Loudoun County School Board

Budget Work Session

Technology Services

January 28, 2016
Presentation Overview

- DTS management / leadership design
- Developing the budget
- Technology fast facts
- Milestones and achievements
- Baseline and initiatives
- Student to computer ratio and refresh
- Teacher laptops
- Service levels
- Budget at a glance
- Funding and staffing
Who Are We?

Strategic Goal: Cultivate a high-performing team of professionals focused on our mission and goals.

Systems and Applications

Information Management and Data Security

Operations and Support

Organizational Content

What Do We Believe?

Core Belief: A culture of continuous improvement drives the fulfilment of our mission

- Service and support
- Agility and flexibility
- Efficiency and excellence
- Value our people and customers
- Focus on the future
- Fiscal responsibility
- Social responsibility
- Management by fact

Design Principals
What Do We Do & How Do We Do IT?

- Provide user-focused technology solutions
- Collaborate with departments and stakeholders
- Analyze and provide data for data-driven decision-making
- Process management
- Strategic planning (ELT)
- Align technology with district vision
- Strengths based leadership

Strategic Goal: Deliver effective and efficient support for student success

Organizational System
## How Good Are We?

<table>
<thead>
<tr>
<th>Level</th>
<th>CMM</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Initial</td>
<td>Characterized by ad-hoc or unpredictable process</td>
</tr>
<tr>
<td>2</td>
<td>Repeatable</td>
<td>Basic project management processes are established</td>
</tr>
<tr>
<td>3</td>
<td>Defined</td>
<td>Processes are documented, standardized, and integrated</td>
</tr>
<tr>
<td>4</td>
<td>Quantitatively Managed</td>
<td>Measured and controlled processes</td>
</tr>
<tr>
<td>5</td>
<td>Optimizing</td>
<td>Focused on process improvement</td>
</tr>
</tbody>
</table>

“You can’t manage what you don’t measure”

High Level overview of the 4 domains of leadership strengths:
- Executing – Know how to make things happen
- Influencing – Selling the teams ideas internally and externally
- Relationship Building – The glue that holds the team together
- Strategic Thinking – Keeping us focused on what could be

<table>
<thead>
<tr>
<th>Executing</th>
<th>Influencing</th>
<th>Relationship Building</th>
<th>Strategic Thinking</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>4</td>
<td>4</td>
<td>10</td>
</tr>
</tbody>
</table>

Developing the Budget

• Success Mentality – Continuous Improvement
  ✓ We constantly strive to improve the level of support we provide and the deployment of technology across the district

• Strategic – Fiscal Responsibility; Improved Efficiencies
  ✓ Remained fiscally responsible by restructuring contracts and renegotiating pricing
  ✓ Identified opportunities for increased efficiency e.g. various staff reorganizations
  ✓ Collaborated with DOI to align technology needs with the strategic actions of the Vision 20/20 plan

• Transparent
  ✓ Developed staffing standards based on current staff deployments and researched current staffing ratios for private industry and neighboring K-12 divisions
  ✓ Provides an annual DTS Guide that includes organizational charts, team roles, and responsibilities
# Technology Fast Facts

## LCPS Customer Accounts

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff</td>
<td>10,202</td>
</tr>
<tr>
<td>Students</td>
<td>75,755</td>
</tr>
<tr>
<td>Parents</td>
<td>94,000</td>
</tr>
</tbody>
</table>

## Hardware

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Computers</td>
<td>37,463</td>
</tr>
<tr>
<td>Interactive White Boards</td>
<td>4,600+</td>
</tr>
<tr>
<td>Intercoms</td>
<td>88</td>
</tr>
</tbody>
</table>

## Technology Support

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>FY15 Incidents Closed</td>
<td>45,011</td>
</tr>
<tr>
<td>FY16 Incidents Closed</td>
<td>25,880*</td>
</tr>
</tbody>
</table>

*As of 1/11/16

## Network & Telecom Infrastructure

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical Servers</td>
<td>356</td>
</tr>
<tr>
<td>Virtual Servers</td>
<td>298</td>
</tr>
<tr>
<td>Switches</td>
<td>2,475</td>
</tr>
<tr>
<td>Wireless Access Points</td>
<td>5,600+</td>
</tr>
<tr>
<td>Network Storage</td>
<td>250 TB</td>
</tr>
<tr>
<td>Phone Sets</td>
<td>3,700</td>
</tr>
<tr>
<td>POTS Lines</td>
<td>640</td>
</tr>
<tr>
<td>Voice Mailboxes</td>
<td>1,810</td>
</tr>
</tbody>
</table>

## Bandwidth Capacity

<table>
<thead>
<tr>
<th>Category</th>
<th>Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Internet</td>
<td>10 Gbps</td>
</tr>
<tr>
<td>Desktop / WAN</td>
<td>1 Gbps</td>
</tr>
</tbody>
</table>

## Phoenix Student Information System

<table>
<thead>
<tr>
<th>Category</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Development Courses Offered</td>
<td>80</td>
</tr>
<tr>
<td>Total Staff Trained</td>
<td>4,800+</td>
</tr>
</tbody>
</table>

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Core Belief: Transparency and good stewardship of resources strengthen public trust and support
Milestones and Achievements

- Installed all technology for Riverside High School
- Installed 8,500+ new computers in 22 schools
- Reimaged 28,000+ computers before the start of school
- Implemented security awareness program for all staff
- Implemented new grade book
- Increased number of BYOT schools
- Increased internet bandwidth to 10Gbps
- Increased secondary school WAN circuits to 1 Gb
- Implemented a new content filter (Lightspeed)
- Implemented new parent and student portals (ParentVue / StudentVue)
- Assumed responsibility for Telecommunication and XEROX Services

Core Belief: A culture of continuous improvement drives the fulfilment of our mission
**Baseline and Initiatives (p. 370)**

**O&M Baseline**
- Software and hardware licensing
- Maintenance and services
- Xerox MDF support
- Data and telecommunication circuits

**Technology Initiatives**
- Technology refresh
  - ✓ Computers
  - ✓ Servers
  - ✓ Switches
  - ✓ Intercoms
  - ✓ Projectors
- Maintain 3.6:1 ratio
- Teacher laptops
- Loudoun creates
- Blended learning
- Wi-Fi expansion

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O&M Baseline

• Software and Hardware Licensing
  ✓ Microsoft EES agreement
  ✓ Adobe enterprise licensing

• Maintenance and Services
  ✓ Student information system (SIS)
  ✓ Network and systems equipment (switches, servers, wireless)

• Xerox MDF Support
  ✓ Monthly Xerox lease
  ✓ Print, scan, copy, and fax

• Data and Telecommunication Circuits
  ✓ WAN / internet circuits
  ✓ POTS lines
Technology Initiatives for FY17

Initiatives

• Maintain 3.6:1 ratio (school based)
• Technology refresh
  ✓ Computers (instructional and administrative)
  ✓ Servers (school based and central office)
  ✓ Switches (school based and central office)
  ✓ Intercoms (school based)
  ✓ Projectors (school based)
  ✓ Wi-Fi expansion (school based)
• Loudoun creates (student based)
• Blended learning (student based)
• Teacher laptops (school based)
Instructional Computer Refresh

[Graph showing a comparison between 'Before DTS' and 'Original Direction' from Summer 2011 to Summer 2022]
Initiatives

- Maintain 3.6:1 ratio (school based)
- Technology refresh
  - Computers (instructional and administrative)
  - Servers (school based and central office)
  - Switches (school based and central office)
  - Intercoms (school based)
  - Projectors (school based)
  - Wi-Fi expansion (school based)
- Loudoun creates (student based)
- Blended learning (student based)
- Teacher laptops (school based)
• Access to valuable tools and information, including software and web-based resources
• Collaborate with teachers, administrators, and students
• Connect with community individuals and resources to support teaching and learning
• Methodology
  ✓ AV computer to laptop during refresh
• Impact on budget and support
• 46 schools completed by August 2016
• Deployment schedule for remaining schools
Service performance is measured by:

- Level of complexity and completeness of information
- Category of incident
- Prioritization
- Routing
- Work load
- Skill set of user and technical support staff
- Tech support training
- Effort vs. time
- Monitoring, closing, and recording incident
Budget at a Glance (p. 370)

<table>
<thead>
<tr>
<th></th>
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<th>O&amp;M</th>
<th>Capital Outlay</th>
<th>Total</th>
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<tbody>
<tr>
<td>FY16</td>
<td>$11,582,835</td>
<td>$15,066,708</td>
<td>$546,871</td>
<td>$27,196,414</td>
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<tr>
<td>FY17</td>
<td>$12,671,482</td>
<td>$15,468,322</td>
<td>$0</td>
<td>$28,139,804</td>
</tr>
<tr>
<td>Change</td>
<td>$1,088,647</td>
<td>$401,614</td>
<td>($546,817)</td>
<td>$943,390</td>
</tr>
</tbody>
</table>

- Personnel: 9.4% increase
- O&M: 2.7% increase
- Capital Outlay: 100% decrease
- Total FY17 Budget: 3.5% increase

- Projected student growth is increasing 3.8% (p. 17)
- 2.8% of total LCPS Operating Budget
### Budget at a Glance (p. 370)

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#### Pie Charts

- **Instruction**: 65%
- **Step and Benefits**: 20%
- **New Positions**: 33%
- **Part-Time Salaries**: 2%
- **Central Support**: 2.8%
- **Technology Services**: 2.8%
- **Grants**: 2.8%
- **Charter Schools**: 1.4%
- **Support Services**: 1.4%
- **Non-Departmental**: 1.4%
- **Personnel Services**: 1.4%
- **Business and Financial Services**: 1.4%
Lease and Grant Funding

• Total DTS allocated lease funds of $6.2M to support:
  ✓ Technology refreshes
  ✓ Hardware purchases
  ✓ Instructional projects

• Total DTS allocated grant funds of $2.4M to support:
  ✓ Hardware purchases that support SOL testing
  ✓ State eBackpack initiative (4 year initiative)
FY16 Revised Staffing (p. 370)

- FY16 Appropriated
  - 117 staff

- FY16 Revised (2 positions added to DTS Budget)
  - 119 staff

- New
  - 1 Grade Book Specialist

- Transferred to DTS from DOI
  - 1 Grade Book Specialist
• FY16 Revised
  ✔ 119 staff

• FY17 Proposed (123 staff)
  ✔ Senior Network Engineer
  ✔ Financial Analyst
  ✔ Senior Software Engineer
  ✔ Service Desk Technician
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<td>Operations and Maintenance</td>
<td>$15,468,322</td>
</tr>
<tr>
<td>Capital Outlay</td>
<td>$0</td>
</tr>
<tr>
<td><strong>Total O&amp;M Budget</strong></td>
<td><strong>$28,139,804</strong></td>
</tr>
<tr>
<td>Lease Funding (p. 392)</td>
<td>$6,200,000</td>
</tr>
<tr>
<td>Grant Funding (p. 252)</td>
<td>$2,379,000</td>
</tr>
<tr>
<td><strong>Total Overall Budget</strong></td>
<td><strong>$36,739,804</strong></td>
</tr>
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</table>
DTS FY17 Proposed Budget

- Operating: $15,468,322 (42%)
- Personnel: $12,671,482 (35%)
- Lease: $6,200,000 (17%)
- Grant: $2,379,000 (6%)
