00
- MEO I Bristol, 38,497.00

Mid
- MEO I Martinsville, 31,904.00
- MEO I Waynesboro, 30,104.00
- MEO I Staunton, 32,558.00
- MEO I Bristol, 32,922.00

Minimum
- MEO I Martinsville, 25,524.00
- MEO I Waynesboro, 23,611.00
- MEO I Staunton, 25,045.00
- MEO I Bristol, 27,348.00
MEO II Pay Ranges per Locality

**Maximum**
- MEO II Martinsville, Maximum, 41,559.00
- MEO II Waynesboro, 41,164.00
- MEO II Staunton, 44,242.00
- MEO II Bristol, 40,270.00

**Mid**
- MEO II Martinsville, Mid, 34,632.00
- MEO II Waynesboro, 33,861.00
- MEO II Staunton, 35,946.00
- MEO II Bristol, 34,924.00

**Minimum**
- MEO II Martinsville, Minimum, 27,706.00
- MEO II Waynesboro, 26,558.00
- MEO II Staunton, 27,651.00
- MEO II Bristol, 29,579.00
### Foreman Pay Ranges per Locality

<table>
<thead>
<tr>
<th>Locality</th>
<th>Maximum</th>
<th>Mid</th>
<th>Minimum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Crew Supervisor Martinsville</td>
<td>48,969.00</td>
<td>Crew Supervisor Martinsville</td>
</tr>
<tr>
<td></td>
<td>Operations Coordinator Waynesboro</td>
<td>48,152.00</td>
<td>Operations Coordinator Waynesboro</td>
</tr>
<tr>
<td></td>
<td>Crew Supervisor Staunton, 53,894.00</td>
<td>Crew Supervisor Staunton, 43,789.00</td>
<td>Crew Supervisor Staunton, 33,684.00</td>
</tr>
<tr>
<td></td>
<td>Foreman Bristol, 41,854.00</td>
<td>Foreman Bristol, 36,275.00</td>
<td>Foreman Bristol, 30,697.00</td>
</tr>
</tbody>
</table>
Mechanic Pay Ranges per Locality

Maximum
- Mechanic Martinsville, 48,969.00
- Mechanic Waynesboro, 44,522.00
- Mechanic Staunton, 48,849.00
- Mechanic Bristol, 46,410.00

Mid
- Mechanic Martinsville, 40,807.00
- Mechanic Waynesboro, 36,623.00
- Mechanic Staunton, 39,690.00
- Mechanic Bristol, 40,732.00

Minimum
- Mechanic Martinsville, 32,646.00
- Mechanic Waynesboro, 28,724.00
- Mechanic Staunton, 30,531.00
- Mechanic Bristol, 35,055.00
Custodial Worker Pay Ranges per Locality

**Maximum**
- Custodial Worker Martinsville, 32,492.00
- Custodial Worker Waynesboro, 30,082.00
- Custodial Worker Staunton, 34,544.00
- Custodial Worker Bristol, 33,137.00

**Mid**
- Custodial Worker Martinsville, 27,076.00
- Custodial Worker Waynesboro, 24,745.00
- Custodial Worker Staunton, 28,067.00
- Custodial Worker Bristol, 28,780.00

**Minimum**
- Custodial Worker Martinsville, 21,661.00
- Custodial Worker Waynesboro, 19,408.00
- Custodial Worker Staunton, 21,590.00
- Custodial Worker Bristol, 24,474.00
Engineering Tech Pay Ranges per Locality

**Maximum**
- Engineering Tech Martinsville, 48,969.00
- Engineering Aide Waynesboro, 46,301.00
- Engineering Tech Staunton, 53,893.00
- Engineering Tech Bristol, 50,867.00

**Mid**
- Engineering Tech Martinsville, 40,807.00
- Engineering Aide Waynesboro, 38,086.00
- Engineering Tech Staunton, 43,788.00
- Engineering Tech Bristol, 43,936.00

**Minimum**
- Engineering Tech Martinsville, 32,646.00
- Engineering Aide Waynesboro, 29,872.00
- Engineering Tech Staunton, 33,683.00
- Engineering Tech Bristol, 37,006.00
## Peer Comparison-Expenses from APA Report FY2015

<table>
<thead>
<tr>
<th>City</th>
<th>Lane Miles</th>
<th>Maintenance of Highways, Streets, Bridges &amp; Sidewalks</th>
<th>$/Lane Mile</th>
<th># of Buildings</th>
<th>Maintenance of Building &amp; Grounds</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>257</td>
<td>$4,077,414</td>
<td>$15,865</td>
<td>20</td>
<td>$412,057</td>
</tr>
<tr>
<td>Martinsville</td>
<td>222</td>
<td>$3,548,232</td>
<td>$15,983</td>
<td>10</td>
<td>$673,872</td>
</tr>
<tr>
<td>Staunton</td>
<td>285</td>
<td>$5,051,369</td>
<td>$17,724</td>
<td>19</td>
<td>$1,617,330</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>268</td>
<td>$6,007,584</td>
<td>$22,416</td>
<td>6</td>
<td>$1,323,969</td>
</tr>
</tbody>
</table>
## Peer Comparison from Weldon Cooper Highway Finance Survey FY2015

<table>
<thead>
<tr>
<th>City</th>
<th>Lane Miles</th>
<th>VDOT Maintenance Funding</th>
<th>VDOT Maintenance Expenditures</th>
<th>Expenditures not Funded</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bristol</td>
<td>257</td>
<td>$3,345,454</td>
<td>$3,714,090</td>
<td>10%</td>
</tr>
<tr>
<td>Martinsville</td>
<td>222</td>
<td>$3,060,077</td>
<td>$2,957,605</td>
<td>0%</td>
</tr>
<tr>
<td>Staunton</td>
<td>285</td>
<td>$3,736,298</td>
<td>$5,532,507</td>
<td>32%</td>
</tr>
<tr>
<td>Waynesboro</td>
<td>268</td>
<td>$3,299,862</td>
<td>$2,788,443</td>
<td>0%</td>
</tr>
</tbody>
</table>
Peer Summary

• Similar functions
• Multi-disciplinary staff allows us to more efficiently utilize our resources.
• Spending less but maintaining more
• Access to VDOT funding
• Only MS4 without stormwater utility
Recommendations

• Establish stormwater utility

• Further analyze maintenance of traffic signals