Executive Summary

Senate Bill 1, Rider 14, 83rd Legislature, required the Texas Department of Information Resources (DIR) to conduct a study to determine whether the use of tablets instead of personal computers (PCs) by state agencies and institutions of higher education would be more efficient and result in cost savings for the State of Texas. This report provides recommendations for agencies to consider when procuring tablets as resources in their information technology environment.

DIR reviewed industry research and hosted a focus group meeting with a broad range of agencies1 to explore their experience and expectations with tablets. DIR found that very few organizations completely replaced traditional PCs with tablets. Currently, tablets are not used in the same functional way as PCs; and despite their portability, they are not displacing other mobile devices, such as smartphones. Instead, they are merely extending some computing capabilities, and the amount of time users spend in computing environments. Thus, tablets are a complimentary, add-on device and productivity tool that allows workers easy access to basic features such as email and calendaring, but have limited functionality when it comes to creating or completing complex business tasks.

Although the research concludes there are clear limitations to tablets, with proper evaluation and planning an agency may determine there are some unique instances where tablets might create efficiencies resulting in increased productivity. At this time, tablets should not be considered a standard replacement for personal computers.

Key Findings

- In 2013, a third of adults owned a tablet, almost twice as many as the 18 percent who owned a tablet in 2012.
- Tablet deployment among state agencies increased 30 percent from 2011 to 2013, and laptop and tablet counts are growing about 15 times faster than desktops, based on agency responses to the 2013 Information Resources Deployment Review.
- Workers most often use tablets as an add-on productivity tool, not as a primary computing device.
- Industry experts predict that by 2015 a majority of laptops will have touchscreen capability, potentially supplanting the desire for tablets.
- Agencies cited the need for thorough assessment and planning, and use of best practices for successful tablet implementation and deployment.

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1 Agencies is defined as state agencies and institutions of higher education.
Background

A tablet is a computing device contained in a single panel and based on touchscreen input and display. Unlike traditional PCs and laptop computers, tablets use applications in which users download programs suited for a specific function. Tablets also lack the additional hardware and peripherals that are standard components for PCs and laptops, making tablets a more compact and mobile option.

Multiple classifications of tablets exist, running a variety of operating systems including Android (Samsung Galaxy Tablet), Apple iOS (iPad), and Windows (Windows RT, Slate, Toughbook). If the usage is primarily for email and web browsing, a tablet may provide sufficient computing power. For those organizations heavily invested in MS Office; Android or Apple may not be adequate, and a Windows OS tablet could be more expensive than a PC. Table 1 describes the most common types of tablets in use in business today.

Table 1. Types of Tablets

<table>
<thead>
<tr>
<th>OPERATING SYSTEM/EXAMPLES</th>
<th>ESTIMATED COST</th>
<th>USE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Android</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Apple iOS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Windows OS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Slate, Toughbook, Surface</td>
<td>$1,000–up</td>
<td>Full PC functionality including full Microsoft Office suite.</td>
</tr>
</tbody>
</table>

Source: Department of Information Resources

Hybrid or convertible computers are laptops with touchscreens or tablets with detachable keyboards. Laptops with touchscreens include the hardware and software needed for increased computing power and storage but limited battery life and mobility compared to a conventional tablet. Tablets that have detachable keyboards offer the benefits of tablet mobility, single-application usage, and touchscreen input, but the additional external peripherals significantly increase the overall cost.

Although the industry has made advances with the functionality of tablet operating systems, tablets cannot yet match the computing power and multi-tasking capabilities of traditional PCs and laptops. Tablets allow easy access to basic features such as email, but have limited functionality when it comes to creating complex content and manipulating data. Tablets are considered a complementary, add-on component in an organization’s overall workforce computing strategy, and are therefore considered a productivity tool. For comparison, tablets are suitable for the quick content consumption and creation. According to Government Technology, workers gain on average one hour of productivity per day using tablets to manage email, calendaring, and note taking.
Organizations considering tablets must evaluate and plan for the transition to deploy, and DIR recommends they address three key questions when considering tablet implementation:

1. **Business Needs**—what purpose will tablets serve for the agency?
2. **User Types**—who will use the tablets, how and where?
3. **Technical Infrastructure**—does the agency have the infrastructure and security to support tablets?

### Business Needs

DIR convened a tablet study focus group, consisting of representatives from agencies, to understand their experiences and expectations of tablet deployment. The focus group also discussed best practices and lessons learned with using tablets. During this facilitated meeting, a majority of participants agreed that *proper planning* is essential to successful tablet implementation.

**Assess**

Agencies should evaluate and assess the business need for tablets. It is important for agencies to evaluate the potential use of a tablet, compared to the functionality of a laptop or desktop. Agencies should build a business case to confirm that tablets offer the appropriate solution to meet business needs.

#### Assessing Business Needs

*Example: In July 2013, the Texas Department of Public Safety (DPS) considered tablet devices as a solution to conducting driver’s license skills (DLS) testing.*

**What is the problem to be addressed?**
The traditional clipboard and paper model of conducting DLS testing resulted in extra paperwork and double entry of information by customer service representatives (CSRs).

**What benefits will be gained?**
The functionality of a tablet solution would increase work productivity. DPS also recognized the need to replace paper with a digital solution and reduce paper usage.

**What business solution will be met?**
- Lessen overall processing time: DLS tests will be scored in real time during testing and the information will be fed into DLS as the test progresses
- Increase DLS efficiency: a tablet that can maintain a connection to the DPS network and DLS and be rugged enough to protect it from the Texas environment will increase the efficiency of the skills testing process
- Assists CSRs: a tablet that is a good size and weight will make its use comfortable for CSRs and make the jobs of our CSRs easier.

*Source: DPS “Testing the Feasibility of Tablets to Conduct Skills Testing Test Results and Recommendations” and DIR’s Tablet Study Focus Group*
Calculate Total Cost of Ownership
Organizations can make the mistake of focusing on the base price of the device, without considering related expenses. The price of a tablet may be lower than a traditional PC or laptop, but the cost of the tablet alone represents a small percentage of total operations and support costs of the device. To be practical, tablets require additional tools for productivity and durability. The additional infrastructure requirements negate much of the hardware and software savings.

Total costs for tablet ownership should take into account:
• Tablet base price
• Hardware peripherals such as keyboards, stands, docks, and cases
• Software support such as connectivity, access to business applications and collaboration tools, and enterprise data storage
• IT support including help desk support, data management and security, and device administration
• User-related costs including lost productivity, unexpected downtime and user training and changes to business workflow specific to tablets.

For tablets, refresh cycles are short, most commonly two years, compared to the recommended 3–4 years for laptops, and 4–5 years for PCs. The cost of maintaining and upgrading tablet operating systems and hardware every two years should be considered in the total cost of ownership.

Consider Functionality and Usability
Tablets as stand-alone devices have less functionality and usability than laptops. For example, tablets that will be used in the field most often need to be “ruggedized” to withstand everyday use in mobile and outdoor locations. If agencies expect to use tablets that are durable for remote locations, they must also factor screen readability, screen size, tablet weight, and overall ergonomics of carrying a tablet during the workday.

Tablets are limited when substantial computing power is required. Standard configurations of tablets are not well suited for:
• manipulating large spreadsheets and databases
• developing graphics
• programs requiring extensive keyboard input
• easy access to printing
• running multiple applications at the same time.

Tablets are best used for:
• easy, “one-touch” access to collaboration tools and social media
• mobility and field operations
• customer-facing operations, such as kiosks and customer check-in stations
Plan
There are limitations to tablets, however, with proper evaluation and planning an agency may
determine instances when tablets would create efficiencies resulting in increased productivity.

Agencies must consider how tablet devices will be supported, maintained, and managed. There are
various management models IT departments can follow to deploy tablets, but in most cases,
enterprise tablets fall into three categories. Table 2 describes the common approaches that are
defined by who owns the device and what services are delivered.

Table 2. Three Common Approaches to Tablet Deployment

<table>
<thead>
<tr>
<th>MANAGEMENT MODEL</th>
<th>CHARACTERISTICS</th>
<th>TABLETS ARE—</th>
</tr>
</thead>
</table>
| Basic Services Support | Bring Your Own Device (BYOD) model improves productivity by helping users stay connected on the go or when away from the office. | • owned by employees
• used as companion devices
• supported with access to a limited set of basic collaboration services over the network (e-mail, calendaring, and contacts) |
| Partial-Enterprise Integration | Partially managed model includes support for IT-approved devices that integrate business applications to help boost productivity and streamline workflows. | • either employee-purchased, employer-subsidized, or employer-purchased
• used as companion devices
• supported with access to select office and enterprise applications, in addition to basic corporate services, on tablets with enhanced security and management capabilities |
| Full-Enterprise       | Fully managed model helps users perform comprehensive job tasks at any time, from any location. | • employer-purchased, with the highest level of services and support,
• deployed as primary work devices, most often for mobile task workers
• Fully supported by IT, including installation of all applications and standardized tools with life-cycle support and full integration to workflows |


Test
Agencies moving forward with tablet implementation should consider a pilot program before full
deployment. Running a targeted and closely monitored tablet pilot will help inform the agency of
what, if any, computing and usability requirements still need to be addressed before an agency-wide rollout.

In 2013, the Texas Workforce Commission (TWC) implemented a small pilot program for the use of Apple iPads to determine whether the Apple-specific product would be suitable for the TWC IT environment. Based on the lessons learned from that pilot deployment, TWC is considering which available tablet option will provide adequate integration with existing agency infrastructure.
Consider Your Users

As part of the planning process, an agency must consider the users’ needs and ability to adapt before bringing tablets to the workplace. For most workers, the current tablet functionality will not easily replace the desktop. However, industry experts predict that by 2015 a majority of laptops will have touch screen capability, which may solve the problem of which device to choose for a worker. In today’s environment, the tablet may replace a laptop when the user is adaptable and increased flexibility offsets the loss of functionality.

It is important for an agency to understand the user’s work environment, job requirements, and user readiness before assigning a tablet. Agencies must factor the type of work each user is expected to complete when considering which device would provide the most efficiency and productivity. Simply because a user is mobile does not mean a tablet is the most suitable tool. Table 3 describes three common categories for users, a description of their work patterns, and which user types may benefit from a tablet. Lastly, an agency should secure user support for tablets and plan to train users prior to implementation.

Table 3. Categories of Workplace Users

<table>
<thead>
<tr>
<th>EMPLOYEE TYPE</th>
<th>WORK PATTERNS</th>
<th>COMMON SOLUTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Mobile</td>
<td>Users whose work is done at a desk. Employee may travel off-site for work activities, or meetings, but spends a clear majority of their time working at an assigned agency worksite. They may not be suited for telework. Example: Maintenance Staff, Corrections Officers, Care Givers for in-state supported living centers, etc.</td>
<td>Desktop</td>
</tr>
<tr>
<td>0 percent travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Semi-Mobile</td>
<td>Users who have an office, however, they may also work away from the office, in the field part-time, or are suited to telework. Example: Administrative staff such as procurement, legal, accounting.</td>
<td>Laptop</td>
</tr>
<tr>
<td>Less than 50 percent travel</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highly-Mobile</td>
<td>Users who generally perform their job function outside of a typical office environment such as full-time field or mobile workers. Example: Inspectors, Investigators, Examiners, Law Enforcement, Appraisers, Surveyors, Game Wardens’, Troopers, Driver License Examiners, etc.</td>
<td>Laptop or Tablet depending on user. Users with high levels of mobile computing requirements and wireless broadband access. Tablet offers efficiencies if the job requirements can be completed with less functionality.</td>
</tr>
<tr>
<td>Greater than 50 percent travel</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Department of Information Resources
Tablets in Use

The number of tablets currently being procured and deployed by state agencies is increasing. In 2013, there were 297,610 iPads purchased through DIR contracts, an increase of 67 percent over 2012. School districts made the majority of tablet purchases, including 283,000 iPads for Kindergarten through 12th grade (K–12), which was a 73 percent increase over fiscal year 2012. The primary use of tablets for K–12 was as a textbook alternative for students. Tablet use within Institutions of higher education demonstrates a variety of user types and devices. Tablets are deployed in clinical and research settings where a patient or a subject is shown information on a tablet or information is collected on a tablet. Faculty, staff, and students are bringing personal devices to work requiring the colleges and universities to provide security and access controls at a minimum for these new devices.

State agencies and institutions of higher education face many of the same challenges of how to best deploy tablets to employees. Both are beginning to include tablets in their IT infrastructure. At this time, tablets should not be considered a standard replacement for personal computers. Due to this determination, a deployment schedule should be based on the needs of each agency and its users. Table 4 shows that about 10,000 state employees are currently using tablets at work.

Table 4. Tablets in Texas Government – 2011 to 2013

<table>
<thead>
<tr>
<th>CATEGORY</th>
<th>AGENCIES</th>
<th>HIGHER EDUCATION</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2011</td>
<td>2013</td>
</tr>
<tr>
<td>Tablets</td>
<td>7,682</td>
<td>9,853</td>
</tr>
<tr>
<td>Laptops</td>
<td>29,946</td>
<td>39,945</td>
</tr>
<tr>
<td>Desktops</td>
<td>109,701</td>
<td>112,319</td>
</tr>
<tr>
<td>Total</td>
<td>147,329</td>
<td>162,117</td>
</tr>
</tbody>
</table>

Source: 2011/2013 Information Resources Deployment Review. Data reported by agencies and higher education institutions to DIR.

Note: These totals do not reflect the number of personal devices in the workplace.

In 2013, DIR surveyed state agencies and institution of higher education about their experience and plans for using tablets. Approximately 80 percent of respondents report that they have purchased tablets, and the same number plan to buy tablets over the next 3 years. Figure 1 shows that tablets will replace PCs at a greater rate in the future.
Although tablets are in limited use, some workers are using tablets to be more productive. Highly mobile workers at the Department of Family and Protective Services (DFPS) and the Texas Department of Transportation (TxDOT) are using tablets in the field, and courts are using them to replace a paper based manual process.

- DFPS case workers are 100 percent mobile and use tablets because they are lightweight and portable. GoMobile is an agency-wide initiative to build a coordinated work model that integrates the workforce, the work environment, and the technology. GoMobile will lead to more efficient use of workers’ time, and long term could lead to cost savings in real estate, travel and overhead expense. The project is coordinated with the HHSC Teleworking, Mobile Work and Alternative Officing Initiatives. The agency currently has 1700 staff designated as mobile caseworkers

- TxDOT Rail inspectors use ruggedized tablets in the field to gather information into a custom application, document their findings, and upload via the web to a database.

- Wichita Falls courts implemented tablets in their paperless initiative. In April 2013, the court began using tablets in combination with a document management application so that they may access, modify, and save changes to legal documents in real time. The court reports the change has increased efficiency in the courtroom and helped save paper, as the court no longer prints case materials.

### Technology and Infrastructure

It is important to evaluate and prepare your technology infrastructure before incorporating a tablet into your technology environment. For example, if the user requires local area network (LAN) access, tablets may not be able to access an agency’s LAN, and the agency may need to invest in additional infrastructure to enable this access. If the user requires network connectivity from the field, broadband wireless service will be required, which will have recurring monthly costs for each user. Agencies with LAN based PCs may have enterprise tools in place to manage their computing devices which may not be compatible with lower cost tablets.

Additional infrastructure considerations include:

- Is there sufficient bandwidth and connectivity for more devices on the network? Technology is moving so fast and agencies must deploy connectivity at the same time as tablets.
• Does the tablet support your current software? While one particular type of tablet may prove to be a helpful companion or productivity device, alternative types of tablet may more easily integrate into the current state IT environment
• Are the business applications touch interactive? General usability differences may require the rewriting of custom and/or legacy applications to accommodate touch screen interfaces.

Security
Agencies must address the security needs of tablet users, be prepared to secure and manage confidential information, and additional costs may be incurred to protect data on the tablet. Agencies should ensure tablets meets their established security policy standards, i.e. data encryption, remotely wiping and erasing, and secure access.

All information resources owned by the State of Texas must meet the requirements of Texas Administrative Code (TAC). These requirements include the use of encryption and authentication. According to TAC 202.25, “Storing confidential information on portable devices is discouraged. Confidential information must be encrypted if copied to, or stored on, a portable computing device, removable media, or a non-agency owned computing device.” Additionally, “Types of information that may be transmitted via wireless networks and devices with or without encryption including mission critical information or sensitive personal information. State agencies shall not transmit confidential information via a wireless connection to, or from a portable computing device unless encryption methods, such as a Virtual Private Network (VPN), Wi-Fi Protected Access, or other secure encryption protocols that meet appropriate protection or certification standards, are used to protect the information.”

Authentication mechanisms must support the agency’s internal policies. For example, mobile devices should support password complexity requirements and failed authentication “lock-outs” in accordance with agency policy.

Additional infrastructure considerations include:
• If the device uses cloud functionality to back-up the device, is the cloud secured?
• Who is responsible for updating and patching the device?
• Are the required business applications tablet compatible and secure?
• Does the device support anti-virus or anti-malware applications?
• Will the devices be inventoried as an asset?

Prepare the User
Some industry analysts estimate that 70 percent of employees who own a tablet or smartphone use their own personal devices to access work-related data. In such a workforce, organizations need to consider their policies regarding mobile solutions. Agencies are at risk if they do not have a Bring Your Own Device (BYOD) policy because of this rapid adoption of secondary devices. For users who are not issued a tablet as a primary computing device, agencies should consider developing a BYOD policy for employees and ensure that they have the IT support for additional, complementary devices.
APPENDIX A
Text of Senate Bill 1 (83R), Article 1, DIR Rider 14

Out of funds appropriated above, the Department of Information Resources (DIR) shall conduct a study to determine whether the use of tablet computers instead of personal computers by state agencies and institutions of higher education would be more cost efficient and result in cost savings for the State of Texas. DIR shall work with agencies and institutions of higher education to determine which agencies would gain efficiencies by using tablet computers instead of desktop computers. The study shall provide the following: 1) strategies to prioritize which agencies and institutions of higher education would gain efficiencies by the use of tablet computers instead of personal computers; 2) purchasing options and cost estimates for agencies and institutions of higher education to consider for their respective Legislative Appropriations Requests; and 3) a deployment schedule, including a timeline to replace existing personal computers with tablet computers. The report shall be provided to the Legislature, the Legislative Budget Board, and affected state agencies and institutions of higher education by March 1, 2014.
## APPENDIX B
### Sample Pricing Options within DIR Cooperative Contracts

The following tables represent a sample of prices for tablets and laptops available to DIR customers.

To see additional vendors and pricing, search product types at DIR’s Cooperative Contracts website at [http://www.dir.texas.gov/ICT/Pages/contracts.aspx](http://www.dir.texas.gov/ICT/Pages/contracts.aspx).

Note: The pricing options listed below are based on the minimum discount. Prices are current as of 3/1/2014 and are subject to change.

### Tablet Pricing

<table>
<thead>
<tr>
<th>MANUFACTURER</th>
<th>MODEL</th>
<th>PRICE PER UNIT</th>
<th>VENDOR</th>
<th>CONTRACT #</th>
<th>PROCESSOR</th>
<th>MEMORY</th>
<th>SCREEN</th>
<th>HARD DRIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microsoft</td>
<td>Surface Pro 2</td>
<td>$732.69</td>
<td>Austin Ribbon &amp; Computer Supplies, Inc.</td>
<td>DIR-SDD-1934</td>
<td>4th generation Intel Core i5 with 64-bit architecture</td>
<td>4GB</td>
<td>10.6-inch, 1,920 x 1,080</td>
<td>64GB</td>
</tr>
<tr>
<td>Apple</td>
<td>iPad Air</td>
<td>$671.00</td>
<td>Apple</td>
<td>DIR-SDD-2068</td>
<td>A7 chip with 64-bit architecture</td>
<td>1GB</td>
<td>9.7 inches - 2,048x1,536</td>
<td>64GB</td>
</tr>
<tr>
<td>Lenovo</td>
<td>Thinkpad Tablet 2</td>
<td>Sent</td>
<td>Lenovo</td>
<td>DIR-SDD-2030</td>
<td>2.80GHz Intel Atom processor and Intel HD Graphics 4200</td>
<td>2GB</td>
<td>10.1in -1,366 x 768</td>
<td>64GB</td>
</tr>
<tr>
<td>Dell</td>
<td>Venue Pro 11</td>
<td>$825.70</td>
<td>Dell</td>
<td>DIR-SDD-1951</td>
<td>i5 4210Y (3MB Cache, 1.5 GHz Dual Core)</td>
<td>4GB</td>
<td>10.8 display FHD 1,920 x 1080</td>
<td>128GB</td>
</tr>
<tr>
<td>HP</td>
<td>HP Pro x2 410</td>
<td>$1,000.95</td>
<td>HP</td>
<td>DIR-SDD-1364</td>
<td>Intel® Core™ i3-4012Y (1.5GHz, 3MB Cache) Processor and Intel HD Graphics 4200</td>
<td>4 GB 1600MHz</td>
<td>11.6-inch diagonal IPS LED-backlit HD anti-glare UWVA (1366x768) Touch</td>
<td>128 GB m.2 SATA SSD</td>
</tr>
<tr>
<td></td>
<td>ElitePad 900</td>
<td>$1,237.25</td>
<td>HP</td>
<td>DIR-SDD-1364</td>
<td>Intel® Atom® Z2760 (1.5 GHz, up to 1.8 GHz using Intel Burst Technology and Intel Hyper-Threading Technology, 1 MB cache, 2 cores</td>
<td>2GB</td>
<td>10.1-inch diagonal LED WXGA (1280x800) with productivity jacket (includes Keyboard)</td>
<td>128 GB embedded Multi Media Card (eMMC)</td>
</tr>
</tbody>
</table>
# Laptop Pricing

<table>
<thead>
<tr>
<th>MANUFACTURER</th>
<th>Dell</th>
<th>HP</th>
<th>Lenovo</th>
<th>Apple</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL</td>
<td>Dell Latitude E6540</td>
<td>HP ProBook 430 G1 Notebook PC</td>
<td>15 in. ThinkPad L440</td>
<td>13.3 Inch Mac Book Pro 2.6GHz</td>
</tr>
<tr>
<td>PRICE PER UNIT</td>
<td>$944.10</td>
<td>$909.55</td>
<td>$845.00</td>
<td>$1,650.00</td>
</tr>
<tr>
<td>VENDOR</td>
<td>Dell</td>
<td>HP</td>
<td>Lenovo</td>
<td>Apple</td>
</tr>
<tr>
<td>CONTRACT #</td>
<td>DIR-SDD-1951</td>
<td>DIR-SDD-1364</td>
<td>DIR-SDD-2030</td>
<td>DIR-SDD-2068</td>
</tr>
<tr>
<td>PROCESSOR</td>
<td>i5-4300M Processor (2.6GHz, 3M cache)</td>
<td>Intel® Core™ i5-4200U (1.6GHz w/ Turbo, 3MB Cache) Processor and Intel HD Graphics 4400</td>
<td>4th Generation Intel Core i5-4300M Processor (2.60GHz 1600MHz 3MB)</td>
<td>2.6GHz dual-core Intel Core i5 processor (Turbo Boost up to 3.1GHz) with 3MB shared L3 cache</td>
</tr>
<tr>
<td>MEMORY</td>
<td>4.0GB, DDR3-1600MHz DDRL3</td>
<td>4GB 1600 MHz DDR3 SDRAM (1D)</td>
<td>4.0GB PC3-12800 DDR3L 1600 MHz</td>
<td>8GB of 1600MHz DDR3L onboard memory</td>
</tr>
<tr>
<td>SCREEN</td>
<td>15.6&quot; HD (1366x768) Anti-Glare LED</td>
<td>13.3 inch LED HD SVA Anti-Glare enabled for Webcam (1366x768)</td>
<td>Retina display: 13.3-inch (diagonal) LED-backlit display with IPS technology; 2560-by-1600</td>
<td></td>
</tr>
<tr>
<td>HARD DRIVE</td>
<td>320 GB 7200rpm Hard Drive</td>
<td>500 GB 5400 rpm 2.5-inch Hard Drive</td>
<td>500GB 7200 rpm</td>
<td>512GB</td>
</tr>
</tbody>
</table>
Acknowledgments

Thank you to the individuals and institutions that provided valuable input into this report, including information resources managers and practitioners who were surveyed for information on current and future use of tablet computers by state agencies.

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- Major Chris Nordloh, Texas Department of Public Safety
- Eric Obermier, Texas Department of Motor Vehicles
- Kyle Park, Texas Commission on Fire Protection
- Eric Posadas, Texas Parks and Wildlife Department
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