Roadmap Planning Workshop

Regional Dispatch Implementation Study

November 30, 2016
<table>
<thead>
<tr>
<th>Time</th>
<th>Session</th>
</tr>
</thead>
<tbody>
<tr>
<td>8:00 – 9:00</td>
<td>Presentation of Benchmark Findings</td>
</tr>
<tr>
<td>9:00 – 10:30</td>
<td>Discussion of Consolidation Assumptions and Requirements</td>
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<tr>
<td></td>
<td>■ Technology</td>
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<td></td>
<td>■ Staffing</td>
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<td></td>
<td>■ Facilities</td>
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<tr>
<td></td>
<td>■ Human Resources</td>
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<td>■ Operations</td>
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<td>■ Cost</td>
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<td>■ Governance</td>
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<tr>
<td>10:45 – 1:45</td>
<td>Presentation of Potential Operational Models</td>
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<td></td>
<td>■ Working Lunch</td>
</tr>
<tr>
<td>1:45 – 2:00</td>
<td>Next Steps</td>
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</tbody>
</table>
1. Reach agreement on dispatch consolidation assumptions and requirements in the main attribute areas

2. Explore potential dispatch consolidation models with the goal of
   - Evaluating advantages and disadvantages of each model, both for individual municipalities and Chittenden County as a whole
   - Identifying potential deal breakers for individual municipalities
   - Identifying individual municipality and group preferences

3. Provide direction for the development of the dispatch consolidation roadmap
   - The detailed analysis and forthcoming implementation plan should be as specific to the desired path forward as possible
Workshop Basics

- All ideas are good ideas – at least initially
  - Creativity is desirable since ideas can spark other great ideas

- There are no right or wrong answers
  - We are brainstorming not debating
  - This is a thinking exercise

- Everyone has the responsibility to participate and ask probing questions

- Focus on the strategic objectives and not the minutiae

**Main Project Driver:**
Improved service delivery through a more efficient and effective dispatch model
Benchmark Findings

CURRENT ENVIRONMENT

OVERVIEW
Technology: Most of Chittenden County Uses Valcour

- State Spillman installation has failed to meet many agencies’ needs
- Valcour is seen as a nimble, cost-effective SaaS alternative to Spillman
  - Designed as a law RMS
  - Constantly evolving
- Dispatchers use Valcour as a log, as opposed to as a decision making tool
- Valcour lacks features one would expect to see in a regional dispatch application
  - Address validation
  - Unit recommendations
  - Response plans
  - Premise information
  - Customer supplied GIS data

<table>
<thead>
<tr>
<th>System</th>
<th>Town</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valcour</td>
<td>Burlington</td>
</tr>
<tr>
<td>Valcour</td>
<td>Colchester</td>
</tr>
<tr>
<td>Valcour</td>
<td>Essex</td>
</tr>
<tr>
<td>Valcour</td>
<td>Milton</td>
</tr>
<tr>
<td>Spillman</td>
<td>Richmond</td>
</tr>
<tr>
<td>Spillman</td>
<td>Shelburne</td>
</tr>
<tr>
<td>Spillman</td>
<td>South Burlington</td>
</tr>
<tr>
<td>Valcour</td>
<td>Williston</td>
</tr>
<tr>
<td>Valcour</td>
<td>Winooski</td>
</tr>
<tr>
<td>Spillman</td>
<td>VSP</td>
</tr>
<tr>
<td>(Plans to Move to Valcour)</td>
<td></td>
</tr>
</tbody>
</table>
## Technology: Mission Critical Voice Systems Vary by Discipline

<table>
<thead>
<tr>
<th>Law Enforcement</th>
<th>Fire</th>
<th>EMS/Rescue</th>
</tr>
</thead>
<tbody>
<tr>
<td>• UHF</td>
<td>• Majority VHF</td>
<td>• Majority VHF</td>
</tr>
<tr>
<td>• Conventional</td>
<td>• Some UHF (Burlington, South Burlington)</td>
<td>• Analog</td>
</tr>
<tr>
<td>• Analog, mixed-mode and digital</td>
<td>• Some UHF Cross-Band (Colchester, Winooski)</td>
<td>• Mostly single use dedicated channels for non-fire based EMS</td>
</tr>
<tr>
<td>• Some encryption using shared County key</td>
<td>• Analog</td>
<td></td>
</tr>
<tr>
<td>• Mostly single use dedicated channels</td>
<td>• Mostly single use dedicated channels</td>
<td></td>
</tr>
<tr>
<td>• VPS dispatched towns operate on VSP infrastructure</td>
<td>• Some sharing of dispatch channel for agencies dispatched from a shared center</td>
<td></td>
</tr>
</tbody>
</table>
Technology: Other Non-Voice Systems Are In Use

- Fire Station Alerting
  - Majority of agencies use two-tone, over-the-air alerting
  - Burlington and South Burlington use dedicated circuits from dispatch to stations
    - Zetron Model 26

- Wireless Connectivity
  - Commercial 3G/4G carriers

- 72MHz Radio Box Systems
  - Burlington – Sigcom Vision 21

- Universal Time Sources
  - Some, but not all agencies use a universal time source
Staffing: Dispatch Center Manpower Is Spread Thin

- All dispatch locations except Burlington have periods when only one dispatcher is working
  - Single person minimum staffing poses a risk to public safety
  - “One call away from a very bad day”

- Agencies report issues with dispatcher retention
  - Many interviewees expressed a desire to give the role the respect it deserves

- Low staffing levels across the county impede dispatchers from participating in activities perceived as “extra,” such as
  - Ongoing training
  - Quality assurance efforts
  - Critical incident stress breaks
  - Community outreach
  - Public safety agency after action reports and ride-alongs
Staffing: Dispatchers Wear Many Hats

- Front counter traffic
- Records functions
  - Report writing for low-priority incidents
  - Entering crash reports
  - Entering tickets and warnings
  - Alarm registration and billing
  - Managing permits
  - Supporting NIBRS reporting
  - Entering court paper work
  - Processing restraining orders
  - Background checks
- Administrative functions
  - Ordering forms
  - Managing town websites
- Facility functions
  - Opening garage doors
  - Monitoring camera feeds
  - Distributing keys
  - Accepting deliveries
  - Managing the community room
  - Managing the drug box
- Other duties
  - Car seat checks
  - Elderly checks
  - Supporting the Recreation Department
  - Responding to an audit
  - Coordinating property return

* Burlington is the exception
## Staffing: Dispatch Centers Authorize a Total of 45 Full Time Equivalents (FTE)

<table>
<thead>
<tr>
<th>Dispatch Center</th>
<th>Total CFS*</th>
<th>Authorized Dispatch FTE</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington</td>
<td>43,500</td>
<td>12</td>
<td>Seeking a Dispatch Manager</td>
</tr>
<tr>
<td>Colchester</td>
<td>25,699</td>
<td>8</td>
<td>Excludes Sergeant’s Supervisory Time</td>
</tr>
<tr>
<td>Essex</td>
<td>15,600</td>
<td>4</td>
<td>Excludes 2 PT Employees</td>
</tr>
<tr>
<td>Shelburne</td>
<td>18,504</td>
<td>8.5</td>
<td>Includes 2 Supervisors</td>
</tr>
<tr>
<td>South Burlington</td>
<td>21,600</td>
<td>6</td>
<td>Excludes Sergeant’s Supervisory Time and 1 Part Time Officer</td>
</tr>
<tr>
<td>Williston</td>
<td>6,496</td>
<td>2</td>
<td>-</td>
</tr>
<tr>
<td>Winooski</td>
<td>11,391</td>
<td>4</td>
<td>Excludes Occasional Part Time Help</td>
</tr>
<tr>
<td>St. Mike’s Rescue</td>
<td>2,285</td>
<td>N/A</td>
<td>-</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>147,391</strong></td>
<td><strong>45</strong></td>
<td>Rounded Up to Offset Exclusions</td>
</tr>
</tbody>
</table>

*Includes self-initiated calls Estimate DRAFT WORKING DOCUMENT
## Staffing: 45 FTE As Compared with Other Dispatch Centers in the Region

<table>
<thead>
<tr>
<th>Dispatch Center</th>
<th>Population</th>
<th>Total CFS</th>
<th>Dispatch FTE</th>
<th>Min Staff</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chittenden County, VT</td>
<td>136,000</td>
<td>147,391</td>
<td>45</td>
<td>8</td>
<td>10 Law and 40+ Fire/EMS agencies</td>
</tr>
<tr>
<td>St. Albans, VT</td>
<td>48,000</td>
<td>21,000</td>
<td>8</td>
<td>2</td>
<td>+ 2: Manager, Assistant (plus 5 PT staff)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>1 Law and 30 Fire/EMS agencies</td>
</tr>
<tr>
<td>Rockingham County, NH</td>
<td>94,000</td>
<td>155,000</td>
<td>14</td>
<td>3</td>
<td>+ 4: Supervisors (plus 4 PT staff)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>25 Law and 28 Fire/EMS agencies</td>
</tr>
<tr>
<td>Merrimack County, NH</td>
<td>146,000</td>
<td>68,000*</td>
<td>8</td>
<td>2</td>
<td>+1: Manager</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>15 Law agencies</td>
</tr>
<tr>
<td>Clinton County, NY</td>
<td>82,128</td>
<td>11,300</td>
<td>9</td>
<td>2</td>
<td>+1: Supervisor (plus 6 PT staff)</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>4 Law and 24 Fire/EMS agencies</td>
</tr>
</tbody>
</table>
## Staffing: 45 FTE As Compared with Other Dispatch Centers in the Country

<table>
<thead>
<tr>
<th>Dispatch Center</th>
<th>Population</th>
<th>Total CFS</th>
<th>Dispatch FTE</th>
<th>Min Staff</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chittenden County, VT</td>
<td>136,000</td>
<td>147,391</td>
<td>45</td>
<td>8</td>
<td>10 Law and 40+ Fire/EMS agencies</td>
</tr>
<tr>
<td>Albemarle County – UVA - Charlottesville, VA</td>
<td>103,000</td>
<td>154,000</td>
<td>43</td>
<td>7</td>
<td>+10: Director, Operations Manager, Training and Accreditation Supervisor, Assistants, Custodian, Systems Positions 3 Law and 5 Fire/EMS agencies</td>
</tr>
<tr>
<td>City of Visalia, CA</td>
<td>128,000</td>
<td>153,000</td>
<td>28</td>
<td>4</td>
<td>+ 1: Manager 1 Law and 1 Fire/EMS agency</td>
</tr>
<tr>
<td>Ventura County, CA</td>
<td>375,000</td>
<td>98,000</td>
<td>28</td>
<td>4</td>
<td>+ 4: Manager, Trainer, Admin Staff County and 5 contract cities (law only)</td>
</tr>
</tbody>
</table>
## Facilities: Few Options for Expanded Operations Today, Many in the Future

<table>
<thead>
<tr>
<th>Dispatch Center</th>
<th>Current Room for Expansion</th>
<th>Future Expansion Possibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington</td>
<td>N</td>
<td>Periodic discussion building a new Police facility, but no concrete plans</td>
</tr>
<tr>
<td>Colchester</td>
<td>N</td>
<td>May have access to neighboring Family Health Building in 2020</td>
</tr>
<tr>
<td>Essex</td>
<td>N</td>
<td>Space exists in the new facility but significant effort would be required to reconfigure the dispatch “bunker”</td>
</tr>
<tr>
<td>Shelburne</td>
<td>Current space could accommodate up to two additional consoles for a total of 5 (compact) positions</td>
<td></td>
</tr>
<tr>
<td>South Burlington</td>
<td>N</td>
<td>Space on second floor of City Hall could potentially be reconfigured</td>
</tr>
<tr>
<td>Williston</td>
<td>N</td>
<td>Space on second floor of Police Department could potentially be reconfigured</td>
</tr>
<tr>
<td>Winooski</td>
<td>N</td>
<td>Plans to build a new Police facility in 2019</td>
</tr>
</tbody>
</table>
## Human Resources: Initial Data Suggests Wide Variances

<table>
<thead>
<tr>
<th>Dispatch Center</th>
<th>Base Hourly Rate</th>
<th>Dispatcher Union</th>
<th>Summary of Benefits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington</td>
<td>$21.20</td>
<td>AFSCME</td>
<td>Municipal Retirement Group</td>
</tr>
<tr>
<td>Colchester</td>
<td>$20.35</td>
<td>AFSCME</td>
<td>VMERS B Retirement Group; Pension after 30 Years Service; Age 62 - 60%</td>
</tr>
<tr>
<td>Essex</td>
<td>$18.92</td>
<td>Essex Police Employees Association</td>
<td>Health, dental and retirement benefits</td>
</tr>
<tr>
<td>Shelburne</td>
<td>$18.90</td>
<td>NEPBA</td>
<td>VMERS B Retirement Group</td>
</tr>
<tr>
<td>South Burlington</td>
<td>X</td>
<td>Police Union</td>
<td>Pension after 25 Years Service; Age 50 - 62.5%</td>
</tr>
<tr>
<td>Williston</td>
<td>$18.63</td>
<td>No Union</td>
<td>VMERS B Retirement Group</td>
</tr>
<tr>
<td>Winooski</td>
<td>X</td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>$19.60</strong></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
In general, dispatch centers are entrenched in police operations

- Dispatchers value their close working relationships with police officers and the high degree of local and institutional knowledge they have developed in the current environment.

Fire/EMS dispatching practices fall short of industry standards and NFPA recommendations

- Lack of Service Level Agreements between Fire Departments and Dispatch centers.
- Lack of dedicated communications oversight during the call for service, handling of emergency mayday alarms and CAD functionality that is particularly important to Fire/EMS responses.
- Anecdotal evidence suggests Dispatchers may make several telephone calls before identifying an available Fire or EMS resource to dispatch.

Police and Fire/EMS cannot communicate due to encryption.

Dispatch centers lack the resources to measure their performance.
Costs: Personnel Costs are Key Input in Otherwise Apples to Oranges Budgets

- All stakeholders would like regional dispatch to contain long-term costs
  - The tolerance for transition costs varies

- Dispatch centers budget differently
  - Burlington PD does not maintain a separate dispatch budget
  - Colchester and Williston’s dispatch budgets include a percentage of overhead costs (supplies, utilities, heat, cleaning, etc.), omit building and capital costs, and handle equipment differently
  - Shelburne’s dispatch budget includes capital improvements and equipment, but omits the cost of supplies, utilities, etc.

- Personnel costs drive dispatch center expenses are and are directly attributable to dispatch operations

<table>
<thead>
<tr>
<th>Dispatch Center</th>
<th>Benefit Multiplier</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colchester</td>
<td>1.53</td>
</tr>
<tr>
<td>Essex</td>
<td>1.48</td>
</tr>
<tr>
<td>Shelburne</td>
<td>1.50</td>
</tr>
<tr>
<td>Williston</td>
<td>1.45</td>
</tr>
<tr>
<td><strong>Average</strong></td>
<td><strong>1.49</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Dispatch Center</th>
<th>Personnel Costs as a % of Total Costs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Colchester</td>
<td>89%</td>
</tr>
<tr>
<td>Shelburne</td>
<td>92%</td>
</tr>
<tr>
<td>Williston</td>
<td>97%</td>
</tr>
</tbody>
</table>
Consolidated Dispatch Presents Several Service Delivery Opportunities

- Consolidating multiple small dispatch centers into one or more larger operations will
  - Eliminate risk inherent to single position minimum staffing
  - Improve the coordination of mutual aid responses
    - Anecdotal evidence suggest dispatchers may make several telephone calls before identifying an available Fire or EMS resource to dispatch

- Consolidation may also
  - “Professionalize” the communications environment by
    - Creating a career trajectory for dispatchers
    - Supporting systematic supervision, training and quality assurance efforts
  - Alleviate dispatch center staffing challenges

- Consolidation provides an opportunity to
  - Bring Fire/EMS dispatching in line with NFPA recommendations through a formalized agreement and accompanying procedures and policies
However Numerous Challenges Must Be Addressed

- Current Valcour technology is not ready to support regionalized operations
- Few facilities can support expanded operations in their current state
  - However there are multiple options on the horizon for the medium-term
- Multiple unions, employment agreements, dispatch practices and policies are in place today
- Dispatchers in particular are concerned that consolidation will dilute institutional knowledge and diminish their rapport with first responders, hindering their ability to effectively do their job
  - The rigor, scale and behavior change required in the new environment may make some people uncomfortable, particularly in the short-term
- The tolerance for one-time expenses varies among municipalities
  - The VSP has signaled that it may start charging for dispatching services, but has yet to put a plan in place
Many Interviewees Believe the Environment is Ready for Consolidation

- Consolidation has been studied and attempted numerous times in the past
  - Failures attributed to “turf wars” and an inability to reach mutually agreeable cost allocation models

- The opportunities of today seem to outweigh the challenges
  - Project stakeholders have expressed a willingness to work together
  - There is a common desire to proactively position Chittenden County to best handle changes that may be coming down from the State, as opposed to being reactive
  - There is a strong desire to improve the dispatch environment, which historically has not gotten the attention it deserves
    - The job is physically and emotionally taxing; agencies struggle with retention
    - “Vermont is changing. Heroin use is rampant and everybody has guns. There is a whole different quality of crime now.” – Interviewee
Dispatch Consolidation

ASSUMPTIONS AND REQUIREMENTS
Overview

- Assumptions:
  - Attributes DELTAWRX believes are necessary for a consolidated dispatch center
  - Project sponsors are encouraged to challenge and add to these assumptions

- Requirements?
  - Project sponsors should decide if the attributes listed are indeed requirements and/or weight their relative importance
  - Participants are encouraged to add to these requirements during the workshop to prevent deal breakers from arising later in the project
Technology: CAD

- Assumptions:
  - Dispatch center and dispatched agencies will use a single CAD system
  - Dispatch center will use a universal clock
  - Dispatchers will enter a single call for multi-agency responses

- Requirements?
  - ANI/ALI interface
  - Spillman interface
  - FRMS/ePCR interface
  - Address validation
  - Municipality supplied GIS data
  - Unit recommendations
  - Response plans
  - Automated move ups based on established criteria
  - Canned reports for statistical analysis

Open Items:
- Review CrossWind’s Valcour development roadmap, if one exists
- Conduct high level gap analysis of forthcoming functionality with APCO minimum requirements of a multi-agency, multi-discipline CAD
Technology: Radio

- Assumptions:
  - All Fire Departments will be dispatched (toned-out) on the same frequency
  - Local dedicated channels could be used as tactical/command/fire ground channels
  - Leased lines can be re-directed to the consolidated center

- Requirements?
  - County EMS dispatch (tone-outs) on the same frequency
  - Fire and EMS on the same frequency
  - Countywide fire communications channel plan and tactical communications plan
Technology: Infrastructure

- **Assumptions:**
  - CAD vendor will provide minimum specifications with which the consolidated center will maintain compliance
    - Server capacity
    - Bandwidth
  - Any combined dispatch facility running Valcour will require two or more redundant internet connections
  - Leased lines for Station Alerting (Burlington, South Burlington) can be re-directed to the consolidated center

- **Requirements:**
  - Policies that prohibit activities that hinder CAD’s performance (e.g., streaming videos, shopping, etc.)
Application and System Support

Assumptions:
- Support will be provided through a formalized agreement

Requirements?
- Professional support arrangement
  - In the case of Valcour, would this be addition to, or instead of volunteer Program Managers?

Open Question:
- Should the dispatch center be responsible for supporting:
  - CAD application
  - Mobile application
  - Mobile computers
  - Portable radios
  - Other devices such as tablets and smartphones
## Staffing

### Assumptions:

- It takes 5.5 FTE to staff a 24x7 position
  - 2080 work hours less 500 hours of leave
- The regional dispatch center(s) will only provide communications services
- Police Departments’ front windows will likely close after business hours
  - Urgent after-hours requests would be handled as a call for service
- Table at right is for cost comparison purposes only
  - Police Departments’ administrative capacity was not examined; agencies will determine how to fill the gap created by regional dispatch
  - This could include transitioning an administrative person to the front window

<table>
<thead>
<tr>
<th>Dispatch Center</th>
<th>Backfill Assumptions (FTE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burlington</td>
<td>0</td>
</tr>
<tr>
<td>Colchester</td>
<td>1</td>
</tr>
<tr>
<td>Essex</td>
<td>1</td>
</tr>
<tr>
<td>Shelburne</td>
<td>1</td>
</tr>
<tr>
<td>South Burlington</td>
<td>1</td>
</tr>
<tr>
<td>Williston</td>
<td>1</td>
</tr>
<tr>
<td>Winooski</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>6</strong></td>
</tr>
</tbody>
</table>
**Staffing**

- **Requirements?**
  - A full-time dispatch center Manager
  - A round-the-clock dispatch supervisor
  - A dedicated dispatch supervisor
    - Perhaps in smaller models the supervisor becomes a “working” position
  - Other roles and positions, based on the size of the consolidation
    - Training Manager
    - QA Manager
    - System Support Specialist
    - Administrative Support
Facilities

- Assumptions:
  - Four consoles require about 500 square feet
  - Manager and support positions require additional office space

- Requirements?
  - Parking that accommodates maximum staffing levels
  - Geographic location that is central to the dispatched agencies
  - Dedicated personal storage space (lockers)
Human Resources

- **Assumptions:**
  - The majority of existing dispatchers will seek employment at the consolidated center
  - Average Dispatcher salary is $47,838
  - Average Dispatcher benefits are 49% of salary, which equals $23,363
  - Dispatch Manager salary of $65,000
    - Less for smaller models

- **Requirements?**
  - All dispatch center staff are employed by the same entity

**Open Questions:**
- How will employees be transitioned to the future entity?
- What is the best way to bring union representatives into the discussion?
Operations

Assumptions:
- The dispatch center(s) will use a hybrid model
  - Call taker also serves as dispatcher, however in the event of a fire, the dispatcher transfers to an exclusive fire operations channel)
  - This would be reconsidered if the dispatch center becomes a PSAP
- Dispatched agencies will standardize policies that cannot be uniquely configured in CAD
- Dispatch center(s) will assign consoles based on function
- Dispatchers will rotate through consoles with all employees capable of performing all duties
- Dispatch center(s) and agencies will develop a Service Level Agreement that establishes performance standards

Requirements?
- For group discussion

Open Questions:
- What is the process for becoming a PSAP?
- Is this a long-term goal for the County?
Assumptions:

- Cost projections will be primarily based on salaries, benefits and technology
  - Overtime and differential pay will be omitted due to the inability to accurately project these costs
- Some equipment and licenses may be able to be redeployed in a consolidated environment
- Future construction costs will be high level only
- Cost allocation methods should be part of governance discussions
Governance

- Assumptions:
  - Three models under consideration
    - Contract for Service
    - RPC COG
    - Central Vermont approach

- Requirements?
  - All participating agencies need an avenue to provide feedback
  - The governance structure must be perceived as fair as transparent
  - *For group discussion*

Open Questions:
- Are host agencies/facilities tied to specific governance models?
For Consideration

OPERATIONAL MODELS
1. Full Consolidation, High Staffing

**Key**
- Primary Transfer
- Alternate Transfer
- Staffed 24x7-365
- Role Filled on Demand
- Administrative Schedule: M-F Days
- Staffed Peak Times

**CFS** 147,391
**FTE** 38
2. Full Consolidation, Medium Staffing

- Shift Supervisor
- PSAP
- BPD
- Local PD
- Backup
- FD/EMS Dispatch
- FD/EMS Ops
- Tactical
- Director
- Training and QA
- Systems Support
- Assistant

**Key**
- Primary Transfer
- Alternate Transfer
- Staffed 24x7-365
- Role Filled on Demand
- Administrative Schedule: M-F Days
- Staffed Peak Times

**CFS** 147,391
**FTE** 33
3. Full Consolidation, Low Staffing

**Key**
- Primary Transfer
- Alternate Transfer
- Staffed 24x7-365
- Role Filled on Demand
- Administrative Schedule: M-F Days
- Staffed Peak Times

**CFS** 147,391
**FTE** 32

**DRAFT WORKING DOCUMENT**
### Full Consolidation: Law/Fire/EMS

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Best possible scenario for facilitating mutual aid</td>
<td>• No facility immediately available</td>
</tr>
<tr>
<td>• Large enough scale to support oversight positions necessary for improved service delivery</td>
<td>• Significant CAD development work required if Valcour is used</td>
</tr>
<tr>
<td>• Most opportunities for dispatcher career progression</td>
<td>• Most challenging to implement on all fronts (HR issues, standardization and governance/cost-allocation stand out)</td>
</tr>
<tr>
<td>• May be able to become a PSAP</td>
<td>• Behavioral change required on behalf of dispatchers</td>
</tr>
<tr>
<td>• Potential for greatest long-term cost saving</td>
<td>• Perceived loss of local, institutional knowledge</td>
</tr>
<tr>
<td>•Eliminates risk of single-person minimum staffing</td>
<td>• Fewer options for backup facilities</td>
</tr>
<tr>
<td>• Provides fire/EMS with dedicated dispatch support</td>
<td></td>
</tr>
</tbody>
</table>
Consolidation by Discipline

Assumptions:
- Shelburne dispatches for Shelburne PD, Hinesburg PD and all Fire/EMS
- Police dispatch either stays as is, housed in a separate standalone facility, or handled through clusters
4. Consolidation by Discipline, Fire/EMS: High Staffing

- Shift Supervisor
- PSAP
  - SPD
  - Backup
  - FD/EMS Dispatch
  - FD/EMS Ops
- Tactical
  - Director
    - Training and QA
    - Systems Support

Key:
- Primary Transfer
- Alternate Transfer
- Staffed 24x7-365
- Role Filled on Demand
- Administrative Schedule: M-F Days
- Staffed Peak Times

CFS: 43,442
FTE: 31
5. Consolidation by Discipline, Fire/EMS: Low Staffing

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CFS 43,442
FTE 27

Key:
→ Primary Transfer
→ Alternate Transfer
☐ Staffed 24x7-365
☐ Role Filled on Demand
☐ Administrative Schedule: M-F Days
☐ Staffed Peak Times

PSAP

FD/EMS Dispatch

FD/EMS Ops

Backup

SPD

Shift Supervisor

Tactical

Director

Training and QA

Systems Support
6. Consolidation by Discipline, Police

<table>
<thead>
<tr>
<th>Key</th>
</tr>
</thead>
<tbody>
<tr>
<td>➔</td>
</tr>
<tr>
<td>➔</td>
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<tr>
<td>□</td>
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<tr>
<td>★</td>
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<table>
<thead>
<tr>
<th>CFS</th>
<th>103,949</th>
</tr>
</thead>
<tbody>
<tr>
<td>FTE</td>
<td>26</td>
</tr>
</tbody>
</table>

Diagram:
- Shift Supervisor
- PSAP
- BPD
- Local PD
- Backup

Director

- Training and QA
- Systems Support

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## Consolidation by Discipline

### Advantages
- Facility options available in Shelburne
- Supports mutual aid between fire/EMS departments
- Provides fire/EMS with dedicated dispatch support
- Fire agencies can take immediate advantage of Spillman functionality
- Some opportunities for dispatcher career progression
- Eliminates risk of single-person minimum staffing

### Disadvantages
- Discipline-based approach requires duplicative FTE for supervisor and management roles; less opportunity for cost savings
- Further Valcour development required
- Creates disconnect between law and fire/EMS; interface required
- Still challenging to implement given HR, operations and governance issues
- Behavioral change required on behalf of dispatchers
- Perceived loss of local, institutional knowledge
- Some risk associated with Shelburne (in current governance model)
7. Clustered Model

- Northern pod
  - Milton, Colchester, Winooski and Essex PD and Fire/EMS
  - 52,890 CFS
  - Facility TBD
  - Essex transitions to Valcour
  - 23 FTE
7. Clustered Model

- Central pod
  - Burlington, South Burlington and Williston PD and Fire/EMS
  - 71,596 CFS
  - Facility TBD
  - Williston transfers Fire from Shelburne and after hours law from VSP once cost changes
  - 23 FTE
7. Clustered Model

- Southern pod (similar to status quo)
  - Shelburne and Hinesburg PD, all current Fire/EMS
  - 18,504 CFS
  - Shelburne facility
  - Shelburne takes on Richmond PD (and others) once VSP charges for service
  - 12 FTE
8. Clustered Model by Discipline

- Geographic police pods
  - Northern: 16 FTE
  - Central: 19 FTE
  - Southern: 7 FTE

- Consolidated fire/EMS dispatch center
  - All fire/EMS agencies
  - 19 FTE
# Clustered Model

## Advantages
- Least organizational and behavioral change required
- May be least challenging to implement; although pods will face similar challenges (e.g., standardization, governance) on a smaller scale
- Supports mutual aid between neighboring communities
- Retains some local, institutional knowledge
- Eliminates instances of single person staffing

## Disadvantages
- Redundant administrative and supervisory positions; will be more expensive than status quo
- Minimal opportunities for dispatcher career progression
- Facility challenges persist
- Some risk associated with Shelburne (in current governance model)
9. Transition Model, High Staffing

Police Dispatch Center

- Shift Supervisor
  - BPD
  - Local PD
  - PD Backup
  - Shift Supervisor

Fire/EMS Dispatch Center

- PSAP
  - FD Backup
  - Director
  - Tactical
  - FD/EMS Dispatch
  - FD/EMS Ops
  - Shift Supervisor

Key
- Primary Transfer
- Alternate Transfer
- Staffed 24x7-365
- Role Filled on Demand
- Administrative Schedule: M-F Days
- Staffed Peak Times

CFS 147,391
FTE 50
10. Transition Model, Low Staffing

Police Dispatch Center

- Shift Supervisor
- BPD
- Local PD
- PD Backup

Fire/EMS Dispatch Center

- Shift Supervisor
- PSAP
- FD Backup
- FD/EMS Dispatch
- FD/EMS Ops

Key:

- Primary Transfer
- Alternate Transfer
- Staffed 24x7-365
- Role Filled on Demand
- Administrative Schedule: M-F Days
- Staffed Peak Times

CFS 147,391
FTE 42

Director

Training and QA
Systems Support
Assistant

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Roadmap Planning Workshop
## Transition Model

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Provides an intermediate step to improve service delivery while bigger facility options become available</td>
<td>• Management must oversee two facilities</td>
</tr>
<tr>
<td>• Supports mutual aid between fire/EMS departments</td>
<td>• Creates disconnect between law and fire/EMS; interface required</td>
</tr>
<tr>
<td>• Provides fire/EMS with dedicated dispatch support</td>
<td>• Additional Valcour development required</td>
</tr>
<tr>
<td>• Fire agencies can take immediate advantage of Spillman functionality</td>
<td>• Additional effort and will be required in 2+ years when facility is ready</td>
</tr>
<tr>
<td>• Some opportunities for dispatcher career progression</td>
<td>• Still challenging to implement given HR, operations and governance issues</td>
</tr>
<tr>
<td></td>
<td>• Behavioral change required on behalf of dispatchers</td>
</tr>
<tr>
<td></td>
<td>• Perceived loss of local, institutional knowledge</td>
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</table>
## Staffing Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>Admin</th>
<th>Supervisor</th>
<th>Dispatch</th>
<th>Subtotal</th>
<th>Backfill</th>
<th>Total</th>
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<tbody>
<tr>
<td>1. Full, High</td>
<td>4</td>
<td>6</td>
<td>28</td>
<td>38</td>
<td>6</td>
<td>44</td>
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<tr>
<td>2. Full, Medium</td>
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<td>4</td>
<td>25</td>
<td>33</td>
<td>6</td>
<td>39</td>
</tr>
<tr>
<td>3. Full, Low</td>
<td>4</td>
<td>6</td>
<td>22</td>
<td>32</td>
<td>6</td>
<td>38</td>
</tr>
<tr>
<td>4. Fire, High*</td>
<td>3</td>
<td>6</td>
<td>22</td>
<td>31</td>
<td>-</td>
<td>31</td>
</tr>
<tr>
<td>5. Fire, Low*</td>
<td>3</td>
<td>4</td>
<td>20</td>
<td>27</td>
<td>-</td>
<td>27</td>
</tr>
<tr>
<td>6. Police*</td>
<td>3</td>
<td>6</td>
<td>17</td>
<td>26</td>
<td>6</td>
<td>32</td>
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<tr>
<td>7. Clustered</td>
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<td>8</td>
<td>44</td>
<td>58</td>
<td>6</td>
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<tr>
<td>8. Clustered, Fire</td>
<td>5</td>
<td>13</td>
<td>43</td>
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<td>67</td>
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<tr>
<td>9. Transition, High</td>
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<td>34</td>
<td>50</td>
<td>6</td>
<td>56</td>
</tr>
<tr>
<td>10. Transition, Low</td>
<td>4</td>
<td>8</td>
<td>30</td>
<td>42</td>
<td>6</td>
<td>48</td>
</tr>
</tbody>
</table>

* Requires both options, or a hybrid approach
### Scorecard

<table>
<thead>
<tr>
<th>Model</th>
<th>FTE Total (+6)</th>
<th>Impact on Service</th>
<th>Impact on Cost</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>1. Full, High</td>
<td>44</td>
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<tr>
<td>2. Full, Medium</td>
<td>39</td>
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<tr>
<td>3. Full, Low</td>
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<td></td>
</tr>
<tr>
<td>4. Fire, High*</td>
<td>37</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Fire, Low*</td>
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<tr>
<td>6. Police*</td>
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<td>7. Clustered</td>
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<tr>
<td>8. Clustered, Fire</td>
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<tr>
<td>9. Transition, High</td>
<td>56</td>
<td></td>
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<tr>
<td>10. Transition, Low</td>
<td>48</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Key**

**Impact on Service**
- 5 = Major Improvement over Status Quo
- 3 = Minor Improvement over Status Quo
- 0 = Status Quo
- Negative = Degradation Over Status Quo

**Impact on Cost**
- 3 = Significant Long Term Savings
- 0 = Status Quo (assuming 1 time transition costs)
- Negative = Additional Long Term Costs
NEXT STEPS
Questions?

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lcoyle@deltawrx.com

Donald Denning
ddenning@deltawrx.com