

**ONLINE VOTER REGISTRATION (OLVR) SYSTEMS IN ARIZONA AND WASHINGTON:
EVALUATING USAGE, PUBLIC CONFIDENCE AND IMPLEMENTATION PROCESSES**

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Executive Summary

The internet has revolutionized the way the public communicates, gathers information, and makes transactions with business and government. What was once viewed with skepticism, consumers now generally embrace online shopping and banking and send billions of dollars through secure transactions over the internet each day. Public use and support for online transactions has increased greatly over the past decade, and more state and local governments are reaching out through the world wide web to engage their constituents. For example, in King County, Washington, residents can log in to the County Assessor webpage and check their property tax statements, make payments, file inquiries or disputes, or write a letter to the Assessor. Similar services are available in almost every county and city government across the fifty states, including registering for a court date, paying a fine, signing up for trash service, requesting an inspection on a home remodel, and much more.

At the same time, state governments have become more interested in reaching out to voters through the Internet. In almost every state, voters can look up their polling place location, read candidate statements, read an official voter pamphlet, and download and print a voter registration application. However, as of the 2008 election cycle, only two states allowed voters to fill out and complete an official voter registration form through the Internet – Arizona and Washington. Online voter registration (OLVR) is one of the recent innovations in election administration that seek to improve access and convenience in voting. True ‘online voter registration’ allows citizens to complete their voter registrations online, *without* the need to print, sign and mail any paper forms. Arizona implemented its online voter registration system (called ‘EZ Voter’) in July 2002, and Washington launched its OLVR system in January 2008. There is much to learn about the processes that went into planning and implementation, and the efforts that go into the continued operation and enhancement of these systems. How successful has the implementation of online voter registration been in these states? This report provides a comprehensive examination of the implementation, operation, public confidence, and usage of online voter registration in Arizona and Washington. This may be particularly important as other states already move forward towards Internet-based registration, and the Congress considers paving the way towards national online registration.

Summary Findings for Usage and Public Confidence

- Demographically, differences exist between voters who register online and those who register via the traditional methods. In both Arizona and Washington, Internet registrants tend to be much younger, 60% under age 34 in WA and 55% under 40 in AZ.

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- In Arizona, racial and ethnic minorities are less likely to use online registration. Latinos and Native Americans are both less likely to register online than Whites.
- In Washington, a disproportionate number of online registrants reside in the Seattle-metro (Puget Sound) area, while the more rural eastern part of the state is less likely to use the new online system. Likewise, in Arizona, Phoenix-metro (Maricopa) is over-represented among the online registered population.
- Despite being much younger, people who registered to vote online turned out to vote at higher rates in 2008 than those who registered in traditional methods. This is remarkable because younger voters continued to witness lower rates of voting as a whole in 2008 than older voters. In Washington 85.3% of online registrants voted, compared to 82.4% turnout statewide. In Arizona, the gap is more noticeable with 94% of online registrants voting compared to 85% of traditional registrants in 2008.
- This turnout differential is greatest among young voters. In Arizona, voters under 34 years old who registered via the Internet turned out at 93% in 2008 compared to a turnout rate of 73% for younger voters that registered “offline.” In Washington the same trend holds whereby young voters who registered online turned out at much higher rates than young voters who did not register online.
- In Arizona and Washington, online voter registration is very popular. This is especially the case among those residents who have used the Internet registration systems. Over 90% report that online voter registration is easy to use, and 95% state they would recommend online registration to others in the state.
- Even among currently registered voters who did not register via the online process, support is high. About 70% of “offline” registered voters believe Internet registration would be more convenient than traditional methods, and 70% also state they would use online registration if they moved to re-register or update their address.
- Given the relative newness of online registration, a significant portion of the public is simply unaware of the ability to register online. In Washington where the method was available for less than a year prior to our survey, only 27% of registered voters knew that Internet-based registration was possible. In Arizona where the method was available for almost six years, 69% knew about the process. In both states, it seems that increased public outreach and awareness campaigns are necessary to better inform the general public.
- In Washington, when registered voters were read a short overview describing how online voter registration works, support went up further, suggesting that simple information campaigns may be effective. Respondents who were informed about how Internet

registration works were more likely (82% agree) to report that online registration is convenient and easy as compared to respondents who were not given any information about the process (70% agree). Likewise, 71% of the informed respondents said online registration would increase government efficiency versus 58% who were not informed.

Summary Findings for Implementation in Arizona and Washington

The main similarity between Arizona's and Washington's online voter registration systems is that they use the registrant's state driver license or state identification (ID) card number to facilitate the registration. The two systems have many differences in structure, functionality, and administrative implementation. Arizona's system is simply an addition to the other online services available at the Motor Vehicle Division; whereas, the Washington system is a stand-alone service that is maintained by the Secretary of State's (SOS) Office. This difference is both administrative and on the front-end for the user. While the user may locate both systems through the respective Secretary of State's website, the actual application resides in vastly different locations. One consequence of Arizona's EZ Voter application being part of the Motor Vehicle set of online services is that the two systems are easily updated by one another, for example address changes can be simultaneously conducted on both motor vehicle and voter registration records. This simultaneity does not occur in Washington where information only flows on direction from the driver license records to the state Elections Division, and that only occurs if the individual agrees to or requests a voter registration update. Both systems do require that voters input personal information that matches exactly what is on their driver license records, therefore resulting in much more accurate voter records than paper registrations.

In terms of the web interface of the two states' systems, there is a basic core of similarity in that each system has the user chose a language, answer some questions about eligibility to register, enter name and ID number, enter personal information (both required and optional), a voter declaration of permission to use the signature off the identification card, and the ability to review the information before submitting. However, the web interfaces are different in the two systems, in that there are different numbers of screens to negotiate, and that the content of screens is organized differently. One major reason for these differences is that Arizona's online registration system automatically pulls more information from the individual's driver license data and therefore requires less to be entered manually. Also, Arizona has had almost seven years of feedback from users and had therefore more time to adapt the screens based on user needs.

The Completeness of Implementation

The two systems work seamlessly and are fully implemented for users that are state residents with driver licenses or state ID cards seeking to register to vote. For county administrative ‘users,’ however, implementation was not complete in either state as of the writing of this report in May 2009. In both states, there were counties that did not receive the online registrations electronically, or integrated into their own registration databases, and therefore had to key punch the registration data manually into their systems just as they do with paper registration forms.

When Arizona’s system was developed in 2002, its functionality did not include a way to transfer incoming information to county registration systems, although the largest Arizona county invested considerable resources into facilitating electronic transfer of EZ Voter registrations into it’s database. The other fourteen counties were waiting for the state to develop and release this feature, which was undergoing testing and scheduled for implementation in September 2009.¹ As of May 2009, twenty-eight of the thirty-nine counties in Washington were receiving electronic registrations. Four registration software vendors were active in the state, and a county’s status with OLVR seemed to correlate with which of the four software types they were using. All of the counties who had contracted with two of the vendors were ‘online’ with OLVR, while only some of the counties with the other two vendors were online.²

Implementation Lessons for Other States

A critical component to the implementation of online voter registration is the collaboration of the state election agency with other organizations, including the driver licensing agency, technology vendors, county registration officials and their professional organizations.

In both states, the relationship with the driver licensing agency was relatively unproblematic, in particular because it was demonstrated that online voter registration would benefit both agencies. State election administrators that will implement online voter registration in the future have already been working with their state driver license agency since 2006 to match driver license information for voter registration verifications in compliance with the Help America Vote Act, and they will be able to build on the existing relationship. In addition, the collaboration and implementation of OLVR should help to improve and simplify NVRA or “motor voter” registrations which take place at the driver license agency.

¹ Update: The fourteen Arizona counties are still manually entering EZ Voter registrations as of January 2010. Testing of the system enhancement is still taking place and the new target date is April 2010.

² Update: As of January 2010, all OLVR registrations are transmitted electronically to Washington counties.

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The relationship with technology vendors is more challenging. In both states, development of the county interface with the online voter registration system relied upon existing technology contractors, and in both cases this has been the most difficult and delayed aspect of the program. States in which the counties maintain their own registration databases, might consider forcing more uniformity across county systems and bidding the county interface separately from other projects.

Whether or not they completely achieved their goals, both states voiced the importance of working with the counties, involving the counties in the process from the beginning, and recognizing the counties as 'users' too. County election officials need to be involved in planning, development and testing of the software and applications they will be using. It is inevitable that there will be problems with the transfer of data from the state to the county systems; those electronic data may not be in the same format as the data that are entered from handwritten forms. Ideally there will be time for testing the system, and the product will go through an iterative design to eventually address all special cases that might arise.

On the voter side, several things should be kept in mind. Many online registrants will be pleased by the convenience of the system, but many will also be nervous about security, privacy and the wait to find out if they actually become registered. Arizona's use of a confirmation number is an especially good way to reassure registrants that there is some way to track what was done online. The design must balance simplicity with adequate explanation. Arizona's showing of a partial address, which allows voters to see whether an address change is necessary or has already been done, is a good way to balance privacy concerns with the need for this critical piece of information.

Addressing Security Issues

The issue of the security of online voter registration needs to be examined from the perspective of all involved entities, including the public, voters, counties, and state agencies. The two states have shown that security issues can be adequately addressed.

In 2000 the California Internet Voting Task Force argued that internet registration is fundamentally not secure and not recommended, primarily because of the inability to authenticate the individual, to assess eligibility for voting, and to avoid fraudulent registrations. This report was written before HAVA was enacted which required construction of statewide registration files which could be checked for fraudulent registrations through matching with other databases and checking for duplicates across local jurisdictions. Online registration can build on that system (in place in most states), and by using the driver license or state ID number allows some of the HAVA matching to be done earlier than it would be with paper registrations.

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In both states the registration is not accepted by the online system if it does not match a real person with a driver license or state identification card.

Registering online does not have to be 'automatic' in terms of establishing a registration record at the local jurisdiction. It can be set up so that local officials must actually accept into their database the registration that was made online; in this case there are opportunities to discover duplicates or ineligible people before they are actually 'registered.'

In addition, a perpetrator of a fraudulent online registration (registering someone else by knowing their license or id number) could not follow that up with fraudulent voting-by-mail, because the perpetrator does not see the signature (associated with the license or id) and could not copy it onto the vote-by-mail envelope. For the purposes of actually voting fraudulently with fraudulent registrations, completing paper registration forms would be easier.

Finally, there is one method to stop or at least slow down registrations being conducted by an automated process. Washington requires the user to type in a number that appears on the screen; Arizona has not had this kind of security measure, but it has had almost seven years of experience during which widespread automation of fraudulent registrations would have been discovered.

In addition to these measures, both states employ standard web security measures, such as SSL-encryption and dedicated lines between agencies. In both cases, the databases accessed during online registration are part of the existing state network which already has a firewall protecting it from all kinds of public access. Regardless of security measures already in place, both states conducted additional security reviews of online voter registration using both in house and external security teams.

Introduction

Through a multi-stage approach, this report assesses the implementation and operation, public response, and use of the new online voter registration systems in Arizona and Washington.

Numerous studies demonstrate that among registered voters, voter turnout in presidential elections is very high, about 80%, even across race, age, and income groups. Once people are registered to vote, they are significantly more likely to be contacted by campaigns as well as pay attention to political news, and ultimately vote in the election. However, a sizable registration gap continues to exist in this country, by which not all citizen adults who are eligible, are actually registered to vote. In addition, outdated voter registration records create bureaucratic problems at both the polling place and the county election office. In particular, youth, minorities, and lower income households have much lower rates of registering to vote, or having out of date registration.

In 2002 Arizona passed legislation allowing citizen adults to register to vote using the Internet and in 2007 Washington state passed a law based on the Arizona system. Previously, states had allowed people to download registration forms, but 2002 marked the first time a state allowed its residents to actually complete the registration form through the Internet. This technological step forward represents a new opportunity in voter registration, increasing the ease and efficiency of voter registration for the general public. Rather than going to the post office, department of vehicles, or county office to get an official registration form, residents of Arizona and Washington can now register to vote from their living room, at work or school, at a library or community center, or any place that has internet access.

2008 is a unique time to analyze the online voter registration (OLVR) systems in Arizona and Washington. Arizona has had OLVR for six years now and use and familiarity should be stable. In contrast, 2008 is the first year that OLVR was available in Washington state, and also the first time a comparison can be drawn to the public experiences in Arizona. Thus, it is important that a complete assessment of the online system is conducted, including measuring voter attitudes and user experiences, as well as assessing the administrative processes involved with its implementation.

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While the online voter registration process sounds promising, there are many potential challenges as well. Will all people have equal access to online registration? Will the public support the online system, or will it be viewed with skepticism as online voting often is? Will new online registrants follow through and become new voters? And how will the new system be implemented and merged with traditional pen and paper registration forms? For example, does it reduce administrative costs and burdens or increase the complexity by introducing new technologies? Further, does it reduce errors on the voter rolls by reducing the number of points where data is entered or reentered?

As other states grapple with the electronic transition to voter registration which seems inevitable, the lessons learned in Arizona and Washington will be relevant to the successful implementation of online voter registration in other states. One aspect of this, is of course, voter confidence. As states have changed their voting systems, transitions have only been successful with public education, understanding and support. To this end, we examine public attitudes towards OLVR in Arizona and Washington, and also examine official voting records to determine if OLVR is being accessed equally by different demographic subgroups in the electorate. In full, the larger project will combine research methodology from public administration analysis, public opinion surveys, and voter turnout.

It is important to note that we are primarily interested in Internet-based voter registration, and that online voter registration can potentially have a broader definition. For example, in Arizona the electronic system is called EZ Voter and state employees at the department of vehicles use the EZ voter system to enter in new registration records. However, these voters did not register to vote online through the Internet. In this report, we focus on Internet-based OLVR

OLVR is one of the recent innovations in election administration that seek to improve access and convenience in voting. True 'online voter registration' allows citizens to complete their voter registrations online, *without* the need to print, sign and mail any paper forms. The basic idea is the same across states; the service is (or will be) available to state residents who have the state's driver license or state identification (ID) card, because having this form of identification facilitates online voter registration in two ways; One, the signatures on licenses or ID cards can be appended to the registration information that is submitted online. These signatures can then be electronically transmitted to the election officials to be used for voting purposes.³ Two, online registrants can be authenticated through the driver license database⁴. At the time of this report (May 2009), two states had implemented an online voter registration system, Arizona in 2002, and Washington in 2008, and several others have similar systems

³ Typically the signature is needed to compare to the signature on an absentee or vote-by-mail ballot envelope, to the signature made at the polling place, or to the signature on a petition.

⁴ In other words, the HAVA matching to the driver license database that is done with paper registrations can be done in real time as the registrant is accessing the service and then the registration will not continue if the information does not match.

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authorized in law and in the planning stages, including California, Utah and Kansas. Many other states (including Colorado, Indiana, Michigan, New York, and Oregon) have legislation pending to allow OLVR.⁵

States that are considering or planning for an online voter registration system can benefit greatly from the experiences of Arizona and Washington. Ideally, understanding the lessons learned in these states, will help other states transition successfully to online voter registration. This study was conducted expressly for the purpose of educating other states on the implementation and operation of the Arizona and Washington systems. This section of the report presents the results of the study, herein referred to as the 'implementation study of OLVR.'

For the implementation study, researchers from UC Berkeley's Election Administration Research Center⁶ collected and analyzed qualitative and quantitative data about the implementation and operation of OLVR. Specifically they conducted in-depth in-person interviews with state and local election officials and other interested parties, collected relevant administrative data,⁷ and followed up with telephone and email correspondence to answer further questions. Interviews followed a basic set of questions and requests for information, but were flexible and adapted to elicit the key contribution of each interviewee.

At the state level, interviews were conducted with the staff of the election agency (Secretary of State's Office in both states), and the agency in charge of motor vehicle licensing, with staff who had involvement with the OLVR program. This included seven state employees in Arizona, and ten state employees in Washington. Some interviews were conducted in groups and some one-on-one in both states. A sample of counties was selected in each state to represent regional variation, the presence of university populations, different languages and ethnicities, and voter registration technology variation.⁸ At the county level, interviews were conducted with members of the election agency staff involved in voter registration. This was, typically the manager in charge of voter registration, one or two employees who actually process registrations, and in some cases the IT programming staff. These interviews were conducted in groups, and in most cases the chief election official stopped by or fully attended the interview. Eleven individuals in four counties were interviewed in Arizona, and fourteen individuals in five

⁵ Update: The Kansas OLVR system went live on June 1, 2009. As of December 2009, Colorado, Indiana, and Oregon passed legislation authorizing OLVR, and the Voter Registration Modernization Act (HR 1719) (Rep. Lofgren) is moving through Congress and would mandate OLVR.

⁶ <http://earc.berkeley.edu>

⁷ Administrative data is data collected through regular administrative processes and reports.

⁸ Variation in region, university presence, and language and ethnic populations allowed analysis of how implementation of online voter registration program might affect different populations differently. It was also assumed that implementation of the system might vary across counties with different voter registration software.

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counties were interviewed in Washington.⁹ Interviews were also conducted with technology vendors and members of good government, civil rights, and language access groups, adding another seventeen individuals who provided input to the study.

⁹ The fact that several more individuals were interviewed in Washington compared to Arizona does not indicate that the research was done differently or more thoroughly in Washington; instead this difference in the number interviewed reflects differences in agency structure and that Washington was still in the middle of implementation and therefore had more people around who were involved with the project.

Part I: Usage and Public Confidence in OLVR

Data & Methodological Approach

To assess public confidence and usage of OLVR we rely on two data sources each for Arizona and Washington. First, in both states we fielded a public opinion telephone survey to gauge knowledge, confidence, and use of the online systems. The surveys include a sample of currently registered voters, with an oversample of those who used the OLVR system, and finally a sample of adults who are not registered. In Washington, through assistance from the Secretary of State's office, we were able to contact online voters via email, using the email address they entered when signing up online, and this portion of the survey was conducted online. In Arizona, email addresses were not available and all portions of the survey were conducted by telephone. In all cases, the surveys employed post-stratification weights to correct for very small discrepancies in response rate by age, gender, and region of state, based on the full universe of registered voters in each state.

In addition to the surveys, we access the official voter registration records in both states, with assistance from the Secretary of State's office in Arizona and Washington. Within the voter file, we were able to flag those registrants who used the Internet to register to vote, and then to compare the rates of OLVR for different subgroups in the voter file. We are particularly interested in examining OLVR rates across different age groups, and across different ethnicities. Finally, we merged in official validated vote history for the November 2008 election in an effort to determine whether or not OLVR registrants turned out at equal, lower, or higher rates as compared to traditional, non-OLVR registrants.

Online Voter Registration in Washington State

An analysis of Online Voter Registration (OLVR) in Washington State necessarily begins with a description of who is registering online. In other words, it is important to know which demographic groups are disproportionately registering online. To do this, we compare the demographic composition of voters who registered online to all registered voters in the state. Because the voter file data are somewhat limited, the demographic description will also be complemented by survey data.

The second section of the report will examine public opinion about OLVR among registered voters, which is based on survey data. This section is written with an eye toward identifying challenges OLVR faces and potential voter uneasiness with this new form of registration. Despite some concern, overall, these data demonstrate broad support for OLVR among the voting public.

The final section analyzes public opinion among respondents who *did* register online. This section is designed not only to gauge the support of OLVR among voters who have actually used it, but also to understand registrants' motivations, experiences, and recommendations about how to improve OLVR.

Who is Registering Online? -- Demographic Comparison

Several demographic cleavages differentiate the OLVR population from the full registered voter population. These differences are most evident with age and region. Differences also emerge—but less so—with education, party identification, and income.

- **Gender.** There are limited gender differences between the two universes. Fifty-three percent (53 percent) of all registered voters are women, 47 percent men. Among OLVR registrants, the split is 50.4 female – 49.3 percent male.
- **Age.** Stark differences emerge, however, when age is examined. Fully 45 percent of respondents in the OLVR sample are between the ages 18-34. This number stands at just 18 percent among all voters in our registered voter survey. Furthermore, the difference in use is even more extreme when we compare the overall voter file to the OLVR voter file. Sixty-one percent (61 percent) of voters who signed up via OLVR are 34 or younger, compared to just 24 percent of all registered voters, a difference of 37 percent. To be sure, this difference is large; nevertheless, it may be due, in part, to new voter registration drives directed towards younger voters in 2008. Indeed, among all new voter registrations processed in 2008 (OLVR and otherwise), 48 percent were 30 or younger.

- **Region.** There is a regional imbalance among citizens who have registered online. Registrants in Puget Sound (King, Snohomish, Pierce, and Thurston counties) comprise 69 percent of OLVR voters, compared to 56 percent among all voters. Eastern Washington voters are noticeably under-represented in the OLVR voter file (7 percent versus 20 percent overall).
- **Education.** In part because the OLVR sample is so much younger, OLVR voters report slightly lower levels of education than the overall registered voter pool. Forty-nine percent (49 percent) of all registrants have a college education or higher, whereas 44 percent of OLVR have a college degree or higher.
- **Party Identification.** When asked what party they identify with, more voters in the OLVR sample claim to be independent of any party (39 percent), compared to 28 percent of respondents in the registered voter survey. As a result, Democratic and Republican identifiers are under-represented in the OLVR sample at about equal rates (36 percent online sample— 42 percent registered voter survey for Democrats; 25 percent online sample—30 percent registered voter survey for Republicans).
- **Income.** OLVR enhances the likelihood that lower income residents will register to vote. In the survey of online registrants, voters making less than \$40K per year comprise 29 percent of the sample; a full seven points higher (22 percent) than voters in the registered voter survey. There is no difference for middle income voters, but there are fewer voters making over \$80K (34 percent) in the online survey than in the registered voters survey (39 percent).
- **Race.** Relative to many other states, Washington State is racially homogenous. But based on the registered voter survey, five percent of African Americans have registered online compared to just two percent of white voters. This, based on other evidence in the survey, suggests that outreach has been relatively strong among the black community. Notably, Asians and Latinos are also disproportionately turning to online registration methods, albeit the differences are small. Indeed, a voter file surname match supports this statement. The findings show that nine percent of online registrants are Asian compared to eight percent overall. Also, four percent of the online registrants are Latino voters compared to 3.85 percent overall. Again, these differences are small, but they are based on the complete universe, not a sample survey.

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Table 1 : OLVR differ from all registered voters

Demographic Comparison					
Variable	Voter File			Survey	
	All Reg Voters (Voter File)	OLVR Reg (Voter File)	Percent that Voted (2008)	All Registered (Sample)	OLVR Voters (Sample)
Gender					
Male	47	49.3	81.5	46.8	-
Female	53	50.4	83.3	53.2	-
Age					
18-34	24	60.5	71.2	17.6	44.5
35-49	27.4	24.1	82.9	27.8	28.6
50-65	31	12.9	90.1	32.4	22.3
66+	17.6	2.5	90.9	22.3	4.6
Region					
Puget	56	69	82.2	54.7	-
Eastern WA	20.3	6.7	82.2	20.9	-
Other	23.8	24.4	83.2	24.4	-
Education					
Non-College	-	-	-	51.4	56.1
College	-	-	-	48.6	43.9
Party ID					
Democrat	-	-	-	42	36.1
Republican	-	-	-	29.6	24.7
Ind / Other	-	-	-	28.4	39.3

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Variable	Voter File			Survey	
	All Reg Voters (Voter File)	OLVR Reg (Voter File)	Percent that Voted (2008)	All Registered (Sample)	OLVR Voters (Sample)
Income					
< \$40K	-	-	-	21.9	28.5
\$40K < \$80K	-	-	-	39	37.7
\$80K +	-	-	-	39.1	33.8
Race/Ethnicity					
White				85.0	88.7
African American				5.2	2.3
Asian	7.81 [*]	9.07 [*]		1.6	3.4
Latino	3.85 [‡]	4.00 [‡]		2.2	3.2
Other				4.1	2.2
Percent Voted (2008)	82.4	85.3			

In sum, relative to voters overall, voters who register online are most likely to be younger, reside in the Puget Sound region, be slightly less educated, more independent in their partisanship, more likely to have lower income, and slightly more likely to be white, Latino, or Asian.

* Based on Asian surname match

* Based on Asian surname match

‡ Based on Latino surname match

‡ Based on Latino surname match

Registered Voter Sample¹⁰

The analysis of online registration in Washington State involved a telephone survey of registered voters as well as an online survey of voters who registered online. The analysis that follows in this section—while incorporating some comparisons to voters who registered online—is primarily an analysis of registered voters who did *not* register online. In other words, these data are taken from a statewide telephone survey (n=1,000) of all registered voters in Washington State. Below, we address the issue of public awareness, the OLVR question battery designed to gauge voters’ attitudes towards online registration, as well as online voting.

Public Awareness

One current challenge to advocates of online registration in Washington State is to raise the profile of OLVR. In the survey of registered voters, only about a quarter (27.4 percent) of the electorate is aware that residents can now register to vote online, and just 2 percent of the sample *did* actually register online. Notably, the demographic groups that are most aware of OLVR are women (30.5 percent), voters age 35-49 (33.6 percent), households earning \$80K or more (33.4 percent), and African Americans (38.6 percent).

Table 2: Public lacks awareness and knowledge of OLVR

<i>“As far as you know, does the state currently allow for people to register to vote online, or on the world wide web?”</i>						
Response	Total	35-49	Female	\$80K +	Black	
Yes, it is possible	27.4	33.6	30.5	33.4	38.6	
No, not possible	20.7	18.2	20.4	20.7	17.2	
Don't Know	51.5	47	48.5	45.9	42.3	
Total	100	100	100	100	100	

To be sure, this lack of OLVR awareness among voters is not surprising given that OLVR began in January, 2008—not even a full year when the data was collected for this study. In Arizona, for

¹⁰ Also referred to as the telephone sample.

instance, OLVR has operated for four years, and nearly a fifth (19 percent) of the Arizona survey sample included voters who registered online. Therefore, it is to be expected that the public's knowledge and usage of the program will only increase with time.

Attitudes towards Online Voter Registration among Registered Voters

Voters were asked a battery of questions designed to measure their attitudes towards a variety of issues facing online voter registration. These questions include privacy concerns, future registration, ease and convenience, and representation and democracy. Respondents' answers indicate broad support for the program, with certain demographic groups consistently more supportive of OLVR and other groups less so. At the same time, voters betray real concerns with OLVR.

- **Privacy.** Voters are concerned that computer hackers may access their voter information or registration databases. Consequently, communication about the program should stress privacy messages. Sixty-two percent (62 percent) of voters are worried that hackers could access their registration information; 74 percent worry that hackers may access registration databases. Voters in Eastern Washington, Republicans and African Americans are the most concerned about privacy matters.

Privacy concerns understandably diminish somewhat among voters who registered online. Only 10 percent are very worried that hackers will access registration databases, compared to 44 percent of registered voters. Nevertheless, 45 percent of online registrants are somewhat worried about privacy concerns. Thus, despite the fact that more than 50 percent of online registrants express some reservation of privacy violations, they nevertheless registered. This may be because, overall, online registrants are confident of the safety of the OLVR system (89 percent express confidence their personal information is safe and secure).

Finally, within the realm of privacy, voters are less concerned about politicians accessing their information and sending them emails than other privacy issues. Yet, 45 percent (27 percent strongly) are worried that politicians may send them unwanted emails. This jumps to 31 percent strongly among Republicans compared to just 24 percent strongly among Democrats. The worry is also highest among upper income voters (33 percent strongly) and African Americans (36 percent strongly).

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Table 3: The public is concerned about OLVR privacy issues

Privacy Issues						
	Total	Eastern WA	African Americans	Republicans	Democrats	Upper Income
<i>(Split A) Computer hackers could access my registration information if I register online.</i>						
Strongly Agree	33.8	47.4	42.2	42.1	27.4	29.7
Somewhat Agree	28.5	25.8	26.2	27.5	28.1	32.5
Somewhat Disagree	18.1	8.7	9.2	17.1	22.1	21.1
Strongly Disagree	12.2	11.4	16.8	7.3	13.2	13.4
<i>(Split B) Computer hackers could access voter registration databases.</i>						
Strongly Agree	43.8	48.5	59.3	49.8	36.6	35.7
Somewhat Agree	30	29.2	16.8	20.6	34.6	30.9
Somewhat Disagree	8.8	4.6	11.3	11.5	8.3	14
Strongly Disagree	10.1	12.6	9.2	12.1	10.9	12.2
<i>(Split A) Politicians will obtain my email address and send me unwanted emails.</i>						
Strongly Agree	27.1	29.8	35.9	31.3	23.5	32.8
Somewhat Agree	18.3	21.5	17.6	18.6	16.1	14.7
Somewhat Disagree	19.5	15.7	12.3	22.3	18.1	22.3
Strongly Disagree	25.2	23.6	27	17.5	32.3	24.4

- **Registering in the future.** Two questions designed to measure the longevity of OLVR augur well for the future of online registration. In other words, if voters have to re-register, they are open to registering online. First, when asked hypothetically if they moved and had to re-register, 70 percent of voters said they would register online, 47 percent strongly. Perhaps reflectively their greater propensity to move, younger voters (79 percent) and middle age voters (84 percent strongly) disproportionately agree to this question. In addition, African Americans (70 percent, but 54 percent strongly), and voters in Puget Sound (53 percent strongly, compared to 37 percent strongly in Eastern Washington) are also disproportionately more favorable to re-registering online.

Second, relative to the above question, voters are less enthusiastic about encouraging a son or daughter to register online. Nevertheless, support is still strong for this question (59 percent agree, 39 percent strongly agree). Moreover, this question appears to elicit more parental instincts among respondents, which may decrease support somewhat for online registration. Indeed, for the youngest cohort in this sample, there is virtually no difference in strength of support across the two questions, but a noticeable drop among voters most likely to have children that may be turning 18 soon (voters between 35-49). Thus, communication outreach should target and reassure voters in this middle-age cohort the benefits of online registration.

Table 4: Voters are interested in using OLVR if they need to re-register in the future.

Future Registration					
	Total	Puget Sound	African Americans	Age 18-34	Age 35-49
<i>(Split A) If I moved to a new address within the state and had to change my registration, I would update my address online.</i>					
Strongly Agree	47.1	53.4	54.4	47.5	66.4
Somewhat Agree	22.6	22.4	15.7	31.3	17.7
Somewhat Disagree	8	6.5	6.5	4	5.7
Strongly Disagree	16.5	13.8	14	11.7	6.8
<i>(Split B) If I had a son or daughter turning 18, I would encourage them to register to vote online.</i>					
Strongly Agree	38.8	41.9	55.1	50.5	53.9
Somewhat Agree	20.4	22	16.1	34.7	17.4
Somewhat Disagree	10.1	9.5	4.7	0	9.8
Strongly Disagree	25.6	22.4	17.8	12.5	15.8

- Convenience and Ease.** One reason why voters may register online in the future is because of OLVR’s convenience, ease, and possibility of decreasing the costs of government. Seventy-one percent (71 percent, 41 percent strongly) of voters agree that registering to vote online is more convenient than using paper forms. Not surprisingly, this jumps to 98 percent among voters who registered online. Demographically, younger voters (53 percent strongly), voters in the Puget Sound (46 percent strongly), African Americans (49 percent strongly), and upper income voters (53 percent) are most likely to agree that online registration is convenient. Notably, older voters (66 or older) are by far the least likely to agree that online registration is convenient (26 percent strongly agree).

We also asked voters if they thought registering to vote online would be easy. This question elicits similar responses to the aforementioned convenience question. However,

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about a quarter of voters did not answer the question, which makes sense considering only 2 percent of them had registered online. Still, 63 percent of voters agree that online registration is easy. Strategic communications involving arguments of convenience and ease, therefore, should be comparative in nature. That is, compared to paper forms, online registration is more convenient, fast, and easy.

Table 5: Voters overall agree that OLVR is convenient and easy

Convenience and Ease						
	Total	Puget Sound	Age 18-34	Age 35-49	African American	Upper Income
<i>(Split B) Registering to vote online is more convenient than registering to vote with paper forms.</i>						
Strongly Agree	41.17	46.4	46	56.5	48.8	52.6
Somewhat Agree	30.01	29.7	29.4	27.3	19.7	29
Somewhat Disagree	9.5	9	10	8.9	6.7	8.1
Strongly Disagree	11.6	6.5	7.8	3	18.6	4.4
<i>(Split B) Registering to vote online is easy.</i>						
Strongly Agree	32.5	29.1	32.5	29.1	50.8	35.9
Somewhat Agree	30.7	34.6	30.7	34.6	22.9	31.8
Somewhat Disagree	3.2	2.7	3.2	2.7	4.7	2.2
Strongly Disagree	7.1	6.1	7.1	6.1	6.9	3.4

Finally, an efficiency-in-government argument regarding online registration is broadly effective among voters. Sixty-two percent (62 percent) of voters, 31 percent strongly, agree that “online registration will cut down printing costs and help increase the efficiency of government.” Interestingly, support for this question is not disproportionately higher among Republicans or voters in Eastern Washington; indeed it is lower. Support is highest among younger voters (37 percent strongly).

Table 6: A majority of voters believe OLVR will increase the efficiency of government

Efficiency in Government					
	Total	Republicans	Democrats	Eastern WA	Age 18-34
<i>(Split A) Online registration will cut down printing costs and help increase the efficiency of government.</i>					
Strongly Agree	30.5	27.2	34.9	20.8	31.1
Somewhat Agree	31.3	25.5	37	32.2	22.6
Somewhat Disagree	14.2	21.5	9.1	18.3	24.3
Strongly Disagree	17.9	20.8	12.3	21.5	18.6

- Participation and democracy.** Registered voters believe that OLVR will increase voter participation in the state. Indeed, 70 percent of voters agree, 36 percent strongly, that “online voter registration will increase the number of registered voters in the state.” Respondents who are most confident that OLVR will increase the number of voters include Democratic voters (43 percent strongly), Obama voters (45 percent strongly), and African Americans (45 percent). Confidence is lowest among voters in Eastern Washington (29 percent strongly), Republicans (28 percent strongly), and lower income voters (27 percent strongly).

Voters are even more confident that OLVR will increase the number of younger people registering to vote. Fully 80 percent of voters (48 percent strongly) agree with the statement “Online registration will increase the number of young people who are registered to vote in this state.” Support is highest among African Americans (69 percent strongly), voters aged 35-49 (62 percent strongly), and voters making \$80K or higher (59 percent strongly). Notably, Democratic and Independent voters are much more likely to *strongly agree* than Republicans (54 percent among Democrats, 56 percent Independents, and just 35 percent among Republicans).

Regarding participation and income, voters believe that OLVR will be used by higher income groups (54 percent agree, 19 percent strongly) than by lower income groups (37 percent agree, 16 percent strongly). Upper income voters are most likely to agree that OLVR will benefit upper income groups (58 percent agree, 19 percent strongly). Upper income voters are also the subgroup most likely to agree that lower income groups will benefit from OLVR

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(48 percent, 20 percent strongly). Interestingly, lower income voters are less optimistic—just 41 percent (19 percent strongly) agree that OLVR will benefit low income communities.

Table 7: Voters think that OLVR will improve democratic processes

Participation and Democracy									
	Total	Dems	Repub	Af - Am	Eastern WA	Upper Income	Lower Income	Age 18- 34	Age 35- 49
<i>(Split A) Online registration will increase the number of registered voters in this state.</i>									
Strongly Agree	36	43.2	27.7	45.3	29.4	37.7	26.8	30.3	37.3
Somewhat Agree	33.6	30.8	32.4	28.9	27.4	36.4	35.8	37.8	41
Somewhat Disagree	10.5	9.6	16.7	7.5	16.7	10.7	12.2	13.5	4.5
Strongly Disagree	12.5	10.4	16.1	11.6	15.8	9.3	14.6	18.5	10.7
<i>(Split B) Online registration will increase the number of young people who are registered to vote in this state.</i>									
Strongly Agree	48.3	53.9	35	68.5	46.2	58.9	43.4	53.2	62.1
Somewhat Agree	31.8	32.2	38.6	15.9	29.4	29.9	37.7	31.6	28.2
Somewhat Disagree	5.9	4	5.8	2.6	6.4	5.7	4	12.1	2.9
Strongly Disagree	9.3	5.5	15.1	6	15.7	2.8	10	3	4.2
<i>(Split A) Online registration will be used more often by people with higher income and resources.</i>									
Strongly Agree	19.41	20.9	18.4	33.5	17.8	19.1	18.7	11.8	13.9
Somewhat Agree	34.27	37.4	32.5	28	27	38.9	31.5	22.1	42.7
Somewhat Disagree	19.08	15.3	24	18.7	19.1	19.8	16.7	33.6	20.1
Strongly Disagree	18.39	18.2	17	17.4	27	16.4	22.7	32.5	16.4

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(Split B) Online registration will provide an opportunity for lower income communities to register to vote.

Strongly Agree	15.7	19.5	9.8	24.5	18.1	19.7	18.7	17.9	23.3
Somewhat Agree	21.7	24.5	19.3	15.8	15.1	28.2	22.2	25.5	20.8
Somewhat Disagree	26.1	25	28.7	20.3	30	27.7	23.9	24.2	30.7
Strongly Disagree	27.6	19.2	34.4	29.3	28.8	19.9	21.8	21.8	17.8

- Barriers to Participation.** While voters express some reservations that OLVR may exclude voters without a driver’s license to register (39 percent), this concern appears to be secondary or tertiary. Many voters (20 percent) responded “don’t know” to this question, suggesting some confusion about this aspect of OLVR. We conducted a split sample survey experiment to tease out possible public opinion challenges regarding voter identification material. Prior to the OLVR battery, half of the voters received an educational message that described how residents can register online; half of the respondents received no message. The description reminded voters they would need a driver’s license or state id.¹¹ Only 13 percent of voters who received this message answered the driver’s license question “don’t know;” 27 percent of voters who did not receive the message said “don’t know.” As a result, 45 percent of voters read the message agreed that OLVR will exclude voters without a license, versus 32 percent who did not receive the message. This indicates that the message worked to increase voter knowledge of the registration requirements. Communication efforts, therefore, should incorporate a message about a driver’s license or other identification requirement.

Online Voting

While voter opinion is broadly supportive of OLVR, opinion is split as regards online voting. In the registered voter survey, 49 percent of voters support online voting if OLVR is proven to be safe and secure. Forty-six percent (46 percent) oppose this form of voting. Demographics most supportive of online voting include voters under the age of 50 (55 percent), voters making more than \$80K a year (60 percent), and African American voters (59 percent). A stark party difference emerges, however, as 56 percent of Democrats support online voting; whereas just 39 percent of Republicans support this form of voting. Although we cannot be entirely sure, it

¹¹ See appendix for language.

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is quite plausible that this party attitude cleavage is a result of broad Democratic control of state government.

Despite these aforementioned attitude cleavages, voters who register online are much more receptive to online voting, as more than two-thirds (65 percent) say they will support online voting in the future if it’s proven safe and secure. This suggests, of course, that as the number of voters registering online grows, so will support for online voting.

Table 8: Voters are unsure about online voting. OLVR registrants are more supportive

Online Voting							
	Total	Upper Income	African Americans	Under 50	Democrat	Republican	OLVR Registrants
<i>If online registration is proven to be safe and secure, in the future would you support voting online in elections here in Washington?</i>							
Yes	48.6	59.9	58.7	55.1	55.9	39.3	65.4
No	46.2	35.9	36.9	40.2	37.7	56.9	24.3

Online Sample

The previous section revealed expansive support for OLVR among registered voters, albeit concerns and challenges exist. This portion of the report examines some general attitudinal differences between the online sample (read: voters who actually registered online) and the registered voter sample to see how these groups differ on a set of important political measures. In short, we want to know how people who register online differ from the overall registration pool.

In addition, we explore the registration process from the perspective of those voters who did register online. Accordingly, a series of questions designed to query voters’ experiences registering online are analyzed. This analysis demonstrates that voters who registered online, on balance, are more supportive of OLVR and less worried about the challenges facing OLVR than are registered voters.

General Attitude and Behavioral Differences: Online Registrants vs. All Registered Voters

As shown, voters who registered online are demographically different from voters who registered by more traditional means, such as vote by mail. Most notably, these online registrants are much younger (45 percent 18-34 in the OLVR sample compared to 18 percent in the telephone sample) and are more likely to use the internet to obtain their news (38 percent

compared to 17 percent in the overall registered voter sample). Some of these demographic differences are reflected in attitudinal differences; others are not.

- **Issue Importance and Interest.** Some attitudinal cleavages are apparent between the two samples; but there are also similarities. For example, voters in both surveys rate the economy as the most important issue. Fifty-nine percent (59 percent) of online registrants, compared to 48 percent of registered voters, rank jobs and the economy as the most important issue to them. Voters in the online sample claim to have more interest in the election, as 79 percent of these voters say they are either very or extremely interested in the election. This number dips to 68 among voters in the telephone sample.
- **News about Politics.** Online registrants obtain their news in more modern ways than traditional registrants. That is, 38 percent of online registrants obtain their political news from the internet versus just 17 percent among traditional registrants. Accordingly, traditional registrants are more likely to obtain their political news from the television (56 percent) and from newspapers (13 percent) than are online registrants, 40 percent, and 6 percent, respectively.
- **Political Knowledge.** Regarding political knowledge, 86 percent of online registrants, compared to 80 percent of the telephone sample, correctly identify the Supreme Court as the branch of government responsible for determining whether laws are constitutional. However, voters in the telephone sample display greater knowledge of local politics, as 80 percent—compared to just 60 percent of online registrants—correctly identify the Democrats as containing the most seats in the Washington State Senate.
- **Voter Turnout.** Finally, turning to voter turnout in the 2008 election, voters who registered online turned out at a slightly higher rate (85.3 percent) than voters who did not register online (82.4). This is impressive considering that the online registrants are considerably younger than the overall registered voter pool, and as table 1 revealed, younger voters turned out at significantly lower rates (71.2 percent among 18-34 year olds). This suggests then, that online registrants—at least in this election—are a greater-than-average motivation group of voters.

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Table 9: Measures of political interest, media, and political knowledge

Differences on attitudes and voting behavior		
	Registered Voters (telephone sample)	OLVR Voters (Online sample)
<i>In general, how interested are you in information about what's going on in government and politics?</i>		
Extremely interested	29.3	37.4
Very interested	38.9	41.2
Moderately interested	24.4	17.8
Slightly interested	4.1	3.1
Not interested	2.9	0.4
<i>How have you been getting most of your news about the November elections?</i>		
Television	55.9	40.4
Newspapers	12.5	5.6
Radio	10.8	10.4
Magazines	0.7	1.1
Internet	16.7	37.9
Other	1.6	3.8
<i>Whose responsibility is it to determine if a law is constitutional or not?</i>		
President	0.9	1.2
Congress	10.7	8.0
Supreme Court	80.3	85.5

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And which political party currently has the most seats in the Washington State Senate in Olympia – the Republican party or the Democratic party?

Republican	4.2	3.9
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Democratic	80.1	59.5
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Don't know	13.6	35.9
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Percent Voted (2008)	82.4	85.3
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OLVR Battery

The same battery of questions that was asked the registered voters sample was also asked of online registrants. As explicated earlier in the report, online registrants tend to be more favorable of OLVR in general. A few examples follow to buttress this point.

- **Online Registrants More Supportive.** Relative to all registered voters, it is hardly surprising that voters who registered online are more favorable to OLVR on a broad set of indicators. Ninety-five percent of these voters agree (72 percent strongly) with the statement, “if I had a son or daughter turning 18, I would encourage them to register to vote online.” These voters also unanimously agree that registering to vote online is more convenient than using paper forms (97 percent), and that OLVR will cut down costs (94 percent). Agreement drops slightly on the question of whether OLVR will increase the number of young voters in the state; nevertheless, a healthy 92 percent of these voters (62 percent strongly) agree with that statement.

Compared to all registered voters, online registrants think that OLVR will equally help lower (52 percent agree) and higher income groups (52 percent agree). Finally, while these voters are somewhat circumspect of politicians obtaining their emails (30 percent agree) and hackers accessing their data (55 percent), they are not nearly as worried as the registered voter sample, indicating a greater level of comfort and trust in the OLVR system.

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Table 10: OLVR registrants were comfortable with the process

Ease and Security							
<i>How easy, or complicated, do you think it is to register to vote on the Washington Secretary of State website?</i>							
	Total	HS or less	College	Age18 – 34	Age 66 +	Low Income	High income
Very difficult and complicated	0.4	0	0.4	0.4	0	0.4	0.3
Somewhat difficult and complicated	2.3	0	3.8	2.9	2.2	5	0.6
Neither difficult nor easy	6.1	5	6.5	7.2	8.7	7.5	5.1
Somewhat easy and straightforward	20.5	18.5	21	20.1	32.6	21.1	20.7
Very easy and straight forward	69.6	75.6	67.6	67.8	56.5	63.9	72.4
<i>How confident or worried were you that your personal information was safe and secure when registering to vote on the Washington Secretary of State website?</i>							
	Total	HS or less	College	Age18 – 34	Age 66 +	Low Income	High income
Very confident	46.8	52.9	46.1	49.1	42.2	47.9	49.5
Somewhat confident	41.7	37	42.7	39.9	48.9	38.9	41.7
Somewhat worried	9.3	8.4	9.8	8.7	4.4	10	7.5
Very worried	1.2	0.8	0.7	1.1	2.2	1.8	0.3

The Process of Registering Online

- **Ease and Security.** Online registrants report that the process is easy and secure. Ninety-one percent (91 percent) say that the process was either very easy and straightforward or somewhat easy and straightforward. Notably, voters with a high school degree or less report the greatest level of ease (76 percent very easy), compared to their college counterparts (68 percent very easy). This may counter expectations; however, this difference may be more a function of youth as opposed to education insofar as younger voters are less likely to be college educated. As may be expected, voters in the oldest age cohort (66 or over) are least likely to say that registering online is very easy (57 percent very easy).

Regarding security, 89 percent of OLVR voters say that they are very or somewhat confident that their personal information is secure. Due to such asymmetric attitude distribution, little attitude variance by subgroup emerges on this question. Overall, then, these findings provide further support for an OLVR communication strategy that emphasizes ease and security.

- **Encouragement and Word of Mouth.** Because most voters had a relatively easy time registering online, logic suggests that these same voters may be likely to encourage others to do so. The data more or less support this notion. Fully 59 percent of online registrants say that they *have* referred someone else to the online registration page.

When asked how they heard of OLVR, 17 percent of respondents say that a friend, colleague, or family member referred them. This word of mouth is important to the success of OLVR—at least at this early stage—as only 9 percent of online registrants hear of OLVR via the television or on the radio. By far, the plurality of voters (40 percent) found out about OLVR by simply browsing online. While word of mouth is certainly important, especially in the early phases of OLVR, most voters simply learned of OLVR by browsing the web (40 percent).

Table 11: OLVR spread via word of mouth

Word of Mouth						
<i>Since the time you have registered to vote online, have you referred anyone else to the online registration webpage or encourage any friends or family to register online here in Washington state?</i>						
	Total	Some College	Age18 – 34	Age 66 +	Low Income	High income
Yes	59	63.4	63.8	47.8	63.8	55.7
No	41	36.6	36.2	52.2	36.2	44.3

- **Room for Improvement.** An earlier section of this report demonstrates that voters betray some reservations about OLVR, primarily security issues. These opinions, however, are based largely on voter worries, as opposed to voter experiences. To gauge discontent with the actual registration process among online registrants, we asked voters an open-ended question about what they thought could be done to improve OLVR. While the majority (51 percent) of respondents who answered this question report having few difficulties or problems with OLVR, other respondents express concerns. These concerns fall into two larger categories, including follow up and email concerns (13 percent) and fraud and security concerns (12 percent); as well as two smaller categories, including address change complications (4 percent) and voter outreach (3 percent). Some open-ended answers provide useful insight.

Email Confirmation. The most common complaint was that many voters would have liked to receive an email confirmation, card, or some sort of communication verifying that their registration was completed.

- “I wasn't sure that my information was received. I don't remember getting a confirmation email, and we waited several weeks before our card arrived in the mail. There was some apprehension that my online registration did not get processed. As it turns out, everything is fine.
- “Some sort of email confirmation would be nice, just to know that you did it right and are eligible to vote/ will receive a ballot.”

Fraud and Security Concerns. This open-ended question mirrors other findings in these data that suggest some voters have privacy concerns. Here, voters express concern with fraud, illegal aliens registering, and data security. To alleviate some of these concerns, the Secretary of State should consider presenting the website in a “secure” manner.

- “I would like to see proof of residency, photo ID, citizen of the US.”
- “Additional measures need to be in place to verify that each person is legally able to register to vote and protect our voting system from voter Fraud.”
- “Maybe stress the security of registrant information. Inform the older generation that it is a secure way of registering.”

Address Issues. Many voters also express concern and confusion about the process of changing addresses, especially when moving across county lines.

- “I was transferring my voter registration from King County to Pierce County and it was a little confusing, it wasn't real clear that I was completing the appropriate portion of the form. My input would be to make it more evident what to complete for transferring your registration from one county to another.”

- “Address changes to a different county should be allowed.”
- “I was just changing addresses and it kept telling me I would have to go to the courthouse to register. I finally ignored that info and kept going to find out all I needed was my DL #. Seemed more complex than it needed to be.”

Increase Awareness. Other voters would like to see advertising and voter education and outreach to increase awareness.

- “I would like to see potential voter awareness increased. The possibility of registering online isn't commonly known about, and I think that that's a shame”
- “Increased exposure/ads on other state websites, such as the Department of Natural Resources, Ecology, DOSH, county extension, etc.”

Overall, though, most voters reported a relatively seamless process when registering to vote.

- “I thought the process overall for initial registration was very convenient. It made the process as a whole stress free and gave me more motivation to register.”
- No, the process was amazingly easy. I was surprised to find out I only needed my driver's license. I was thinking registering to vote would include me finding all kind of personal documents and information.

Concluding Remarks

Although online registrants comprise a minute portion of all registrants in Washington State, in less than a year, a little more than a quarter of voters claim to be aware that they can register online. Just as importantly, voter opinion is generally favorable to the concept of OLVR; the relative ease and convenience of registering online attracts a wide swath of voters, especially younger and more educated voters. Nonetheless, many respondents—particularly Republicans and voters in Eastern Washington—express security concerns (i.e., hackers and politicians) with OLVR and maintain a wary eye towards the process. These two surveys suggest, though, once voters undertake the process of registering online, their concerns tend to mollify, as they become even more supportive of OLVR. In sum, other than a few hiccups, online registration in Washington State has been implemented to the satisfaction of most voters.

Appendix and Tables

Because the level of awareness of OLVR may be an important predictor of attitudes towards OLVR, voters were sorted into four categories ranging from most informed, aware and informed, unaware and informed, and unaware and uninformed. Category definitions are listed below.

Most Informed. Online registrants. Voters who registered online are considered the most informed about OLVR.

Aware and Informed. Telephone respondents who said they were aware of OLVR and were also read a brief description of OLVR before the battery of questions.

Unaware and Informed. Telephone respondents who did not say they were aware of OLVR but were read a brief description of OLVR before the battery of questions.

Unaware and Uninformed. Telephone respondents who were unaware of OLVR and did not receive a description of OLVR before the battery of OLVR questions.

Overall, as expected, and shown throughout this report, generally speaking, the most informed voters are very favorable to OLVR. This is highlighted by the wide margin in “most informed” respondents agreeing to the following question:

“If I had a son or daughter turning 18, I would encourage them to register to vote online.”

Ninety-five percent (95 percent) of “most informed” voters agree with this statement versus 66 percent of “aware and informed,” 53 percent for “unaware and informed,” and 57 percent of “unaware and uninformed.”

The following table also shows interesting results for informing voters of OLVR. That is, generally, voters who were previously aware of OLVR are more agreeable to OLVR once informed. But, voters who were unaware of OLVR but informed during the survey are actually less agreeable to OLVR than voters who were unaware and were not informed. For instance, 80 percent of “aware and informed” agree with the question:

“Online registration will increase the number of registered voters in this state.”

This is a full 20 percent higher than “unaware and informed” (61 percent), but just 10 points higher than unaware and uninformed (70 percent). Thus, these data suggest that level of awareness has a moderating effect on level of support for OLVR. Efforts to inform voters of OLVR should keep these results in mind.

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Table 12 : OLVR Battery By Level of Information

Question	Level of Information about OLVR			
	Most Informed (Online Registrants)	Aware and Informed	Unaware and Informed	Unaware and uninformed
<i>(Split A) Computer hackers could access my registration information if I register online.</i>				
Agree	-	59.7	66.8	61.6
Disagree	-	37.2	23.8	29.9
DK/Ref	-	3.1	9.5	8.5
Total	-	100	100	100
<i>(Split B) Computer hackers could access voter registration databases.</i>				
Agree	55.2	68.1	75.6	75.8
Disagree	31.6	21.4	19.1	16.6
DK/Ref	13.3	10.5	5.2	7.6
Total	100	100	100	100
<i>(Split A) If I moved to a new address within the state and had to change my registration, I would update my address online.</i>				
Agree	-	86.4	62.1	65.1
Disagree	-	12.7	28.4	29
DK/Ref	-	0.9	9.4	5.9
Total	-	100	100	100

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Question	Most Informed (Online Registrants)	Aware and Informed	Unaware and Informed	Unaware and uninformed
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(Split B) If I had a son or daughter turning 18, I would encourage them to register to vote online.

Agree	95.2	66.2	52.5	57.4
Disagree	2.2	27.6	44.2	36.1
DK/Ref	2.6	6.2	3.3	6.4
Total	100	100	100	100

(Split A) Politicians will obtain my email address and send me unwanted emails.

Agree	29.6	44.3	45.2	46.7
Disagree	56	53	43.8	39.5
DK/Ref	14.5	2.7	11.1	13.7
Total	100	100	100	100

(Split B) Registering to vote online is more convenient than registering to vote with paper forms.

Agree	97.5	82.3	64.4	70.2
Disagree	1.8	10.5	25.9	22.9
DK/Ref	0.8	7.3	9.8	6.9
Total	100	100	100	100

(Split A) Online registration will cut down printing costs and help increase the efficiency of government.

Agree	94.2	71	52.2	58.1
Disagree	3.7	28	39.4	34.6
DK/Ref	2	0.9	8.4	7.4
Total	100	100	100	100

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Question	Most informed (Online Registrants)	Aware and Informed	Unaware and Informed	Unaware and Uninformed
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(Split B) Registering to vote online is easy.

Agree	-	64.6	60.8	59.4
Disagree	-	8.6	12.7	10.3
DK/Ref	-	26.8	26.4	30.2
Total	-	100	100	100

(Split A) Online registration will increase the number of registered voters in this state.

Agree	-	79.7	60.7	69.8
Disagree	-	17.5	29.3	21.2
DK/Ref	-	2.7	10	8.9
Total	-	100	100	100

(Split B) Online registration will increase the number of young people who are registered to vote in this state.

Agree	91.9	86.5	74.6	81.8
Disagree	3.1	6.1	17.9	15.1
DK/Ref	5	7.5	7.4	3.1
Total	100	100	100	100

(Split A) Online registration will be used more often by people with higher income and resources.

Agree	51.3	63.4	51.1	52.3
Disagree	31.5	32.2	37.3	39
DK/Ref	17.2	4.4	11.5	8.8
Total	100	100	100	100

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Question	Most informed (Online Registrants)	Aware and Informed	Unaware and Informed	Unaware and Uninformed
<i>(Split B) Online registration will provide an opportunity for lower income communities to register to vote.</i>				
Agree	51.5	49.6	33.7	35.3
Disagree	28	37	56.1	56.8
DK/Ref	20.4	13.4	10.2	7.9
Agree	100	49.6	33.7	35.3
<i>Registering to vote online will exclude Washington residents who may NOT have a driver's license.</i>				
Agree	30.5	36.2	48.7	31.2
Disagree	29.8	54.6	35.8	39.9
DK/Ref	39.8	9.1	15.4	28.9
Total	100	100	100	100

Online Voter Registration in Arizona

Arizona implemented its online voter registration system, EZ Voter, in 2002, becoming the first state in the nation to register voters online. Voters can register online one of two ways: by having a clerk at the Department of Motor Vehicles use the system or by navigating to the EZ Voter website directly. The following analysis, based on the Arizona voter file as well as a poll conducted in October 2008, examines those voters who used online system to register to vote. The voter file analysis excludes those who registered through the Department of Motor Vehicles, while the poll may include those who used the system directly or through motor vehicles. It is important to remember through the analysis that all the voters, in the file or in the survey, are registered voters.

The first section compares the demographic composition of voters who registered online to all registered voters in the state. The second section of the report will examine opinion about OLVR among registered voters. This section is written to identify potential challenges to OLVR and potential voter unease with this system. Overall, these data demonstrate broad support for OLVR among voters.

In Arizona, where online voter registration has been an option for roughly six years, 23.5% of all registered voters registered online according to the voter file provided by the secretary of state's office. This figure, however, may be slightly inflated due to issues with the voter file data. Data from the EZ Voter system is kept separate from the actual voter file and there is no unique voter identification number that allows the two systems to relate to one another. The only way to merge the files was by driver's license number and many individuals in the voter file had no number as a driver's license is not required by law to register to vote. As a result, these individuals were classified as non-OLVR. Weighted estimates in the poll, however, reveal that roughly 19% of all registrants used the EZ Voter system.

Who is registering online? A Demographic Comparison

There are several demographic cleavages between online registrants and traditional registrants. Most prominently, registrants under the age of 40 and those with more resources (in education and income) are more likely to register online.

- **Gender.** Arizona does not collect data on the gender of voters. Using the weighted figures in the poll, there is virtually no difference between the sexes. Fifty-one percent (51.4%) of all registered voters are male and 48.6% are female, and among online registrants, 51.3 percent are male and 48.7% are female.
- **Age.** Thirty-one percent of registered voters in Arizona are under the age of 40; however, among online registrants, 54.7% are between the ages of 18-39. Almost 38% of voters are between the ages of 40-60, but among online registrants that number is almost 34%. Fewer than 12 percent of online registrants are above 60 years old, according to the voter file. In the poll sample, the differences are starker. Sixty-five percent of online registrants are under 40, 31.1% are between 40-60, and 3.8% are over 60. There is a clear break among the age groups reflecting how the Internet is used between generations.
- **Region.** Where a voter lives matters to the method of registration. Almost 69% of OLVR voters live in Maricopa County, where Phoenix is located, according to the state voter file. The poll finds that 74.6% of online voters are in Maricopa County. This could reflect that those who live in Maricopa County have higher resources than those who live in the rest of the state. According to the US Census, Maricopa County has the highest median household income (\$54,733).¹² When one examines the difference between the three counties with the highest median household incomes (“Rich Counties” in Table 1) and the three with the lowest (“Poor Counties” in Table 1), the difference is stark. Among OLVR voters, 74% come from the three wealthiest counties while less than 1% come

¹² All data on counties from the US Census can be found:
<http://quickfacts.census.gov/qfd/states/04/04001.html>.

from the three poorest.¹³ The implication is that those who can afford to have the Internet in their home are more likely to use online voter registration.

- **Education.** Education is another predictor of OLVR use. According to sample, 56.8% of online registrants have a college degree or more education while 43.2% do not. Overall, 51.4% of voters have a college degree and 47.1% have between some college and no formal education at all.
- **Party Identification.** Unlike Washington, Arizona collects data on party identification. Thirty-four percent of Arizona voters identify as Democrats, 39% as Republicans, and 26.3% as independents or others. Among online registrants, 36.3% are Republicans, 32.3% are Democrats, and 31.4% are independents or others.
- **Income.** As mentioned in the discussion above about region, there are clear reasons to believe income matters when it comes to OLVR. The poll sample, however, does not reveal this split. Those making more than \$60,000 a year represent 57.6% of all voters in the sample and 58% of OLVR voters.
- **Race and Ethnicity.** The surname match program used on the Arizona voter file did not capture the full depth of race and ethnicities of the population because it is based on surname, however it is still a good proxy. According to the program, 12.4% of registered voters were Latino and 5.7% were Asian. That noted, about 11% of online registrants were Latino (about a quarter of all Latinos used the EZ Voter system) and 5.4% were Asian. According to the poll, 34% of online registrants were Latino (26.9% of all voters), 5.4% were African American (2.2% of all voters), and 2.9% were Asian (1.9% of all voters). When looking at counties, 1.5% of online registrants came from the three counties with the highest Latino populations (Santa Cruz (80.2%), Yuma (55.5%), Greenlee (44.9%)) and 3.1% came from the three counties with the highest Native American populations (Apache (73%), Navajo (45.8%), Coconino (28.3%)).

¹³ Richest: Maricopa (\$54,733), Greenlee (\$50,195), Pinal (\$49,906), Poorest: La Paz (\$29,912), Apache (\$29,976), Gila (\$34,761).

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Table 1. Demographic Comparisons of Registered Voters in Arizona

Demographic Comparison					
Variable	Voter File			Survey	
	All Reg Voters (Voter File)	OLVR (Voter File)	Percent that Voted (2008)	All Registered (Sample)	Online Reg (Sample)
Gender					
Male	-	-	-	51.4	51.3
Female	-	-	-	48.6	48.7
Age					
Under 40	31.2	54.7	86.6	34.7	65.1
40-60	37.9	33.8	86.4	44.8	31.1
Over 60	30.9	11.5	86.9	20.5	3.8
Region					
Maricopa	60.3	68.6	86.2	61.8	74.6
Rest of AZ	39.7	31.4	83.5	38.2	25.4
Latino County	2.4	1.5	85.5	-	-
Native Am. Counties	5.19	3.1	76.6	-	-
Rich Counties	64	74.0	86.2	-	-
Poor Counties	2.3	0.7	78.7	-	-
Education					
Some College	-	-	-	47.1	43.2
College	-	-	-	51.4	56.8
Party ID					
Democrat	34.5	32.3	84.6	19.7	15.1
Republican	39.1	36.2	86.8	40.7	32.3
Ind / Other	26.3	31.4	82.9	34.1	43.8
Income					
Under \$60K	-	-	-	42.4	42
\$60K +	-	-	-	57.6	58
Race					
White	-	-	-	61.9	51.2
African American	-	-	-	2.2	5.4
Asian	5.7	5.4	-	1.9	2.9
Latino	12.4	10.9	-	26.9	34
Other	-	-	-	2.9	2.8
Percent Voted (2008)	85.1	93.9	-	-	-

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Registered voter sample

The following analysis concerns the telephone survey of Arizona voters taken in October 2008. It contains comparison to online registrants but is not limited to their responses alone. Each sample consists of 607 total respondents with a margin of error of $\pm 3.9\%$.

Public Awareness

Approximately six years into the EZ Voter system Arizona voters seem to understand that they can register online. Sixty-nine percent of respondents in the poll said they knew that Arizona voters could register online. Voters who registered by mail, however, were the least likely to know that OLVR existed. About 42% of mail registrants said it was *not* possible to register online. This was the lowest level of awareness among any group. Voters over the age of 60 were similarly split, with 60% indicating that they could register online. Those who live outside of Maricopa County were split 65.4%-34.6%. Democrats, the unmarried, those who registered with petition gatherers and college graduates reported they knew voters could register online above 70%. Interestingly, though, Latinos in the sample reported the highest levels of awareness – second only to those who actually had registered online themselves (97.7%). Almost 78% of Latinos said they knew that Arizona voters could register online.

Table 2. Arizona voters understand OLVR is an option

OLVR Public Awareness

<i>"As far as you know, does the state currently allow for people to register to vote online, or on the world wide web?"</i>						
Response	Total	Mail registrants	Over 60	Rest of AZ	Latino	
Yes, it is possible	69.1	57.6	60	65.4	77.6	
No, it is not possible	30.3	42.4	40	34.6	22.4	
Refused	0.5	0	0	0	0.6	
Total	100	100	100	100	100	

Privacy

Like in Washington, Arizona respondents to the poll were asked a battery of questions relating to OLVR. These questions included issues of privacy, future registration via OLVR, ease of use and convenience, and representation and democracy. This battery indicates broad support, even after six years of EZ Voter, for the system.

With regard to privacy, those who register in government offices are considerably more leery of the EZ Voter system. Almost 37% of those who register in person at a government office strongly agree that computer hackers could access voter registration databases compared to 25% who said the same overall. About 14% of online registrants said the same. Even though they had used the system to register themselves, 50% of online registrants said that they strongly or somewhat agreed that computer hackers could access the voter registration databases. Democrats were the most trusting of the EZ Voter system. Roughly 35% said they strongly disagreed that hackers could access the registration database.

More than 70% of voters voiced concern that politicians would be able to send unwanted emails to them if they registered online. The security and non-partisan nature of the voter registration system should be stressed when informing voters of OLVR. Among those who went to government offices to register, 53% said they strongly agreed that politicians would send unwanted emails. About 74% of Republicans are concerned about receiving unwanted emails and about 64% of Democrats.

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Table 3. Privacy is a concern for those who register in government offices

Privacy Issues						
	Total	Online	Gov office	Latino	Republicans	Democrats
<i>Computer hackers could access voter registration databases.</i>						
Strongly Agree	25	13.7	36.6	31.9	24	10.9
Somewhat Agree	24.9	36.3	19.7	18.8	16.3	32.5
Somewhat Disagree	20.1	24.7	15.2	16.5	24.6	15.2
Strongly Disagree	20.7	23	15.6	29.1	21.9	34.6
<i>Politicians will obtain my email address and send me unwanted emails.</i>						
Strongly Agree	39.1	18.2	53	47.2	43.1	30.2
Somewhat Agree	32.1	41.5	21.9	34.2	30.8	34.1
Somewhat Disagree	13.3	9	12.7	8.4	11.3	19.1
Strongly Disagree	7.2	10.3	7.9	8.1	5.7	10.7

Registering in the future

When it comes to re-registering to vote, voters overwhelmingly say they will do so online. Almost 54% of voters strongly agreed with the statement “If I moved to a new address within the state and had to change my registration, I would register online.” An additional 14.8% somewhat agreed with the statement, but 21.3% strongly disagreed. Those least likely to re-register using EZ Voter included those who registered previously at a government office, those over the age of 60, and Republicans. More than 92% of respondents under the age of 40 strongly or somewhat agreed that they would re-register online. More than 80% of respondents who had previously registered by mail would re-register online.

A separate question asked whether the respondent would encourage new voters to register online. It read, “If I had a son or daughter turning 18, I would encourage them to register to

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vote online.” Almost 68% of respondents overall agreed with that statement. Those with college degrees or more education strongly agreed at 59.7%. Those whose incomes were above \$60,000 strongly agreed at 58.7%. Respondents over the age of 60, however, were the least likely to recommend OLVR to their hypothetical son or daughter. About 46% disagreed with the recommendation. Similarly, those with less than a college degree and those who made less than \$60,000 a year were less sanguine about the recommendation. Each group disagreed with the recommendation at more than 30%.

Table 4. Voters are interested in using OLVR to register in the future

Future Registration						
	Total	Mail	Gov office	College grad	Upper income	Under 40
<i>If I moved to a new address within the state and had to change my registration, I would update my address online.</i>						
Strongly Agree	53.9	51.8	46.1	71	68.5	75.5
Somewhat Agree	14.8	29	10.3	6.9	7	16.8
Somewhat Disagree	7.2	4.2	10.2	5.6	7	2.5
Strongly Disagree	21.3	15	31	15.2	17.6	4.1
<i>If I had a son or daughter turning 18, I would encourage them to register to vote online.</i>						
Strongly Agree	46.4	45.6	38.2	59.7	58.7	53.3
Somewhat Agree	21.3	20.1	22.5	14.1	19.7	29.7
Somewhat Disagree	7.2	18.5	8.6	4.7	2.2	9.5
Strongly Disagree	20.1	12.2	25.8	19.1	17.5	6.4

Participation

Almost 90% of voters surveyed in Arizona agree with the statement that OLVR will increase the number of voters in the state. Some of the most sanguine about the system included Obama

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supporters (73.2% strongly agreed), those making more than \$60,000 a year (71.6% strongly agreed), and those under the age of 40 (70.1% strongly agreed). Those who had used the online system to register already themselves agreed completely that EZ Voter would increase the number of registered voters, 76.3% strongly agreed. While 65.2% of Latinos strongly agreed that OLVR will increase the number of registrants, 8.2% (the largest share) strongly disagreed. Among Latinos, 84.4% agreed generally that the system would increase the number of registrants. Similarly, 85.4% of McCain supporters agreed generally but 4.8% disagreed strongly that the system would increase registration.

Overall, 82% of respondents surveyed agreed that OLVR will increase the number of young people registered in Arizona. Again, unsurprisingly, those who registered online already had the strongest intensity of positive feeling (60.8 strongly agreed compared to 49.9% overall). Great faith exists among those who had previously used the system in OLVR's potential to improve democratic participation. A similar pattern is found among those making more than \$60,000 a year and those under the age of 40: 93.3% of those surveyed under the age of 40 agreed that OLVR will increase youth registration (55.2% strongly), and 86.2% of those making more than \$60,000 a year agreed (52.4% strongly). Republicans were somewhat less sanguine than Democrats about OLVR's potential among youth voters. More than 77% of Republicans agreed with the survey statement while 81.5% of Democrats did. But among Democrats who disagreed, the feeling was more intense than their Republican counterparts. Just more than 4% of Democrats strongly disagreed that OLVR will make a difference while 2.8% of Republicans said similarly.

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Table 5. Voters think that OLVR will increase voter registration

Participation and Democracy								
	Total	Online	Lower income	Upper income	Under 40	Over 60	Maricopa County	Rest of AZ
<i>Online registration will increase the number of registered voters in this state.</i>								
Strongly Agree	62.9	76.3	55.1	71.6	70.1	51.1	58.3	70.3
Somewhat Agree	26.6	23.7	33	22.4	27.8	34.9	30.2	20.8
Somewhat Disagree	2.7	0	2.5	2.5	0	4.8	3	2.7
Strongly Disagree	2.9	0	4.1	1.5	0	4.8	3	2.7
<i>Online registration will increase the number of young people who are registered to vote in this state.</i>								
Strongly Agree	49.9	60.8	49.3	52.4	55.2	33.4	49.9	49.7
Somewhat Agree	32.1	33.5	30.4	33.8	38.1	32.3	33.6	29.6
Somewhat Disagree	8	1.2	8.9	6.1	3.8	9.9	6.6	10.4
Strongly Disagree	2.4	0.7	2.3	1.6	0	8.3	1.9	3.2

Arizona Conclusion

Familiar themes emerge from the analysis of Arizona poll data on online voter registration. While support after six years of EZ Voter is high across the board, the intensity of the support is greatest among past online registrants, those under the age of 40, and those with greater resources (income and education). These groups, however, are among some of the most likely to register (or re-register) to vote, indicating that the EZ Voter system will continue to increase

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in popularity. As an analysis of the voter file concludes, though, there are differences among online registrants from heavily Native American counties and counties with lower median incomes. The availability of the Internet and voter outreach in those areas could be improved. Also, there is concern that an online system of registration would be vulnerable to security or privacy issues. More than 58% of survey respondents voiced concern about the potential of hackers to infiltrate the database. More than 70% said politicians would obtain their email address through such a system and send them unwanted email. Advertising and continued voter outreach by the state of Arizona should be able to further allay these concerns among registrants.

ADDITIONAL APPENDICES FOLLOW

CROSS-TABULATION RESULTS OF SURVEYS

IN ARIZONA AND WASHINGTON STATE

Online registration will increase the number of young people who are registered to vote in this state

	Total	Not White	White	HS or Less	Some College	College	18 - 34	35 - 49	50 - 65	66 +	Under 50	50 +	Dem	Rep	Ind	\$20 < \$40	\$40K < \$80K	\$80K +
Strongly Agree	61.9	60.7	62.1	57.1	66.7	58.5	67.3	57.3	61.2	47.8	63.4	58.9	77.4	48	57.5	64.2	65.7	58.1
Somewhat Agree	30	24.4	30.9	31.1	26.4	33.4	28.2	31.8	30.4	30.4	29.6	30.4	18.9	37.8	34.1	28.3	25.9	34.3
Somewhat Disagree	2.7	5.2	2.4	5.9	2	2.7	1.4	4.9	1.8	6.5	2.7	2.6	1.1	6.1	2.3	1.8	3.5	2.4
Strongly Disagree	0.4	1.5	0.2	0	0.4	0.4	0.2	0.7	0.4	0	0.4	0.4	0	0.4	0.8	0.4	0.8	0
Don't Know	5	8.1	4.5	5.9	4.4	4.9	2.9	5.2	6.3	15.2	3.8	7.8	2.5	7.7	5.3	5.4	4.1	5.1
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Online registration will be used more often by people with higher income and resources

	Total	Not White	White	HS or Less	Some College	College	18 - 34	35 - 49	50 - 65	66 +	Under 50	50 +	Dem	Rep	Ind	\$20 < \$40	\$40K < \$80K	\$80K +
Strongly Agree	18.4	25.9	17.3	20.3	17.8	18.8	16.9	15	23.7	30.4	16.2	24.8	21.7	18.3	16.1	18.6	19.7	17.5
Somewhat Agree	32.9	28.1	33.6	23.7	28.4	39.8	28.9	33.9	37.1	43.5	30.9	38.1	33.4	32.1	33.2	28.7	31.4	40.2
Somewhat Disagree	23.8	23	23.9	22.9	26.9	20.8	26.9	24.5	19.2	8.7	25.9	17.4	22	24.8	25	25.1	25.4	19.9
Strongly Disagree	7.7	9.6	7.4	10.2	8	6.7	8.4	9.4	5.4	4.3	8.8	5.2	5.8	8.5	9.4	9	8.4	5.7
Don't Know	17.2	13.3	17.8	22.9	18.9	13.9	19	17.1	14.7	13	18.2	14.4	17	16.3	16.3	18.6	15.1	16.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Online registration will provide an opportunity for lower income communities to register to vote

	Total	Not White	White	HS or Less	Some College	College	18 - 34	35 - 49	50 - 65	66 +	Under 50	50 +	Dem	Rep	Ind	\$20 < \$40	\$40K < \$80K	\$80K +
Strongly Agree	15.7	17.8	15.4	22	18.2	11.2	15.8	15.4	16.1	15.2	15.6	16	18.2	14.2	14.8	17.2	15.9	14.2
Somewhat Agree	35.8	28.9	36.9	31.4	36.4	37	35.1	33.3	40.8	39.1	34.4	40.5	37.7	30.9	38.5	35.8	37.3	37
Somewhat Disagree	23	21.5	23.3	16.1	21.1	26.9	24.8	22.5	22.4	15.2	23.9	21.2	20.9	28	22.2	21.9	23.2	23.9
Strongly Disagree	5	12.6	3.8	2.5	4.4	6.3	5.2	6	2.2	4.3	5.5	2.6	4.7	4.9	5.1	3.9	6.5	3
Don't Know	20.4	19.3	20.6	28	19.8	18.6	19.1	22.8	18.4	26.1	20.6	19.7	18.4	22	19.4	21.1	17	21.8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Registering to vote online will exclude Washington residents who may NOT have a driver's license

	Total	Not White	White	HS or Less	Some College	College	18 - 34	35 - 49	50 - 65	66 +	Under 50	50 +	Dem	Rep	Ind	\$20 < \$40	\$40K < \$80K	\$80K +
Strongly Agree	8.9	10.4	8.6	13.7	10	6.7	9.2	6.6	9.8	17.4	8.2	11.1	9.5	6.5	10.2	11.2	7.8	8.7
Somewhat Agree	21.6	23.9	21.2	19.7	22.4	21.5	24.5	18.9	18.3	19.6	22.3	18.5	24.2	18.3	20.9	21.6	25.4	16.6
Somewhat Disagree	16.9	19.4	16.5	14.5	14.6	19.5	17.8	15	18.3	15.2	16.7	17.8	16.4	17.9	16.6	17.3	16.5	18.1
Strongly Disagree	12.9	14.9	12.6	12	13.3	12.3	10.8	14.7	12.5	13	12.3	12.6	10	14.2	15.3	13.7	11.1	13.9
Don't Know	39.8	31.3	41.1	40.2	39.7	40	37.6	44.8	41.1	34.8	40.4	40	39.8	43.1	37	36.3	39.2	42.8
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

If online registration is proven to be safe and secure, would you support Internet voting for military and overseas voters?

	Total	Not White	White	HS or Less	Some College	College	18 - 34	35 - 49	50 - 65	66 +	Under 50	50 +	Dem	Rep	Ind	\$20 < \$40	\$40K < \$80K	\$80K +
Yes	81.3	77.8	81.9	83.8	82.7	79.9	82	80.4	84.7	76.1	81.4	83.2	81.5	83.8	79.8	79.5	82.4	82.2
No	12.1	12.6	12	11.1	11.3	13.2	13.7	12.6	8.6	10.9	13.3	9	10.9	12.6	13.5	15.1	11.4	11.2
Don't know	6.5	9.6	6.1	5.1	6	6.9	4.3	7	6.8	13	5.3	7.8	7.6	3.6	6.6	5.4	6.2	6.6
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

If online registration is proven to be safe and secure, in the future would you support Internet voting for all citizens here in Washington?

	Total	Not White	White	HS or Less	Some College	College	18 - 34	35 - 49	50 - 65	66 +	Under 50	50 +	Dem	Rep	Ind	\$20 < \$40	\$40K < \$80K	\$80K +
Yes	65.4	61.2	66	71.2	64.5	64.9	62.2	65.7	70	69.6	63.6	69.9	65.6	67.2	64	64.4	63.8	68.4
No	24.3	29.1	23.6	22	24.2	25.1	27.2	23.8	20.6	17.4	25.9	20.1	23.7	26.3	24	24.8	25.4	22.9
Don't know	10.3	9.7	10.4	6.8	11.3	10.1	10.6	10.5	9.4	13	10.5	10	10.6	6.5	12	10.8	10.8	8.7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Pew Online Voter Registration Study
Results for Washington

Prepared by: Loren Collingwood
University of Washington

Splits
Split J = Before the OLVR question battery, 1/2 of the respondents were informed of their ability to register online
Split K = The other 1/2 of respondents were not informed.

Sample Size and Margin of Error for Cross-tabulations

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind 20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black*	Not Mil	Military	J Split	K Split	OLVR	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Sample	1,000	466	223	311	86	180	383	315	266	698	538	462	511	480	356	262	365	186	331	287	264	736	347	502	858	203	606	387	506	494	1287
Margin of Error	3.1	4.5	6.6	5.6	10.6	7.3	5	5.5	6	3.7	4.2	4.6	4.3	4.5	5.2	6	5.13	7.2	5.4	5.8	6	3.6	5.3	4.4	3.4	6.9	4	5	4.4	4.4	2.7

*Includes oversample

Do you ever go online to access the Internet or World Wide Web or to send and receive email?

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind 20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Yes	85.2	90	82	77.5	92.5	98.2	88	62	96	77.4	87.3	83.4	80.7	91	82.9	87	88.7	77	87.5	96.9	74.2	89.3	86.5	84.8	85.1	79.4	87.2	82.8	83.9	86.4
No	14.1	9.3	18	22	6.5	1.8	12	38	3.6	22.6	11.8	16.2	19	9	16.7	13	10.7	23	12.5	3.1	23.2	10.7	13.1	14.3	14.3	18.3	12.8	16.7	15.9	12.3
Ref	0.7	0.9	0	1	1	0	0	0	0.4	0	1	0.5	0.3	0	0.3	0	0.6	-	-	-	2.6	0	0.5	0.9	0.6	2.3	0	0.5	0.16	1.22
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

As far as you know, does the state currently allow for people to register to vote online, or on the world wide web?

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind 20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Yes, it is possible	27.4	29	24.4	26.3	21.6	33.6	29.2	22.4	29	26.5	23.8	30.5	27.6	26.7	27.9	26	27.9	27.9	24.9	33.4	26.2	27.8	23.4	29.9	26.6	38.6	27.2	27.4	27.6	27.2
No, it is not possible	20.7	21.4	22.4	17.7	26.6	18.2	17.8	23.5	21.5	20.2	21.1	20.4	17.4	24.2	19.1	24.7	19.1	19.3	22.1	20.7	13.9	23.2	24.4	19.2	21.5	17.2	21.7	18.6	20.6	20.8
Don't Know	51.5	49.6	52.2	55.2	51.7	47	52.9	53.8	48.8	53.3	55	48.5	54.2	49.1	52.8	48.7	52.5	52.5	52.4	45.9	58.9	48.8	51.7	50.5	51.4	42.3	50.7	53.4	51.7	51.3
Refused	0.4	0	0.9	0.8	0	1.2	0	0.3	0.7	0.1	0.1	0.6	0.8	0	0.1	0.7	0.5	0.3	0.6	0	0.9	0.2	0.5	0.3	0.5	1.9	0.3	0.6	0.1	0.7
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(SPLIT A) Computer hackers could access my registration information if I register online.

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind 20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Strongly Agree	33.8	30.6	47.4	31.2	36.5	30.2	34.3	34.5	32.7	34.4	26.5	40	39.2	28.4	27.4	42.1	34.3	35.3	33.1	29.7	38.7	32.2	45.7	23.9	32.6	42.2	30.5	39.4	39.9	26.6
Somewhat Agree	28.5	26.9	25.8	33.8	23.5	31.8	31.6	23.7	28.5	28.2	29.7	27.4	26.5	30.5	28.1	27.5	31.1	24.8	27.1	32.5	26.3	29.2	26.7	30.4	29.6	26.2	30.2	25.4	24.8	32.8
Somewhat Disagree	18.1	22.6	8.7	15	23.2	22.4	15	14.7	22.7	14.8	21.8	14.9	16	20.4	22.1	17.1	12.7	15.5	21.6	21.1	11.7	20.2	14.3	21.6	18.7	9.2	18	18.5	16.9	19.5
Strongly Disagree	12.2	13.5	11.4	10	14.3	13.5	14.1	8	13.8	11.5	15.8	9.2	11.7	12.2	13.2	7.3	15.5	12.4	10.3	13.4	15	11.3	8.2	14.9	11.9	16.8	14.8	7.5	10.9	13.8
Don't Know	7.1	6.5	6.2	9.1	2.5	2	5	17.7	2.2	10.4	5.8	8.2	6.1	8.2	9	6	5.5	12	7.5	3	8.3	6.7	4.8	8.8	6.8	3.9	6.5	8.2	7.4	6.8
Refused	0.3	0	0.6	0.9	0.2	0.5	0.2	0.3	0	0.8	0.3	0.3	0	0.5	0.3	0.4	0.4	0	0.4	0.3	1	0.2	0.5	0.4	0.4	1.8	0	1	0.1	0.5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	99	99.9	99.5	

(SPLIT B) Computer hackers could access voter registration databases.

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	> \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	OLVR	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Strongly Agree	43.8	40.9	48.5	45.6	22.3	45.2	44.5	52.9	36.4	47.7	40	47.1	47.2	40.2	36.6	49.8	45.8	48.4	42.8	35.7	51.9	40.5	50.6	36.1	43	59.3	40.5	49.8	40.7	46.3	10.7
Somewhat Agree	30	31.9	29.2	26.6	50.4	30.9	25.9	21.3	38.4	24.1	31.2	29	28.3	32.2	34.6	20.6	36.2	30.5	35.5	30.9	29.8	30.1	26	35	29.7	16.8	31.7	27.6	33.1	27.5	44.5
Somewhat Disagree	8.8	11.6	4.6	6.6	5.2	9.4	13.3	6	7.8	10.5	11.2	6.7	8.9	9	8.3	11.5	7.2	3.2	8.8	14	3.9	10.8	9.8	9	9.8	11.3	10.6	5.5	9.7	8.1	21.8
Strongly Disagree	10.1	8.6	12.6	10.9	14.2	10.5	7.1	10.8	11.9	8.5	12.2	8.1	8.6	11.5	10.9	12.1	6.5	9.5	7.7	12.2	6.3	11.6	10.7	10.4	9.7	9.2	10.4	8.6	10	10.1	9.8
Don't Know	6.4	5.8	4	10.3	8	2.9	8.2	8.3	4.9	8.2	3.7	8.8	6.4	6.5	9.6	4.9	3.9	8.3	5.2	5.6	8	5.7	2.4	9.5	6.8	2.7	6.4	6.5	5.4	7.2	13.3
Refused	0.9	1.2	1.1	0	0	1.1	1	0.8	0.7	0.9	1.6	0.3	0.6	0.7	0	1.1	0.4	0	0	1.6	0	1.3	0.5	0	0.9	0.7	0.5	1.9	1.1	0.8	-
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(SPLIT A) If I moved to a new address within the state and had to change my registration, I would update my address online.

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	> \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	OLVR	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Strongly Agree	47.1	53.4	36.6	40.8	47.5	66.4	46	27.3	59	38.1	49.4	45	42.5	52.5	55.9	39.2	42	46.7	47.2	53.5	45.4	47.6	35.5	58.1	45.6	54.4	51.1	39.6	44.2	50.5	
Somewhat Agree	22.6	22.4	23.1	22.4	31.3	17.7	20.9	23.4	23	22	22.7	22.4	20.7	24.4	18.6	26.2	25.2	23.4	20.1	24.2	21.1	23	25	19.9	23.4	15.7	22.1	23	25.3	19.3	
Somewhat Disagree	8	6.5	10	9.9	4	5.7	8.4	12	5.1	10	7.3	8.6	8.4	7.3	6.6	8.6	9.2	11.1	7	4.3	8.8	7.8	9.7	6.9	8.9	6.5	8.2	7.6	8.2	7.7	
Strongly Disagree	16.5	13.8	23.8	17	11.7	6.8	18.4	28	8.7	22.5	16.4	16.6	21.9	10.4	11.5	19.8	19.9	14.6	19.5	13.3	17.3	16.2	22.9	10.3	16.3	14	13.9	21.6	15.5	17.7	
Don't Know	5	3.8	4.4	7.9	5.5	0.8	5.6	9.3	2.6	7.2	4.2	5.7	5.4	4.7	6.6	4.1	3.6	4.2	5	3	7.4	4.2	5.5	4.8	4.8	6.2	3.8	7.2	5.8	4	
Refused	0.9	0	2.1	2	0	2.7	0.6	0	1.6	0.3	0	1.7	1	0.8	0.7	2.1	0	0	1.1	1.7	0	1.2	1.6	0	1.1	3.2	0.9	0.9	1.1	0.7	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(SPLIT B) If I had a son or daughter turning 18, I would encourage them to register to vote online.

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	> \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	OLVR	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Strongly Agree	38.8	41.9	34.2	36.2	50.5	53.9	32.4	24.5	52.6	29.3	40.2	37.5	35.6	42.8	41.7	33.7	41.6	38.9	38.7	52.4	32.1	41.5	34.4	43.2	38.8	55.1	42.7	31.9	37	40.2	71.8
Somewhat Agree	20.4	22	20.1	17.2	34.7	17.4	18.9	19.3	24.1	19.1	20	20.8	21.2	20	24.1	16.4	21.2	16.6	23.8	15.9	25.7	18.3	16.9	24.2	20.9	16.1	20.8	20.3	18.9	21.7	23.4
Somewhat Disagree	10.1	9.5	12	9.7	0	9.8	15.6	10.5	6	13.6	8.3	11.7	9	11.6	8.7	10.3	12.1	7.3	14.6	7.3	10.6	9.9	11	9.5	11.2	4.7	10.3	9.2	12	8.6	1.2
Strongly Disagree	25.6	22.4	27	31.8	12.5	15.8	28.5	37.5	14.5	32	25.9	25.4	28.8	21.7	21.5	33.9	21.4	30.2	18.6	21.8	27.1	25	33.8	18	24	17.8	21.4	33.3	28.1	23.6	1
Don't Know	4.7	3.6	6.6	5.2	2.3	3.1	4.1	8.2	2.8	5.7	5.1	4.3	4.6	3.9	4.1	5.7	3.1	6.9	4.3	2	4.4	4.8	3.9	5.1	4.7	6.2	4.8	4.1	3.6	5.6	2.6
Refused	0.4	0.7	0	0	0	0	0.6	0	0	0.4	0.4	0.3	0.7	0	0	0	0.7	0	0	0.6	0	0.5	-	-	0.4	0	0	1.1	0.4	0.3	-
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(SPLIT A) Politicians will obtain my email address and send me unwanted emails.

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	> \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	OLVR	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Q66	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Strongly Agree	27.1	27.4	29.8	24.7	23.9	29	28.2	24.4	27	26.6	24.8	29.1	26.9	27.4	23.5	31.3	27	18.4	24.6	32.8	27	27.2	32.3	22.8	25.1	35.9	28.9	24.1	29.4	24.4	7.1
Somewhat Agree	18.3	15.6	21.5	21.9	13.3	19.1	19.4	20.6	16.8	19.9	19.6	17.2	15.4	21.6	16.1	18.6	22.1	15.1	28.4	14.7	17.5	18.6	17.5	18.3	19.1	17.6	17.6	19.9	15.4	21.8	22.5
Somewhat Disagree	19.5	21.4	15.7	18	23.4	22.7	20.8	11.7	22.9	16.9	19.5	19.5	19.5	19.5	18.1	22.3	18.9	15.8	20.5	22.3	12.5	21.9	18.7	21.7	21.1	12.3	17.2	23.4	18.4	20.8	31
Strongly Disagree	25.2	26.5	23.6	23.7	31.5	24.3	22.4	26.2	27.1	24	24.9	25.5	27.2	22.7	32.3	17.5	22.3	42.5	17.4	24.4	34.4	22.2	19.8	28.9	25	27	27.3	21.2	28.2	21.7	25
Don't Know	9.2	8.9	7.9	10.8	8	4.9	8.7	15.6	6.1	11.7	10	8.5	10.2	8.3	9.7	10.2	7.8	8.3	8.5	5.5	8.7	9.4	11.3	7.6	9.2	6.2	8.6	10.4	8.4	10.2	14.5
Refused	0.6	0.2	1.5	0.9	0	0	0.4	1.5	0	0.9	1.1	0.2	0.8	0.5	0.3	0	1.8	0	0.5	0.3	0	0.8	0.4	0.7	0.6	0.9	0.4	1	0.2	1.1	-
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(SPLIT B) Registering to vote online is more convenient than registering to vote with paper forms.

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	OLVR	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Strongly Agree	41.17	46.4	38.9	31.1	46	56.5	38.3	26.2	52.5	33.6	43.6	39	36.9	46.4	44.7	37.5	41.5	35.2	43	52.6	35.4	43.5	35.5	46.5	43.1	48.8	43	38.7	42	40.5	84.6
Somewhat Agree	30.01	29.7	34.8	25.8	29.4	27.3	36.4	26.7	28.1	32.6	28.7	31.2	33.3	26.5	28	28.9	34.8	28.3	33.7	29	29.3	30.3	30.7	30	29.5	19.7	29.9	30.2	26.8	32.7	12.9
Somewhat Disagree	9.5	9	8	12.2	10	8.9	8.8	11.3	9.3	9.7	10.3	8.8	9.3	9.9	11.5	9.5	7.3	7.3	11.2	8.1	9	9.7	9.4	9	8.9	6.7	8.4	12	10.9	8.4	1.3
Strongly Disagree	11.6	6.5	10.9	24.3	7.8	3	12.8	20.7	4.9	15.9	10.8	12.3	14.5	7.7	8	13.5	14	18.1	8	4.4	16.1	9.8	15.7	8.1	10.8	18.6	9.7	14.2	11.2	11.9	0.5
Don't Know	6.74	7.2	6	6.6	6.9	2.6	3.3	15.1	4.3	7.9	5.9	7.5	4.1	9.5	7.8	9.1	1.9	7.8	4.1	5.9	8.2	6.2	7.3	6.5	6.8	6.3	7.8	4.3	8.4	5.3	0.8
Refused	0.99	1.2	1.5	0	0	1.7	0.4	0	1	0.3	0.7	1.3	1.9	0	0	1.5	0.5	3.3	0	0	2	0.6	1.5	0	0.9	0	1.2	0.6	0.7	1.2	-
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(SPLIT A) Online registration will cut down printing costs and help increase the efficiency of government

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	OLVR	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Strongly Agree	30.5	33.9	20.8	30.1	31.1	41.4	30.7	18.2	37.4	25.4	29.1	31.8	29.3	32.3	34.9	27.2	27.4	32.1	34.2	34.5	31	30.4	23.3	36.1	31	39.7	31	30	28.8	32.6	68.6
Somewhat Agree	31.3	33	32.2	27	22.6	39.5	24.9	36.7	32.9	29.9	34.1	28.8	27	35.3	37	25.5	27.5	21.6	30.1	32.5	26.6	32.8	24	36.6	33.7	32.8	35.5	23	29.1	33.8	25.6
Somewhat Disagree	14.2	13.2	18.3	13.4	24.3	8.2	15.3	11.8	14.5	13.8	14.1	14.2	13.8	14.4	9.1	21.5	15.3	18.5	13.5	14.6	15.4	13.8	20.5	10.5	12.8	8	13.5	15.5	17.1	10.7	2.2
Strongly Disagree	17.9	15.1	21.5	21.4	18.6	9.6	22	20.8	13.1	21.5	17.1	18.6	23.5	12.1	12.3	20.8	23.4	19.6	16.4	17	18.2	17.8	26.5	10.6	16.9	10.3	15.4	22.5	19	16.7	1.5
Don't Know	5.7	4.8	7.2	6.4	3.3	0	7	12	1.3	9.2	5.4	6	5.7	5.8	5.8	5.1	6.3	8.3	4.8	1	8.9	4.6	5.7	6	5	7.4	4.6	7.8	6.1	5.1	2
Refused	0.4	0	0	1.7	0	1.2	0	0.5	0.7	0.2	0.3	0.6	0.7	0.2	1	0	0	0	1.1	0.3	0	0.6	0	0.2	0.5	1.8	0	1.3	0	1	-
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(SPLIT B) Registering to vote online is easy.

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split		
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***		
Strongly Agree	32.5	29.1	37.5	35.7	32.7	39.1	32.3	26.6	36.7	30.1	36.8	28.8	33.9	31.4	26.6	32.1	42.4	25.9	36.7	35.9	26.7	34.9	35.3	29.8	57.1	50.8	30.7	36.6	37.1	28.8	
Somewhat Agree	30.7	34.6	26.5	26	36.7	28.1	30.9	31.6	31.4	31.2	28.3	32.9	27.7	34.4	31.9	30.5	31	33.6	34.2	31.8	31.3	30.5	28.9	32.8	14.3	22.9	31.5	30.1	24.7	35.7	
Somewhat Disagree	3.2	2.7	2.3	5.5	0	0.7	4.6	6.7	0.5	5.4	2.8	3.6	3.1	3.5	2.6	4	3.5	2.5	4.8	2.2	3.4	3.2	3.5	3.3	0	4.7	2.9	4.1	4.4	2.2	
Strongly Disagree	7.1	6.1	6.9	9.8	2.6	2.9	8.2	10.7	2.8	9.2	5.4	8.6	9.5	4.2	6.5	9.1	5.5	10.8	5.6	3.4	12.2	5.1	9.3	5.3	21.43	6.9	4.6	10.5	7.2	7	
Don't Know	26.1	27.1	26.8	23.1	28	29	23.7	24.4	28.6	24	26.1	26.1	25.5	26.5	32.4	24.3	17.4	27.2	18.5	26.7	26.2	26.1	22.9	28.8	7.1	14.8	30.3	17.9	26.1	26.2	
Refused	0.2	0.5	0	0	0	0	0.2	0	0	0.1	0.5	0	0.5	0	0	0	0.2	0	0.2	0	0.2	0.3	-	-	0	0	0.8	0.4	0.1		
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

(SPLIT A) Online registration will increase the number of registered voters in this state.

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split		
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***		
Strongly Agree	36	36.5	29.4	39.5	30.3	37.3	37.4	36.8	34.6	37.1	36	36	37.1	35.2	43.2	27.7	32.5	26.8	40	37.7	39.4	34.8	22.7	45	34.5	45.3	37	33.9	36.4	35.5	
Somewhat Agree	33.6	35.5	27.4	34.1	37.8	41	30.2	25.6	39.7	28.3	37.8	30	30	37	30.8	32.4	38.7	35.8	34.4	36.4	27.4	35.7	36.4	32.3	35.9	28.9	33	35.1	30	37.9	
Somewhat Disagree	10.5	10.3	16.7	6.6	13.5	4.5	15	9.3	8	12.6	9.7	11.3	10.7	10.6	9.6	16.7	6.3	12.2	7.7	10.7	12.8	9.8	13.2	9.2	9.6	7.5	12.1	7.7	11	10	
Strongly Disagree	12.5	11.8	15.8	11.6	18.5	10.7	12.8	11.1	13.8	12.1	10.8	13.9	16.3	8.3	10.4	16.1	12.5	14.6	11.6	9.3	13.4	12.2	19.9	7.3	12	11.6	12.1	13	14.7	9.8	
Don't Know	6.6	5.5	8.6	7.5	0	5	4.1	16.2	3	9.2	4.9	8	5.8	7.5	5.2	5.8	9.7	10.7	6.4	3.6	7	6.4	6.8	5.6	7.3	2.1	4.9	9.7	6.8	6.4	
Refused	0.8	0.3	2.1	0.8	0	1.5	0.6	0.9	0.9	0.7	0.8	0.7	0	1.5	0.7	1.4	0.3	0	0	2.3	0	1	1	0.5	0.8	4.6	0.9	0.6	1.1	0.4	
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

Thinking back to when you registered to vote, how did you register?

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
By mail	17.3	19.5	13.3	15.7	30.5	21.2	12.9	8.5	24.8	11.1	19.9	14.9	17.6	16.8	17.7	17.4	15.9	12.1	14.8	20.8	15.4	18	15.1	19.1	17	19.6	19.9	12	16.6	17.9
In person	46.8	39.9	56	54.7	20.9	40.7	57.1	59.1	33	57.9	49	45	45.9	48.5	42.6	47.8	52.3	43.6	48.2	47.2	40.9	49	51.1	43.4	47.9	39.8	41.5	57.1	45	48.6
Signature gatherer	5.3	6	5.6	3.5	10.7	5.6	4.3	3.1	7.6	3.8	4.1	6.4	5.6	5.2	8.4	4	2.5	9.6	5.5	5.3	9.6	3.8	3.4	7.2	5.3	8.5	7	2.1	5.8	4.9
An organization	15	15.4	12.5	16.2	20	14.4	12.7	15.1	16.6	13.7	12.5	17.1	13.7	16.1	12.9	15.3	18	19.7	15.7	11.1	17.9	13.9	15.8	13.4	14.7	11.8	15	15	15.2	14.8
On the internet	1.9	2.9	0	1.2	6.1	2.4	0.2	0.6	3.8	0.4	1.3	2.4	2.7	1	2.8	0.2	2.4	3.4	0.7	2.4	2.8	1.5	1.2	2.5	1.9	5.1	1.7	2.4	2.6	1.2
Some other way	4.1	5.1	3	3	4.7	5.7	3.6	2.6	5.3	3.2	4.7	3.6	4.3	3.8	3.7	5.4	3.7	3.4	3.9	4.4	4.1	4.1	5.1	3.7	4.1	6.2	4.9	2.7	4.1	4.1
Don't Know	9.6	11.2	9.7	5.7	7.1	10	9.1	11.1	8.9	9.9	8.5	10.5	10.2	8.6	11.9	9.9	5.2	8.4	11.3	8.8	9.2	9.7	8.3	10.7	9.1	9.2	9.9	8.7	10.6	8.5
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100

If online registration is proven to be safe and secure, in the future would you support voting online in elections here in Washington?

	Total	Puget st	Wash	Region	18-34	35-49	50-65	66+	Under 50	50+	Male	Female	Non-Coll	College	Dem	Rep	Ind20 < \$40K	\$40K < \$80K	\$80K +	Unmarried	Married	McCain	Obama	White	Black	Not Mil	Military	J Split	K Split	OLVR	
	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	***	
Yes	48.6	51.6	41.6	47.8	49.9	58.5	46.3	42.2	55.1	44.6	51.8	45.7	46.8	50.9	55.9	39.3	48.3	46.8	46.8	59.9	42.4	50.9	37	58.2	48.3	58.7	50.4	44.8	46.6	50.5	65.4
No	46.2	42.7	53.6	47.7	46.3	36.3	48	51.4	40.2	49.4	44.2	48	48.4	43.4	37.1	56.9	47.5	45.6	47.7	35.9	50.4	44.7	60.1	34.9	46.6	36.9	44.6	49.5	48.4	44	24.3
Don't Know	5.1	5.6	4.8	4.2	3.8	5.2	5.7	5.9	4.7	5.8	3.8	6.3	4.8	5.5	7.1	3.8	3.8	7.6	5.5	4	7.2	4.3	2.9	6.8	5	2.8	5	5.4	4.9	5.3	10.3
Refused	0.1	0.1	0	0.2	0	0	0	0.5	0	0.2	0.2	0	0	0.2	0	0	0.4	0	0	0.1	0	0.1	0	0.1	0.1	1.6	0	0.3	0	0.2	-
Total	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	

Pew Online Voter Registration Study
Results for Arizona

Prepared by Francisco I. Pedraza
University of Washington

Mail= Registered to vote by mail
 Gov office=Registered to vote in person at government office (e.g. USPS)
 Petition gatherer=registered to vote in person through a petition gatherer.
 Online=Registered to vote online through AZ EZ voter registration.
 Some Coll or Less = up to some college education, but no 4 year degree
 Coll Grad+ = 4 year degree or greater
 Non military HH = No one in household is in the armed service or has served.
 Military HH = Respondent and/or other in household has served or is serving.

Sample Size and Margin of Error for Cross-tabulations

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Sample	607	90	289	74	72	269	338	293	304	215	243	97	218	275	100	466	349	248	353	254	182	125	259	204	403	248	273	
Margin of Error	3.9	10.3	5.7	11.4	11.5	5.9	5.3	5.7	5.6	6.6	6.3	9.9	6.6	5.9	9.8	4.5	5.2	6.2	5.2	6.1	7.2	8.7	6.1	6.8	4.8	6.2	5.9	

Do you ever go online to access the Internet or World Wide Web or to send and receive email?

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
No	12.7	17.8	14.2	11.7	5	12	13.9	19.6	6.6	21.5	4.2	3.5	6	38.4	16.6	12.5	9.4	19.6	10.7	16.1	17.1	12.1	10.6	16.8	10.4	13.2	11.9	
Yes	85.4	81.6	83.9	85.7	95	87	83.9	79.5	93.2	77.9	95.8	95.5	94	60.8	81.5	86	90	80	87.2	82.4	81.8	87.9	88.6	79.8	88.6	85.2	87	
Ref	1.9	0.6	1.9	2.5	0	1.6	2.1	0.9	0.2	0.6	0	1.1	0	0.8	2	1.5	0.6	0.4	2.1	1.4	1.1	0	0.8	3.4	1	1.7	1.1	

Did you know that voters in AZ can register to vote online, or on the world wide web?

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
No	30.3	42.4	38.8	28.6	2.3	30	30.7	32	28.9	26.2	30.5	23.3	30.7	40	22.4	30.7	28	35.2	27.7	34.6	27.8	30.9	32.4	28.4	31.4	28.5	31.9	
Yes	69.1	57.6	61.2	71.4	97.7	70	68.6	68	71.1	73.8	69.5	76.7	69.3	60	77.6	68.8	72	64.8	71.4	65.4	72.2	69.1	67.6	70.1	68.6	71.5	68.1	
Ref	0.5	0	0	0	0	0.4	0.7	0	0	0	0	0	0	0	0.6	0.5	0	0	0.9	0	0	0	0	1.5	0	0	0	

Given that the state of AZ allows residents to register online to vote how likely is it that you would consider registering to vote online as opposed to in person or by mail?

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Very Likely	54.1	47.3	43	43.3	92.6	49	59.2	46.8	60.7	53.2	59.9	72.5	56.6	24.7	44.7	56.3	59	44.2	53.5	55	54.5	54.6	55.5	56.2	52.9	57.2	52.8	
Somewhat Likely	11.9	20.4	11.3	20.4	3.9	15	8.5	12.1	11.8	10.7	13	15.7	10.6	10.5	15.3	10.9	12.7	11	13.3	9.6	10.6	11.2	12.3	6.2	15.1	11.1	10.9	
Somewhat unlikely	6.5	5.2	8.8	3.5	3	5.5	7.6	9.6	3.8	6.3	6.5	2.6	8.4	8.7	7.2	7.3	6.5	6.8	6.1	7.3	5.4	8.8	4.2	6.4	6.6	7.5	6.5	
Very Unlikely	27.5	27.1	36.9	32.8	0.5	30	24.7	31.5	23.7	29.7	20.6	9.2	24.4	56.1	32.8	25.5	21.8	38	27.1	28.2	29.5	25.4	28	31.2	25.4	24.2	29.9	

How much do you agree/disagree with: "Registering to vote online is safe and secure."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	28.4	24.7	19.4	27.5	50.2	27	29.4	27.8	29.1	30.1	33.9	39.5	29.8	12.2	38.6	30.7	30.2	24.6	32.7	21.2	32.5	26.9	29.3	27.8	28.8	32.4	26.5	
Somewhat Agree	30.8	40.4	26.2	29.2	37.6	33	28.6	28.6	33.2	33.5	30.4	39.3	29.4	23.8	24	31.1	34.4	25.2	29.9	32.5	31.4	34.9	30	30.5	31	38	25.8	
Neither	3	1.1	4.1	1.7	1.7	3.1	3	3.5	2.7	3.3	3.6	0	5.9	0.9	6.4	2.7	3.3	2.7	2.4	4	2.7	2.9	2.5	1.8	3.7	2.4	2	
Somewhat Disagree	12.3	9.6	16.2	14.6	7.6	9.2	15.5	12.8	11.9	11.1	11.7	10.5	12.5	15.3	11.3	11.1	9.9	17.3	12.5	14.3	12.8	10.4	12.9	12.1	9.1	14.1		
Strongly Disagree	19.4	18.2	26.2	22.4	2.2	22	17	21.1	18	17.7	17.3	7	18.7	36.7	14.8	18.6	17.2	23.5	16.9	23.5	12.7	16.8	22.7	18.7	19.8	13.8	25.8	
DK/REF	6	5.9	7.9	4.5	0.7	5.5	6.5	6.1	5.1	4.2	3.1	3.7	3.6	11.2	4.9	5.8	5	6.7	5.6	6.7	6.4	5.7	5.2	8.3	4.7	4.3	5.8	

How much do you agree/disagree with: "OLVR will make it easier for illegal aliens to vote illegally."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	29.5	28.3	44.3	29.5	5.2	31	27.4	37	23	31.2	23.7	15.3	31.8	44.9	24.5	30.3	25.6	36.7	29.1	30	12.1	23.2	40.1	26.6	31.1	14	42.9	
Somewhat Agree	19.2	30.2	14.7	13.3	22.8	19	19.2	24	15.5	21.7	17.9	27.4	15.7	13.2	10.3	21.8	20.3	18.3	20.3	17.5	12	21.9	20.5	21	18.2	15.7	22.4	
Neither	2.7	1.5	3.4	1.9	2.8	1.6	3.9	1.4	4	2.1	3.7	1.1	2.4	5.8	3.2	3.1	2.7	2.8	2.6	2.9	5	2.3	1.8	1.3	3.5	4.1	1.5	
Somewhat Disagree	18.4	19.8	13.5	19.1	30.4	19	18.3	15	21.5	17.4	21.9	24	18.4	12	23.5	19.2	20.9	14	15.5	23.4	27.8	18.3	15.6	18.3	18.5	27.4	14.3	
Strongly Disagree	21	15.6	16.7	28.2	30.1	22	19.8	14.4	27.5	19.6	25.9	22.1	24.9	13.3	34.4	18.3	22.6	19.2	21.9	19.5	33.7	25.9	13.9	22	20.5	32.2	10.5	
DK/REF	9.1	4.6	7.4	8	8.7	7	11.3	8.2	8.5	8	6.9	10	6.8	10.7	4.1	7.3	7.8	9	10.6	6.6	9.3	8.4	8.2	10.9	8.2	6.6	8.4	

How much do you agree/disagree with: "Computer hackers may be able to access my registration info if I register online."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	30.7	28.6	43.6	37.7	12	31	30.1	33.2	29.2	32.8	24.6	17.1	28.8	54.7	31.3	26.9	25.6	42.9	30.3	31.5	22.4	36.4	28.9	27	33.1	24.2	31.4	
Somewhat Agree	27.3	31	30.8	16.9	31	26	28.9	30	25.5	28	24.5	31.4	28.6	19.7	35.5	28.2	30.5	21	29.1	24.1	27.2	25.4	27.5	35.2	22	28.4	26.4	
Neither	2.6	0	0.7	3.6	2.8	1.3	4	1.4	3.6	2.7	3.8	1.6	4	1.6	1.9	2.7	1.8	4.5	4	0.2	2.4	1.8	3.9	0.5	4.1	2	3.7	
Somewhat Disagree	20.7	23.8	6.4	35.5	30.8	26	15	19	21.7	23	22.9	32.2	18.7	8.6	11.9	23.3	24.4	12.2	18.8	24.3	18.8	18.9	23.1	21.9	20	20.7	23.7	
Strongly Disagree	15.3	13.8	14.3	4.4	21.6	14	16.5	14.3	16.1	8.9	21.9	17.7	17.3	6.1	12.8	15.3	14.5	15.9	13.6	18.5	26.4	13.5	14	10.7	18.4	21.2	11.3	
DK/REF	3.3	2.9	4.2	1.8	1.8	1.2	5.4	2.1	3.9	4.6	2.2	0	2.7	9.4	6.7	3.6	3.1	3.6	4.3	1.4	2.8	4	2.5	4.6	2.4	3.6	3.4	

How much do you agree/disagree with: "I'd rather register online than in person."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	44.9	42.8	29.7	37.2	83.6	41	49.1	43	46.2	53.6	44.5	62.7	45.1	20.7	43.7	46.1	50.3	33.1	47.3	40.5	49.8	51.5	39.7	44.8	44.9	55.7	40.4	
Somewhat Agree	13.9	15.4	7.3	16.2	15.7	17	10.6	13.2	14.3	8.8	16.6	15.4	16.8	7	10.3	12.4	16.5	8.6	13.9	13.8	10.6	9.2	16.9	14.5	13.5	9.5	16	
Neither	2.9	1.8	3.8	1.8	0	3.5	2.3	4.8	1.5	6.1	1.7	0	3.8	5.6	19.2	2.6	3.2	2.2	3.2	2.3	3.6	3.5	2.7	3.3	2.6	4.1	1.6	
Somewhat Disagree	8.3	14.4	11.1	9	0	7.5	9.2	7.8	8.8	5.5	8.6	6.3	5.2	14.6	26.8	10.2	6.4	12.9	6.9	10.9	5.9	11.1	6.5	9	7.9	8.9	6.7	
Strongly Disagree	27.8	21.5	46.1	31.7	0.7	30	25.5	28	27.6	23.5	26.9	13.8	27.9	46.9	29.7	26.7	21.1	41.4	26.3	30.5	28.2	23.3	31.5	24.9	29.7	19.5	32.9	
DK/REF	2.3	4.1	2	4.2	0	1.1	3.4	3.2	1.5	2.4	1.7	1.8	1.3	5.1	2.2	2	2.6	1.7	2.4	2	1.8	1.4	2.7	3.5	1.4	2.2	2.4	

How much do you agree/disagree with: "I'd rather register online than by mail."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	49.8	42.8	39.2	26.6	83.7	46	53.5	50	49.6	57.7	52.7	75.6	50.7	13.1	36.7	49.4	57.7	32.6	52.6	44.7	50.9	60.1	42.8	49.8	49.8	60.9	40.4	
Somewhat Agree	12.3	18	7.9	25.6	9.8	15	9.2	10.2	13.8	8.1	14.2	6	14.7	13	25.3	13.3	13.1	10.9	10	16.4	13.9	6.8	14.9	12.9	12	6.9	16.4	
Neither	3	2.5	3.7	5.4	0	1.3	4.8	2.6	3.4	5.1	2.7	0.9	4.1	4.3	0	3.3	2.3	4.6	3.4	2.3	3.4	1.4	2.6	4	2.4	2	1.6	
Somewhat Disagree	9.1	13.5	10.8	17	1.8	9.4	8.8	6.6	10.8	5.6	8.8	8.2	5.9	17.1	11.4	10	6.7	14	8.4	10.3	3.4	7.8	11.7	9.8	8.6	7.8	11.2	
Strongly Disagree	23.5	20.8	34.4	25.4	4.8	26	21.5	27.1	21	22	18.5	7.6	23.6	46.7	26.5	21.3	17.7	35.7	23	24.4	27.4	23.1	25.8	21.7	24.7	21.4	26.9	
DK/REF	2.3	2.3	3.9	0	0	2.4	2.2	3.5	1.5	1.5	3.1	1.8	1.1	5.9	0	2.7	2.4	2.2	2.6	1.9	1	0.7	2.1	1.9	2.6	0.9	3.5	

How much do you agree/disagree with: "Politicians will obtain my email address and send me unwanted emails."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	39.1	26.1	53	33	18.2	38	40.2	43.6	36.3	40.9	39.3	23.4	45.2	48.6	47.2	41	35.7	47.4	36.1	43.9	30.2	36.9	43.1	35.9	40.5	28.8	49.1	
Somewhat Agree	32.1	47.2	21.9	36.1	41.5	30	34	31.4	33.9	27.7	34	40.5	28.9	32.1	34.2	32.3	33.2	32.7	28.5	37.9	34.1	37.5	30.8	34.2	31.1	34.9	30.2	
Neither	2.7	2.1	0.2	0	15.1	2.1	3.2	2.1	3.3	2	3.6	5.5	1.5	0.4	0	1	4.4	0	3.7	0.9	2.3	2.4	3.5	2.3	2.8	2.9	1.7	
Somewhat Disagree	13.3	17.5	12.7	19.9	9	13	13.5	11.1	15.5	14.7	14.6	18.7	14.7	4.6	8.4	13.6	14	12.2	16.9	7.4	19.1	12.8	11.3	8.2	15.6	19.4	5.6	
Strongly Disagree	7.2	0	7.9	8.4	10.3	12	2.9	6	8.1	7.9	6.8	9.7	7	4.2	8.1	7.1	9.4	3.3	7.9	6.1	10.7	6.6	5.7	11	5.5	9.8	6.7	
DK/REF	5.7	6.9	4.3	2.6	6	5.2	6.1	5.8	2.8	6.8	1.7	2.3	2.7	10.1	2.1	5.1	3.2	4.3	6.9	3.7	3.5	3.8	5.6	8.5	4.4	4.2	6.6	

How much do you agree/disagree with: "OLVR will increase the number of registered voters in this state."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	62.9	51.6	67.2	51.7	76.3	63	63.3	59.7	67.8	55.1	71.6	70.1	66.6	51.1	65.2	62.7	66.9	57.5	58.3	70.3	69.8	59.9	66.3	57.3	65.4	73.2	54	
Somewhat Agree	26.6	37.2	20.7	44.9	23.7	27	25.9	29.4	25.1	33	22.4	27.8	23.4	34.9	19.2	28.7	24.3	32.4	30.2	20.8	25	34.7	22.8	27.7	26.1	21.7	31.4	
Neither	1.6	2.1	2.8	0	0	1.5	1.7	3.3	0	2.5	1	2.1	1	1.1	0	1.5	2.3	0.7	2.6	0	0	0.7	1.9	0.8	2	0	3.8	
Somewhat Disagree	2.7	1.5	4.4	0.8	0	2.4	3	3.8	1.7	2.5	2.5	0	3.6	4.7	3.4	3.6	2	4.1	3.1	2.1	2.4	0.7	5	3.2	2.4	1.5	4.4	
Strongly Disagree	2.9	7.5	2.7	2.6	0	3.8	2	2.1	3.9	4.1	1.5	0	3.9	4.8	8.2	1.4	2.8	3.2	3	2.7	2.3	2	3.2	3.5	2.6	0.9	4.8	
DK/REF	3.3	0	2.1	0	0	2.5	4	1.8	1.6	2.8	1.1	0	1.6	3.4	4	2.1	1.7	2.1	2.8	4.1	0.5	2	0.8	7.5	1.4	2.7	1.6	

How much do you agree/disagree with: "If I moved to a new address within the state and had to change my registration, I would register to vote online."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	53.9	51.8	46.1	38.7	93.1	56	51.7	39	71	47.7	68.5	75.5	57.2	27.6	63.7	52.7	59.4	46.5	57.4	48.3	54.3	56.5	54	44.6	58.2	65.5	40.9	
Somewhat Agree	14.8	29	10.3	23.7	6.3	11	18.6	22.8	6.9	19.5	7	16.8	12.2	18.9	6.4	15.3	14.5	16.3	18.9	8.1	12.4	18.4	13.5	21.7	11.6	16.3	14.4	
Neither	1	0	1.6	2.8	0	1.5	0.6	0.9	1.2	0.2	0	1.1	1.4	0.4	0	1	1.1	1	1.3	0.5	3.8	0	1.1	1	1.1	0.7	1.7	
Somewhat Disagree	7.2	4.2	10.2	10.9	0.6	7.2	7.2	8.3	5.6	8	7	2.5	7.3	10	9.6	6.6	5.9	8.8	4.2	12	12.6	8	4.9	9.2	6.3	5.7	8.4	
Strongly Disagree	21.3	15	31	23	0	23	19.8	27.5	15.2	24.1	17.6	4.1	21.7	40.4	19.2	22.6	18.7	26.1	16.4	29.2	15.8	15.6	26.4	19.5	22.1	10.7	33.9	
DK/REF	1.8	0	0.8	0.8	0	1.5	2.1	1.4	0	0.5	0	0	0.2	2.7	1.1	1.7	0.4	1.2	1.8	1.9	1.1	1.5	0	4.1	0.8	1.1	0.6	

How much do you agree/disagree with: "Politicians will use OLVR for illegal purposes."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income grad+	Income 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain
Strongly Agree	18.8	12	26.2	8.1	12.6	17	21.1	24.2	14.2	21.3	18.6	19.1	15.7	23.7	14.1	17.3	18.9	20	18.1	19.9	21.2	13.1	19.8	19.9	18.3	14.2	23
Somewhat Agree	22.9	38.8	18.3	37.2	17.8	18	27.6	25.6	21.2	20.1	22.2	24.9	19.6	29.6	16.7	22.5	17.5	33.2	24.4	20.5	18.6	23.3	27.9	26.3	21.3	19.6	25.7
Neither	3.5	2.7	3.7	1.6	6.4	4.3	2.7	4	3.2	3.8	2.4	1.2	3.9	4.6	4.5	4.4	4.1	2.8	4.4	2	4.5	0.8	4.1	3	3.7	1.7	4
Somewhat Disagree	22.9	14.5	22	28.3	31.1	25	20.6	22.6	23.6	27.2	22.4	22.3	28.7	14.3	20.5	21.4	23.8	22.2	19.4	28.6	24.6	25.3	21.7	19.2	24.6	25.9	20.8
Strongly Disagree	24.2	28.6	22.4	14.2	25.2	30	18.9	17.6	31.3	18.1	28.8	30.3	25.3	16.7	40.6	27.9	28.7	17.8	24.5	23.7	23.4	30	21.9	20.2	26	31.3	21.5
DK/REF	7.8	3.4	7.3	10.6	7	6.5	9	6	6.5	9.6	5.7	2.3	6.8	11.1	3.5	6.4	7	3.9	9.2	5.4	7.7	7.5	4.6	11.4	6.1	7.3	5

How much do you agree/disagree with: "If I had a son or daughter turning 18, I would encourage them to register to vote online."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income grad+	Income 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain
Strongly Agree	46.4	45.6	38.2	36.1	75	49	44.2	34.9	59.7	36.1	58.7	53.3	52.4	30.2	70.2	46.8	50.5	40.6	46.3	46.4	50.4	48.7	46.2	36	51.1	52.1	39.5
Somewhat Agree	21.3	20.1	22.5	34.9	18.3	22	20.7	29.4	14.1	25.2	19.7	29.7	20.2	13.6	4.2	23.4	20.9	23.7	24.7	15.9	25.1	24.2	20.9	27.7	18.4	24	21.9
Neither	1.8	1.7	2.1	0	0	1.3	2.3	1.8	1.8	2.6	0.8	0	1.1	5.6	0	1.6	1.8	1.9	1.4	2.4	4.1	2.2	0.8	2.3	1.5	2.8	1.4
Somewhat Disagree	7.2	18.5	8.6	0	0	5.3	9.2	10.1	4.7	11.1	2.2	9.5	5.2	9.7	4.6	6.6	7	8.1	8.1	5.8	7.8	7.4	6.4	7.4	7.2	8.1	6.5
Strongly Disagree	20.1	12.2	25.8	25.7	5.5	20	19.9	21.3	19.1	22.2	17.5	6.4	20.3	36.5	16.5	18.8	18.1	23.8	16.4	26.1	11.9	15.1	24.2	20.5	19.9	11.2	29.7
DK/REF	3.2	2	2.8	3.3	1.2	2.6	3.8	2.5	0.6	2.9	1	1.1	0.8	4.5	4.5	2.8	1.7	1.9	3.1	3.4	0.6	2.2	1.6	6.1	1.9	1.8	1

How much do you agree/disagree with: "Computer hackers could access voter registration databases."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Income grad+	Income 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain
Strongly Agree	25	16.3	36.6	25.4	13.7	25	24.5	28.7	21.7	17	28.1	21.5	23.7	31.2	31.9	21.6	25.5	23.5	26.1	23.1	10.9	29.8	24	22.9	26.4	22.2	22.7
Somewhat Agree	24.9	21.8	19.7	19.7	36.3	26	24.2	23.9	25.4	29.7	21.4	26	24.9	24.2	18.8	26.4	27.1	20.3	26.2	22.6	32.5	33.3	16.3	25.1	24.8	33	22.7
Neither	2.5	1.2	5.1	1.2	0	1.5	3.6	4.4	1.1	3.5	2	0	3.6	4.3	0	2.5	2.2	3.4	1.5	4.3	2.3	0.8	3.5	2.6	2.5	2.1	2.9
Somewhat Disagree	20.1	23.5	15.2	24.4	24.7	21	19.6	12.1	26.6	21	21.5	24	22.9	9	16.5	21.7	18.8	23.8	18.2	23.6	15.2	16.7	24.6	20.2	20.1	19.8	21.1
Strongly Disagree	20.7	25.1	15.6	24.2	23	21	20.4	23.4	18.9	22.1	24	22.9	21.3	16	29.1	20.8	20	21.6	20.9	20.5	34.6	15.4	21.9	20.8	20.7	19.4	21.5
DK/REF	6.7	12.1	7.8	5.1	2.3	5.7	7.8	7.5	6.1	6.6	3	5.6	3.7	15.2	3.7	7	6.5	7.3	7.1	6	4.4	4	9.8	8.3	5.6	3.6	9

How much do you agree/disagree with: "OLVR will increase the number of young people who are registered to vote in this state."

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Strongly Agree	49.9	61.3	47.7	27	60.8	49	50.5	50.9	49	49.3	52.4	55.2	54.8	33.4	51.5	50.9	53.9	40	49.9	49.7	51.8	54.2	46.3	54.3	47	53.8	46	
Somewhat Agree	32.1	19.4	37.1	40.3	33.5	31	33	30.8	33.6	30.4	33.8	38.1	27.4	32.3	29.9	30.3	30.3	37.1	33.6	29.6	29.7	33.8	31.2	26.9	35.6	35.3	35.6	
Neither	4.6	1.9	3.4	6.2	1.9	7.2	1.9	3.9	4.9	5.5	4.8	2.9	3.8	8.4	0	5.4	3.4	6.9	4.6	4.6	2.7	4.2	4.9	5.4	4.1	2.1	3.3	
Somewhat Disagree	8	13	7.1	13.9	1.2	8	7.9	8.6	7.5	8.9	6.1	3.8	9.6	9.9	10	8.4	7.6	9	6.6	10.4	8.7	7.1	9.4	6.8	8.7	5.4	8.9	
Strongly Disagree	2.4	2.7	2.6	4.7	0.7	2.2	2.5	2.5	2.3	2.3	1.6	0	1.3	8.3	8.6	2.5	2.1	3.1	1.9	3.2	4.2	0	2.8	2.7	2.1	2.1	2	
DK/REF	3.1	1.7	2.1	7.9	1.9	2	4.2	3.2	2.7	3.6	1.2	0	3.1	7.7	0	2.6	2.7	4	3.4	2.5	2.9	0.7	5.3	4	2.5	1.3	4.3	

And thinking back to when you registered to vote, how did you register to vote?

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Mail	15.1	100	****	****	****	14	15.9	15.3	15.3	17.7	8.7	19.2	11.2	16.8	14.7	15.6	15	16.1	16.1	13.4	12.8	16.3	15.8	15.8	14.7	15.2	14.9	
person at gov office	41.5	****	100	****	****	44	38.7	45.1	37.9	37	42.6	25.4	45.4	54.2	40.8	41.8	39.4	44.8	38.9	45.8	46.3	33.9	46.3	36	44.5	38	45.5	
son petition gatherer	12.5	****	****	100	****	12	13	11.7	13.6	13.9	12.8	7.4	16.4	12.7	13	12.9	11.8	14.6	10.8	15.4	11	13.8	12.7	12.1	12.7	9.4	14.5	
Online AZ EZ	18.6	****	****	****	100	18	19	16	21.5	20.8	22.9	38.6	14.2	3.2	21.7	16.1	21.3	13.6	21.3	14	15.4	25	13.9	23.1	16.1	24	14.4	
Some other way	7.1	****	****	****	****	7	7.2	7.1	7.1	5.9	8.8	6.4	9.1	3.7	3.9	8.3	8.6	4.3	8.2	5.2	7.8	6.7	6.8	8.7	6.2	8.9	6.2	
DK/REF	5.2	****	****	****	****	4.2	6.3	4.8	4.7	4.8	4.1	3	3.8	9.4	5.9	5.2	3.9	6.5	4.7	6.1	6.8	4.4	4.6	4.3	5.8	4.5	4.5	

If registered by some way other than OLVR: And thinking back to when you registered to vote, where exactly did you get your registration form?

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Coll grad+	Income Less 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Family/Friend	6.3	****	****	****	****	6.4	6.1	7.9	4.8	4.9	5.4	7.9	4.7	6.9	8	6.5	5.7	7.6	6.7	5.6	4.6	8.5	6	7.3	5.7	3.2	7.1	
Civic Org	4.9	****	****	****	****	5.8	4	4.2	5.2	3.8	5	2.2	5.6	5.3	5.9	5.6	5	4.3	4.1	6.4	2.5	6.6	4.2	4	5.4	7.1	4.5	
Political party	3.9	****	****	****	****	4.6	3.2	4.6	3.3	6.2	2.7	3.1	5.3	2.6	4.5	3.2	4.9	2.3	4.8	2.4	5.9	3.1	4.3	6.4	2.6	4.1	3.8	
Gov office	49.3	****	****	****	****	50	48.5	51.1	48.1	50.8	54.2	45.2	48.8	54.7	50.1	47.7	47.5	53.6	46.2	54.2	58.2	45.4	49	47.4	50.2	52.2	45.4	
Gov website	3.8	****	****	****	****	2.7	5	2.5	5.2	2	6.4	4.1	4.9	2.2	2.4	4.8	5	2	4.7	2.5	5.2	2.1	4.1	0.8	5.3	4.9	3.3	
Civic org website	1	****	****	****	****	1.8	0.1	0.1	1.9	1.5	0.7	1.8	0.7	1	2.1	1.2	0.8	1.4	1.6	0	0.4	0.6	1.6	1	1	0.2	1.6	
Party website	0.1	****	****	****	****	0.3	0	0	0	0	0	0	0	0	1.3	0.2	0	0	0.2	0	0.8	0	0	0.4	0	0.3	0	
Other	13.8	****	****	****	****	13	14.4	16.9	10.7	16.8	13	16.4	15.3	8.8	13.2	14.8	13.3	14.6	14.2	13.2	10.6	18.8	10.6	17	12.2	13.6	16.4	
DK/REF	16.9	****	****	****	****	15	18.5	12.7	20.8	14	12.6	19.4	14.8	18.4	12.6	16	17.9	14.2	17.6	15.8	11.9	15	20.1	15.6	17.5	14.4	17.9	

And still thinking back to when you registered to vote here in AZ, would you describe the process as really easy to register or did you encounter any issues or problems?

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Coll grad+	Income 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
Easy	95.1	94.3	96.6	97.5	95	96	93.9	95.8	95.5	94.1	97.4	94.8	97.6	92.4	99	95.7	96.9	93	94.2	96.7	96.2	94	97	93.1	96.2	95.9	97.5	
Had some problems	2.2	3.7	1	1.7	5	0.8	3.7	1.5	2.9	3.6	1.6	3.7	0.6	3.8	0	2.1	1.1	4.4	3.1	0.6	2.1	3.1	1.6	2.3	2.2	2.3	1.3	
I don't remember	1.5	1.5	1.9	0.8	0	2.5	0.5	1.8	1.2	0.8	1	1.5	1	2.6	1	1.3	1.3	1.8	1	2.3	1.4	2.5	0.7	1.7	1.4	1.6	0.7	
DK/REF	1.2	0.5	0.5	0	0	0.5	2	0.9	0.4	1.5	0	0	0.9	1.1	0	0.9	0.6	0.8	1.6	0.5	0.3	0.4	0.7	2.9	0.3	0.1	0.5	

If encounter issues or problems: Where did you seek help or advice to answer your questions?

	Total	Mail	Gov office	Petition gatherer	Online	M	F	Some Coll or Less	Coll grad+	Income 60K	Income 60K+	Age Under 40	Age 40-60	Age Over 60	Latino	White	Non military HH	Military HH	Maricopa County	Rest of AZ	Dem	Ind	Rep	Not Married	Married	Obama	McCain	
	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****	****
AZ Help Desk	7.4	13.8	6.4	****	****	7.5	7.2	9.6	5.5	6	6.3	9.6	5.6	7.7	9.6	7.7	6.6	9	7.9	6.4	5.2	10.5	6.8	9	6.6	3.7	8.7	
Other gov website	5.8	6.9	5.4	****	****	6.9	4.7	5.1	6	4.7	5.8	2.6	6.7	5.9	7	6.7	5.8	5.1	4.8	7.3	2.9	8.1	4.8	4.9	6.2	8.3	5.5	
Gov official	4.6	3.9	4.2	****	****	5.4	3.7	5.5	3.8	7.6	3.1	3.8	6.3	2.9	5.4	3.8	5.7	2.8	5.7	2.8	6.6	3.8	4.9	7.9	3	4.8	4.7	
Family/Friend	57.9	47.8	69.6	****	****	59	56.8	61.5	55	62.1	62.8	55.2	58	60.7	60	57	55.3	63.9	55.1	62.4	65.9	56.3	55.8	58.1	57.8	60.8	55.3	
Other	4.5	3.2	1.9	****	****	3.2	5.9	3.1	6	2.4	7.4	5	5.8	2.5	2.9	5.8	5.8	2.4	5.5	2.9	5.9	2.6	4.7	1	6.1	5.7	4	
DK/REF	19.9	24.4	12.5	****	****	18	21.7	15.2	23.8	17.1	14.7	23.8	17.6	20.4	15.1	19.1	20.9	16.9	20.9	18.2	13.5	18.6	22.9	19.1	20.2	16.8	21.8	

ONLINE VOTER REGISTRATION IN TWO STATES – AN IMPLEMENTATION STUDY

County Sample Selection

In Arizona, the largest county (Maricopa), which is also one of the most racially and ethnically diverse counties, was selected, as well as the next largest county (Pima) which has a major university (University of Arizona). Both Maricopa and Pima have substantial Latino and American Indian populations, and are covered under Section 203¹⁴ of the Voting Rights Act for Spanish and one and two Indian languages respectively. To complement these relatively central metropolises, Coconino County in the north, and Santa Cruz County on the border with Mexico were selected. Coconino County, with a moderate population size, has a substantial Native American population as it includes part of the Navajo reservation, as well as the Hopi reservation and some other tribal lands. Coconino is also covered under Section 203, but for two Indian languages, and it is home to Northern Arizona University in Flagstaff. Santa Cruz County is a relatively small county on the border with Mexico. Approximately 50 percent of its population identify as Latino, and the county is covered under Section 203 for Spanish. Together, these four counties represent the range of voter registration systems, as Maricopa and Pima have their own unique systems developed in-house, and all other Arizona counties use the Power Profile program.

In Washington, five counties were visited. As in Arizona, the largest county (King) was chosen, primarily because of its size and diversity. King County has substantial Latino, African-American, Native American and Asian populations, as well as recent immigrants from specific nations or regions. Because of Seattle's large Chinese population, King County is covered under Section 203 of the Voting Rights Act for Chinese. The rest of the counties were chosen to represent the four vendors who provide registration programs to Washington counties, DIMS (Premier), ES&S, DFM, and Votec. King County uses DIMS software, but because of sheer size and history is not a typical DIMS user. Snohomish County, another large and diverse county was selected to represent the DIMS counties. Spokane County, also relatively large but not particularly diverse, was chosen to represent the ES&S counties, as well as the eastern part of the state. Whatcom, a smaller and more rural county on the northern border of the state, and home to a large university (Western Washington University) was selected from the DFM counties. Finally, the small rural Adams County (47% Latino), was selected from the Votec counties.

All of the data collected were used to construct a descriptive case study of OLVR in each state, and draw conclusions about the administrative processes, efficiencies, costs and benefits of each program. This report contains the case studies of Arizona and Washington, and concludes with a general discussion of the two states' programs in comparison. Each case study has four sections; the first describes the background of voter registration systems in the state, and how OLVR fits into that broader context. Part two presents a discussion of the OLVR system from the voter's perspective, including available information on utilization and usability, and section

¹⁴ Section 203 of the Voting Rights Act mandates that certain jurisdictions provide bi-lingual voting materials and assistance to protected populations whose English skills may be limited. The coverage formula is based on the population numbers of the protected group(s).

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three, the ‘Administrative Perspective,’ provides substantial detail about the legal history of the program, including the planning and implementation processes, technical security concerns, and the county administrative experience with OLVR. The fourth and final section of each case study draws out conclusions about the lessons learned in OLVR implementation, the perceived and measured costs and benefits, and an overall assessment of the success or failure of the program based on these conclusions.

B. WHERE IT ALL BEGAN: THE STORY OF THE NATIONS FIRST ONLINE VOTER REGISTRATION SYSTEM – ARIZONA’S EZ VOTER

I. BACKGROUND- Voter Registration in Arizona

Statewide Voter Registration Database

On January 1, 2004, Arizona’s Secretary of State’s Office launched its Help America Vote Act (HAVA)-compliant statewide registration database, called Voter Registration Arizona or ‘VRAZ.’ This initial version of VRAZ, ‘VRAZ-I,’ was designed to perform the basic matching tasks required by HAVA. With VRAZ –I, voter registration records could be matched with state motor vehicle records (to verify identity), court records (to check for felons and incapacitated persons), death records, and across counties. This allowed county recorders to eliminate duplicates and ineligible registrations in their own databases, and the state to compile a relatively clean statewide voter file. According to state election officials, this system was developed in-house in 2003 with two software developers, and only required the purchase of a few new servers.¹⁵ In November of 2005, IBM (with ES&S as subcontractor to bring in election-specific knowledge) was awarded a \$9.4 Million contract to develop VRAZ-II. In July of 2008, implementation of VRAZ-II began with a more streamlined statewide matching process, and real-time data transfer to and from counties (as opposed to the nightly batch upload under VRAZ-1). By September of 2009, the Arizona Secretary of State’s Office plans to have VRAZ-II fully implemented, including a final enhancement involving the transfer of online voter registrations to all counties (explained below).¹⁶

County Registration Databases

In Arizona, as in Washington, voter registration records are kept at the county level, by the respective county Recorder’s Office.¹⁷ This was the case before and after implementation of VRAZ-I and VRAZ-II. The largest county, Maricopa, and the second largest county, Pima, have each developed their own database systems ‘in-house.’ Maricopa has had its current registration system for about twenty years, while Pima implemented the first version of its registration system about ten years ago. When IBM and ES&S were awarded the contract to develop the second version of the statewide registration database (VRAZ-II), it was also agreed that the thirteen other counties, which were using a variety of other registration systems at the

¹⁵ The SOS office estimates that VRAZ-I cost well under \$500,000 to build, including the time of not only SOS staff but also Motor Vehicle Division staff and county recorder staff.

¹⁶ Update: As of January 2010, the testing of enhancements continues and the new target date for full implementation is April 2010.

¹⁷ In many cases the county ‘Elections Office’ which conducts elections is a separate county department.

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time, would switch over to the ES&S 'Power Profile' registration software. All thirteen counties were using Power Profile by 2006. . With Power Profile, these counties continue to maintain their own registration databases. All fifteen counties update the statewide system (VRZ-II) continuously.

Paper Registrations

There is one standard statewide registration form in use in Arizona. Available at <http://www.azsos.gov/election/forms/VoterRegistrationForm.pdf>, the form can be completed online and printed, or downloaded, printed and completed by hand. This four-page document includes instructions and a Spanish translation. It was last updated in September 2007. The paper registration form that is designed by the state and provided to voters and voter registration groups is identical to the online version, except that it includes a carbon copy receipt. Whether the form used originated online or is the paper version, the registrant has to mail the hardcopy form to the respective County Recorder's office. The addresses of all fifteen offices are listed at the bottom of the fourth page. When the form is completed online, it must be printed, signed and mailed in order to effectively register the individual.¹⁸ Although the Secretary of State's address is not provided on the form, paper forms are sometimes mailed to or brought to the SOS' office, and from there forwarded to the appropriate county.

At the county recorder's office, the information on paper registration forms, including the original signature, is scanned and processed. Processing includes validating the applicant and the registration through information transfers with the state's VRZ system, which facilitates matches with motor vehicle and other agencies. Approved registrations are entered by hand into the county's registration database. Once registrations have been officially entered in the county records, the county recorder's office sends each registrant a notice of voter registration (sometimes called 'voter card,' 'voter registration card,' or 'voter identification card') that confirms his/her registration including party identification. At this point, the notice or card replaces any receipt that the registrant may have saved to show completion of the form. This notice or card is not by itself sufficient to prove identification at the polls (required since January 2005), because it lacks a photo. It can, however, be used in combination with another non-photo id card to establish identification at the polls.

EZ Voter Registration:

Online voter registration is conducted through the state's motor vehicle agency. Arizona driver licenses and Arizona state identification (ID) cards are issued by the Motor Vehicle Division (called 'MVD') of the Arizona Department of Transportation (ADOT). Since July 2002, Arizonans with an Arizona driver license or state ID card¹⁹ have been able to register to vote on-line at the Motor Vehicle Division's online services website 'ServiceArizona' <http://servicearizona.com/>.²⁰

¹⁸ True online registration is done at a different site which is discussed in the next section 'EZ Voter Registration.' This paragraph explains that Arizonans have the option to complete the regular paper form online before printing it.

¹⁹ According to the SOS Office, a driver licenses are ubiquitous among Arizonans, making access to EZ Voter widespread. Most registered voters (92%) have a DL number in their voter registration record, and more than 95% of the paper registration forms coming into county recorder offices have DL numbers.

²⁰ The home page for the MVD is <http://www.azdot.gov/mvd/index.asp>, and at this page there are links to ServiceArizona and to the various online services available on ServiceArizona. There is also a page <http://www.azdot.gov/mvd/Menuonlineservices.asp> which lists and links to the applications on ServiceArizona.

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This application is called 'EZ Voter' and is one of twenty applications that the public can complete on the ServiceArizona website, including vehicle registration renewal (EZ Renewal), insurance verification (EZ Insurance Verification), obtaining a duplication driver license or ID (EZ duplicate), driver license reinstatement (EZ Reinstatement), vehicle tab (sticker) replacement (EZ Tab Replacement), aircraft registration renewal (EZ Aircraft Renewal), change of address or email (EZ Address/Email), etc.²¹

The online registrant begins at <https://servicearizona.com/webapp/evoter/> with the first of nine screens where he/she can choose to complete the process in English or Spanish. (See Appendix A for a screen shot of the EZ Voter portal.) After making a language selection, the registrant is taken to the next screen, which describes the process and alerts users to registration deadlines; there is an opportunity on this screen to switch back and forth between English or Spanish. The screens and corresponding actions to take are described in Table 1. Note that when personal information is entered on Screen 4, the stated name, birth date and license number *must* match what is already in the MVD records. If these items do not match, the registration will not continue. At the end of the process, on Screen 8, the registrant can print a registration receipt with a confirmation number made from the date and time of the transaction. This number can be used by an official to look up the transaction if the registrant does not receive his or her voter identification card in the mail.

When a voter registration is completed on EZ Voter, the MVD system does several things to facilitate the registration. First, the appropriate validation of the registrant's identity required by HAVA is done by MVD before the registration is complete.²² After completion, the MVD system merges the necessary demographic information from its driver license database with the image of the registrant's signature on the driver license, and then saves the merged record on a server that is designated for the exclusive use of the Secretary of State's Office. Each day's registrations are uploaded to this server in a nightly batch for the SOS office. The AZ SOS system then downloads the new registration records from this server, superimposes the information onto a voter registration form, and makes the completed forms available to the counties for download from the SOS website. The resulting form is identical to the hardcopy paper form with the addition of one more field for the date of issuance of the driver license or state ID card. Fourteen county recorders access the SOS website daily and download their respective forms, which are formatted to hold two registrations on each page. Maricopa County, which in 2008 received 65% of all EZ Voter registrations, imports EZ Voter registration data directly into its database.²³ In contrast, in all other county recorders' offices, the staff has to print the forms, cut the pages in half, scan each form, and key punch the information by hand. Thus,

²¹ The reader may wonder why there is the ability to get a duplicate driver license and to reinstate a driver license but not to renew a driver license. An Arizona Driver License does not expire, and therefore does not need to be 'renewed,' until the driver reaches age 65 (at one time the expiration was at age 60). A law passed about twelve years ago requires a new photo be taken after twelve years and that (or the renewal for the older driver) cannot be done online.

²² Before a voter registration can be approved the election official must verify that the person on the application is who they say they are, and the easiest way to do this is by cross-checking the person with their driver license or state ID card record (if they have one). This identity check is automated during the EZ Voter process.

²³ Maricopa County receives the pdfs and a .csv file with the registration data, and uses the .csv file to import registration data into its own database.

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these registrations are handled the same as registrations that came in on the paper forms and were validated and entered in the county's system.

In September 2009, the state plans to have all 15 counties receive the EZ Voter registrations electronically. The OSOS is currently testing the 'electronic feed' of EZ Voter registrations by sending some to various counties and making adjustments as counties report back on formatting and other issues.²⁴ Under the procedure being tested, the county will see the EZ Voter record and then 'accept' it manually before it becomes part of the county's database. Once a registration is accepted, the county's power profile system will import the registration data, the image of the form, and the image of the signature.²⁵

²⁴ One adjustment already made as a result of testing was to move the signature image to the top of the record so that county staff do not have to scroll down the page to see the signature before accepting the registration.

²⁵ Update: As of January 2010, the testing continues and the new target date for implementation of the electronic feed is April 2010.

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Table 1: EZ Voter Process for User

Screen Title and Content	Action
Screen 1: ‘Before beginning please choose a language from the list below’	User chooses English or Spanish
Screen 2: ‘Updating your voter registration is a quick and simple process’ Lists six components to the process ²⁶ ; place to click to switch language, explains registration deadline in general (29 days prior to election) and provides specific dates for the next election and its registration deadline.	Read information and switch language if necessary
Screen 3: ‘Verify Voter Registration Eligibility’ Explains that must be able to answer five questions correctly to legally register.	Verify Voter Registration Eligibility: Read explanation and answer five questions correctly (stating that a resident of Arizona, not a felon, not adjudicated incompetent, a US citizen, and 18 yrs old)
Screen 4: ‘Enter Personal Information’ Explains requirement of having a AZ driver license or ID card and that information must match what is on license or card.	Enter Personal Information: Read and complete full name, DL or ID Card #, and birth date ²⁷
Screen 5: ‘Change Address Information’ Shows partial address on file and date of last address change with MVD; explains why partial address provided; two questions to complete re changing residential address and adding mailing address; registrant gets to this screen only if identity has been authenticated by MVD.	Change Address Information: Read, see part of address on record, and chose whether to A) change residential address and B) to add a mailing address
Screen 6: ‘Enter Voter Registration Information’ Eight fields to complete and three yes-no questions; only top field, party preference, is required and the rest can be left blank.	Enter Voter Registration Information: Complete fields only; it is mandatory to chose party preference from a drop down menu ²⁸ and optional to provide state or country of birth (drop down menu), father’s last name or mother’s maiden name, phone number, Indian census number, occupation (drop down menu ²⁹), county or state where previously registered (drop down menu), former name if changed, and willingness to work as a poll worker on Election Day

²⁶ The components are listed as six bullets, which correspond to the items in bold in the ‘Action’ column.

²⁷ If the user does not know his/her DL or ID card number, he/she can click on the bottom of the screen and will be taken to another screen which will pull out the DL or ID card record with other information (full name, birth date, SSN, residential street address on file with MVD, zip code, and eye color).

²⁸ The choices are DEMOCRATIC, REPUBLICAN, GREEN, LIBERTARIAN, and NO PARTY PREFERENCES. There is also a field to write in an ‘Other’ party preference.

²⁹ The menu has 28 choices and there is also an ‘Other’ to complete if none of those fit.

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<p>Screen 7: 'Verify Voter Registration Information' Lists answers entered on Screen 6 for user to review, and states four points that voter affirms by continuing on in the application.</p>	<p>Read, review and if necessary go back and correct information; if correct, click 'Finish Voter Registration' to affirm information is correct and authorize release of MVD information and MVD signature image to County Recorder.</p>
<p>Screen 8: 'EZ Voter Registration Receipt' Printable receipt with full name, county, birth date, party preference, application date and confirmation number (made of the date and exact time of transaction); states that registration has been successfully completed, explains that County Recorder will receive registration and send a notice within 4-6 weeks that user has been registered, suggests to call Recorder (numbers provided) if have questions, and suggests to keep and use this receipt if not on the list on election day. At bottom of page requests 'Please complete the (optional) Feedback Survey.'</p>	<p>Print Voter Registration Receipt: Read and print and then go to (or skip) survey</p>
<p>Screen 9: 'Provide Feedback' Three questions: two are multiple choice (how learned about ServiceArizona and satisfaction level); and one is an open-ended field to write any comments.</p>	<p>Provide Feedback: Complete three question survey and 'submit' answers</p>

Registrations at the Motor Vehicle Division (MVD) Office

Until October of 2005, voter registration at the MVD Office was completed on paper registration forms. Customers were handed a form to either take with them or fill out and leave at the MVD Office. Forms were then sent to the appropriate county. Since October 2005, the Driver License application contains the question: 'Are you a citizen of the United States who wishes to register to vote?' with a box to check 'yes' and a place to enter party preference. Driver license applicants could then register to vote using this application rather than filling out a separate voter registration application. The driver license application already asks for all the information that is also needed to register to vote, except for party preference. Thus the customer simply needs to check the box indicating that they wish to register to vote, and write in party preference. The customer service representative (CSR) at the MVD office enters that information in the MVD driver license system and the information is processed through EZ Voter. The customer receives a receipt just like the one they would print off the EZ Voter application, and the MVD can use the receipt to check on the transaction if the customer later finds a problem with his/her voter registration and brings the receipt back to an MVD clerk.

At the MVD offices, there are also terminals from which customers can access ServiceArizona, and complete the same services that they might complete from any computer connected to the

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internet, rather than wait to talk to a customer service representative. The MVD began placing these workstations in January 2004, and by June 2008 there were 1 to 2 terminals in about half of the state's MVD offices.³⁰ This is another convenient way to register to vote or change one's address, especially for those that may not have internet access elsewhere, and who are not there to apply for a driver license, which requires a personal visit to the MVD counter. The MVD has considered putting ServiceArizona machines ('SAMs') outside offices in other high traffic locations.

Voter's Change of Address

As is the case in many states, moving to a different address requires re-registration. This can be done on ServiceArizona through the 'Change Address' application, or through EZ Voter. If a user changes his or her address for the MVD on ServiceArizona and then goes to EZ Voter to re-register to vote, the new address will be partially shown on EZ Voter. However, the user has to complete the full EZ Voter process in order for the county recorder to receive the new address. If the user goes directly to EZ Voter to re-register, then he/she will see a partial address reflecting the old address and will have the opportunity to change it to the new address. If an address is changed in EZ Voter, it will be updated in other MVD records as well.³¹

Looking up Registration

EZ Voter is not intended as a place to check one's registration status. Rather than to provide information to voters, the goal of EZ Voter (according to SOS officials) is to authenticate registrants, that is, to verify that they are who they say they are. Because users often need to check their address on record to see if it needs to be changed, a partial address is returned when a previously registered Arizonan accesses EZ Voter. It shows only enough of one's address to see if one needs to change it, but not enough that a stranger with one's driver license number could find out where he/she lives. The partial address assists the registrant while protecting the privacy of his/her information.

The Arizona SOS office provides another way to check registration status at <https://voter.azsos.gov/VoterView/RegistrantSearch.do>. There are three separate options available on the 'Voter View' page, 'Search Your Voter Registration Information,' 'Search Your Polling Place,' and 'Search Your Provisional Ballot.' For registration information, the voter must enter the first and last name, date of birth, county (choose from drop down list), and either voter ID number or Driver License number. With this information, the voter should see their name, status (active or inactive), reason for status (eg. 'valid registration'), and party preference, and voting history. Voting history displays the past elections in which the individual voted and whether he/she voted at a polling place or 'early' (early voting is explained below). Polling place information is accessible by entering full residence address and selecting either 'county' or the same information as for registration status (DOB, DL #, etc). The first name is not required when choosing this option. As of this date, there is no link to the SOS Voter View page from ServiceArizona, but the SOS office intends to create one for those who go to EZ Voter

³⁰ Out of 61 MVD field offices, 32 have ServiceArizona terminals; at least one MVD office in twelve of the fifteen counties have a terminal.

³¹ This simultaneity of address changes in EZ Voter and other applications on Service Arizona was designed to reduce customer confusion.

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solely to check their registration status. Voter View was launched in August 2008 without much advertising, to allow for a testing period before any onslaught of users.

Proof of Citizenship

Arizona voters enacted Prop 200 in November 2004 which, beginning in January 2005, required proof of citizenship when registering to vote, and showing ID when voting at the polling place. This requirement applies to those registering for the first time in Arizona or moving to and registering in a different county within the state. A driver license (or state ID card) number issued after October 1, 1996 can be used for this purpose.³² If the registrant does not have a license or ID that was issued after this date, then he/she can provide one of five other documents or numbers to prove citizenship, including a copy of a birth certificate, passport, naturalization document, or a tribal identification number. To register on EZ Voter, the individual must have an Arizona driver license or ID card. If the ID was issued prior to October 1, 1996, however, they will not be able to use the system. Arizonans who become naturalized cannot use EZ Voter to register immediately after the procedure because it takes time for their citizenship status to be recorded in MVD records. At naturalization ceremonies voter registration is often encouraged through the use of paper forms.

Early Voting

The term 'early voting' in Arizona includes voting by mail and in-person voting prior to Election Day. Arizona voters do not need to provide a reason to be able to vote early, and a law enacted in 2007 allows all voters to sign up for the 'Permanent Early Voting List' (PEVL) so that they are mailed a ballot automatically in each election. Arizona voters can also sign up for an 'early ballot' (by mail) for a particular election rather than being mailed a ballot each election. A separate form is used to request an early ballot (by mail) for a particular election or the PEVL, and it is not possible to apply for absentee ballots via the paper registration or EZ Voter registration forms. The SOS is developing the ability to apply for an early ballot or the PEVL when registering on EZ Voter. Administratively, early voting interacts with registration in another way. Voter registration in Arizona is the job of the county recorder's office, while conducting elections at the polling place is generally the job of a separate county election department. In some counties these functions are combined, but the tradition is to keep them separate so that those maintaining the voter lists are not those responsible for tabulating votes. However, the county recorders administer 'early voting,' which means that they mail the ballots to those who request them. As early voting increases, especially with the permanent early voting list, the recorders offices are increasingly more involved with handling ballots.

³² After October 1, 1996 Arizonans had to establish an 'authorized presence' in the US, i.e. that they were either a US Citizen or a legal resident of the US, in order to obtain an Arizona driver license or state id card. Starting in 2001, driver licenses were marked as Type F for those who are legal residents and not citizens, so those holding Type F licenses cannot register to vote. If an individual does try to register with a Type F driver license on EZ Voter the system won't let him/her continue. If he/she registers on paper the registration will be kicked out when its matched with MVD records.

II – THE USER PERSPECTIVE: Voters and EZ Voter

Utilization

By all accounts, EZ Voter has been popular since its inception. (See the figures in Table 2 below.) Around key registration deadlines, usage of the system peaks. During its first full month, in August of 2002, which was also the month containing the deadline to register for that year's Primary Election with Gubernatorial candidates on the ballot, the EZ voter registrations reached over 14,000. Two months later, when the deadline to vote in the General Election occurred, the registrations reached over 15,000.³³ The next high point was reached in January 2004, when Arizonans registered for their Presidential Preference Primary, and more than 17,800 registered online. Starting in July 2004 registrations climbed consistently up until the October registration deadline to be able to vote in the General Election, and then dropped to earlier levels. The registration deadline for the state primary occurred in August 2004, which was not a peak in use of EZ Voter. Over 47,600 registered in October 2004, and 21,400 (45%) of those were on October 4, the deadline to register for the Presidential Election. October 4, 2004 held the one-day record for the most EZ Voter registrations until the deadline for the 2008 Presidential Election approached and a record 38,372 Arizona residents registered to vote on October 6, 2008 using EZ Voter.³⁴ EZ Voter registrations never fell below 4,000 a month, and began to climb again at the end of 2005 as the mid-term/gubernatorial election got closer. Again, EZ Voter registrations peaked in August 2006 before the Primary, and in October 2006 before the General Election, when over 50,000 registrations were processed online. (See Table 2 below). The monthly EZ voter registration rate then ranged from 23,361 to 48,530 until January 2008, the month when Arizonans had to register for the 2008 Presidential Preference Election of February 5, 2008. In that month over 105,000 registrations were conducted online.³⁵ Online registrations reached this milestone again in September 2008, and then peaked in October 2008 at almost 145,000 (26% of those registered on October 6, the deadline to register for the November 2008 election). In the last two months of 2008, the number of EZ Voter Registrations stayed at over 30,000 per month; but interestingly in December many more of these were done at the MVD office rather than online at ServiceArizona. EZ Voter also became the most popular way to register over its six full years. In 2003, just over one quarter of registrations were done online, and until October 2005, customers at the MVD office who registered to vote were still using the complete paper registration form. Starting that month, October of 2005, applicants for a driver license could check a box on the license application that would trigger registration to vote by MVD office staff through EZ Voter. This is reflected in the 'Office' column in the Table below. For those who did not want to wait in line, most MVD offices by 2008 had ServiceArizona kiosks where all the functions, including voter registration, could be accessed as though the customer was using the internet.³⁶

³³ This was the year that Janet Napolitano (D) was first elected Governor (replacing Jane Hull (R)) and Jan Brewer, the current Governor, was first elected Secretary of State, and might have drawn some particular interest. Turnout in the primary was 25% and 56% in the General, where Napolitano beat her Republican opponent by only 1%.

³⁴ In both Presidential elections (2004 and 2008) the turnout rate was over 77% of registered voters.

³⁵ Turnout for the Presidential Preference Election was 51% overall, an average of 50.5% for Democrats and almost 52% of Republicans (even though their own Senator McCain won handily).

³⁶ The MVD calls these kiosks 'ServiceArizona Machines' or 'SAMs,' and is considering installing them in high traffic facilities other than MVD offices.

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TABLE 2: EZ Voter Registrations by Month

Month	Internet	Office ²⁴	Total	Month	Internet	Office	Total	Month	Internet	Office	Total	Month	Internet	Office	Total
				Jan-03	6,535	0	6,535	Jan-05	6,077	0	6,077	Jan-07	11,213	16,613	27,826
				Feb-03	5,592	0	5,592	Feb-05	5,449	0	5,449	Feb-07	10,281	14,016	24,297
				Mar-03	6,741	0	6,741	Mar-05	6,767	0	6,767	Mar-07	11,556	15,679	27,235
				Apr-03	6,558	0	6,558	Apr-05	6,581	0	6,581	Apr-07	11,559	15,205	26,764
				May-03	7,338	0	7,338	May-05	6,995	0	6,995	May-07	12,115	16,585	28,700
				Jun-03	8,287	0	8,287	Jun-05	8,064	0	8,064	Jun-07	12,613	17,319	29,932
				Jul-03	9,042	0	9,042	Jul-05	8,049	0	8,049	Jul-07	14,233	18,292	32,525
				Aug-03	9,219	0	9,219	Aug-05	9,859	0	9,859	Aug-07	15,168	20,619	35,787
				Sep-03	9,358	0	9,358	Sep-05	9,267	0	9,267	Sep-07	14,085	15,523	29,608
				Oct-03	9,548	0	9,548	Oct-05	10,073	5,226	15,299	Oct-07	17,123	16,481	33,604
				Nov-03	8,249	0	8,249	Nov-05	8,984	16,470	25,454	Nov-07	15,717	14,999	30,716
				Dec-03	9,314	0	9,314	Dec-05	8,068	16,333	24,401	Dec-07	34,246	14,284	48,530
				Jan-04	17,839	0	17,839	Jan-06	11,332	18,111	29,443	Jan-08	86,219	19,230	105,449
				Feb-04	14,415	0	14,415	Feb-06	10,149	15,924	26,073	Feb-08	40,348	18,670	59,018
				Mar-04	14,164	0	14,164	Mar-06	12,238	18,965	31,203	Mar-08	19,615	17,822	37,437
				Apr-04	11,741	0	11,741	Apr-06	11,289	16,409	27,698	Apr-08	17,246	17,419	34,665
				May-04	12,690	0	12,690	May-06	11,530	18,428	29,958	May-08	18,387	17,082	35,469
				Jun-04	14,774	0	14,774	Jun-06	11,287	18,966	30,253	Jun-08	20,074	18,200	38,274
Jul-02	1,391	0	1,391	Jul-04	26,178	0	26,178	Jul-06	13,265	18,572	31,837	Jul-08	23,555	21,730	45,285
Aug-02	14,111	0	14,111	Aug-04	37,613	0	37,613	Aug-06	25,339	22,147	47,486	Aug-08	40,523	26,175	66,698
Sep-02	9,606	0	9,606	Sep-04	44,472	0	44,472	Sep-06	20,743	18,632	39,375	Sep-08	72,921	32,471	105,392
Oct-02	15,023	0	15,023	Oct-04	47,622	0	47,622	Oct-06	32,975	17,731	50,706	Oct-08	115,290	29,628	144,918
Nov-02	7,065	0	7,065	Nov-04	9,469	0	9,469	Nov-06	19,403	15,086	34,489	Nov-08	24,640	22,909	47,549
Dec-02	5,465	0	5,465	Dec-04	4,736	0	4,736	Dec-06	9,616	13,745	23,361	Dec-08	7,136	24,257	31,393

²⁴ 'Office' refers to the office of the Motor Vehicles Division (MVD) of the AZ Department of Transportation. These are registrations which were entered into the EZ Voter system by an MVD employee, a practice which started October 2005. Previous to that, when MVD employees had customers wishing to register to vote, the customers were provided a paper registration form to complete.

The Table below shows the increase in EZ Voter registrations among Arizonans seeking to register. For 2005 and 2006 over half of all voter registrations were conducted through EZ Voter. In 2007, this number reached close to 70%. In other words, in 2007 just a little over than 30% of voter registrations were completed on a paper form. In 2008, the 'market share' of EZ Voter Registrations was closer to 60%, but still well over half of the registrations in the state. Because of the huge interest in the 2008 presidential elections and the increase in voter registration drives by non-governmental groups who mostly use paper registration forms, it makes sense that the percentage dropped from the year before, but the total number of registrations done through EZ Voter were still higher than all other years.

TABLE 3: EZ Voter's Market Share of Arizona Voter Registrations

	2003	2004	2005	2006	2007	2008
Registration Forms Processed in AZ	377689	1129091	246787	762859	534546	1241409
Registrations Done Through EZ Voter	95718	256568	132456	401335	362188	728319
EZ Voter Percentage	25.34%	22.72%	53.67%	52.61%	67.76%	58.67%

Usability - Feedback on ServiceArizona

One measure of usability is derived from the comments that users entered on the website after completion of registration using EZ Voter. EZ Voter is one application of many on ServiceArizona, where there is a feedback form accessible at the end of every application and also on the right side menu when a user is in any application. Regardless of how one arrives at the 'user survey,' the wording is as shown below:

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[Feedback Form]

Please answer a few short questions about our service:

1.) How did you find out about ServiceArizona?

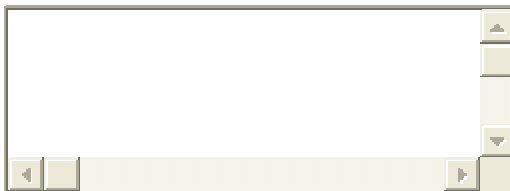
- Radio
- Television
- Newspaper/Print Media
- Mail
- Internet
- Other

2.) How satisfied were you using ServiceArizona?

- Very Satisfied
- Somewhat Satisfied
- Not Satisfied

3.) Please give us your comments on ServiceArizona:

Please note that this is an anonymous survey. If you would like a personal reply, please use the "Contact Us" link to the right.



Skip Survey	Clear Survey	Submit Survey
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Users are asked to complete the above survey at the end of every application, including EZ Voter. Only comments that were entered after completion of EZ Voter registration were analyzed for this report. Please note that this is a volunteer sample of users rather than a random sample. Many of the submitted comments refer explicitly to voter registration, some mention other applications (eg. address change, duplicate driver's license request, vehicle registration renewal), but most are general comments about the website. Occasionally, comments entered in Q3 are answers or further elaborations referring to Q1 (i.e. how the user found the site) or Q2 (the level of satisfaction with the site). During the last nine days prior to the close of registration for the November 4, 2008 Election, the state received 1805 comments on ServiceArizona after respondents went through the EZ Voter application. On Monday October 6, 2008, the last day to register for the November 4 Election, over one third (643 or 35.6%) of those comments were recorded. (Over 38,000 Arizonans registered through EZ Voter that day and about 1 or 2 in every hundred left comments.) The 1805 comments were overwhelmingly (84.8%) positive, with only 7.6% outright negative, and 7.6% were of either mixed or neutral tone, nonsensical, blank, or 'no comment.'

Just 13% (235) of the responses contained specific complaints, questions, or suggestions. Only 4 responses (.2%) were general criticism with no specific reason for the negative comment. Many of the complaints were implied suggestions for improvement, especially for adding features that the user would have liked to see, such as a listing of where to vote, instructions on applying for an absentee ballot, or the ability to send a question. When these comments were not specifically about voter registration issues then they were about the website in general, for example, that it was hard to find or that it did not look official enough. Some negative commentators were asking about an individual voter registration situation that needed to be addressed, but that feedback was not at all relevant to improving the site. This user survey was not the proper venue to resolve individual problems or get specific questions answered. Another group of negative comments showed confusion about the site, the process, and the questions asked on the site, and/or the respondent did not see information (that is in fact provided). However for each of the comments in that category, there were at least four comments on the positive side that showed most users found the site easy to understand and to use. A few respondents complained that the October 6 registration deadline was not indicated on the website. The deadline was, in fact, indicated on the second screen but was not highlighted and might have been overlooked.

Although the EZ Voter application itself did not highlight the registration deadline for the November election, clearly most registrants were aware of this deadline as the utilization (and the comments) reached a peak on that day. For this reason the comments were analyzed before and after the deadline. The close of registration is 29 days prior to Election Day. During the 28 days prior to election day and including election day (October 7-November 4, 2008), users of EZ Voter left 910 written comments. (Those using EZ Voter at this time were registering for a future election with the exception of members of the Armed Services, who have different registration

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deadlines and were still able to register for the November election.) 16% (149) of the comments in this period were left on October 7, probably reflecting that many users still hoped to register in time for the November election. On Election Day, 63 comments were left, which was almost 7% of the 910 comments left during those 29 days. Comments during this period were still mostly positive (77.4%), but not quite as positive as during the nine days before the registration deadline (84.8%). 13.7% of the comments during the 29 day period were outright negative, and 8.9% were either mixed, neutral, nonsensical, blank or a simple 'no comment.' Of the 910 comments, 173 (19%) report specific complaints, questions or suggestions for improvement. None of the comments were outright negative remarks without specific complaints or suggestions.

The positive remarks fell into four different categories: general praise and accolades for the website, simple descriptors of why the user liked the website, praise about specific tasks that could be accomplished on the site, and descriptions of why the site was particularly convenient for the user. The first category included many one or two word exclamations which were repeated over and over, such as 'great site,' 'wonderful,' 'good job', 'awesome,' 'love it,' and 'I'm happy.' About 10% of positive remarks were in this category. The most common comment in the second category was 'easy and quick' and the rest were some variation of that including 'self-explanatory,' 'straight forward,' 'easy to navigate,' 'efficient.' In the third category were those comments that said explicitly that how great it is to be able to register, re-register, change party affiliation, and register in Spanish. The final category included those who talked about why the online application was beneficially to them or made the difference in getting them to register. These comments talked about saving time, gas, and not having to deal with rude MVD staff.

Accessibility, Diversity, and Community Groups

Arizona is a state with densely populated urban and suburban areas (Phoenix, Tucson), surrounded by mostly rural areas. Close to 60% of the population lives in Maricopa County (Phoenix and surrounding cities), and another 16.4% lives in Pima County (Tucson area). The thirteen remaining counties have under 4% of the state's population each, and only 23.6% of the population together. Parts of the state have large Indian reservations, including the Navajo reservation which covers the northeast corner of the state and reaches into Utah and New Mexico, the Tohono O'odham Reservation at the central southern border, the Fort Apache and San Carlos reservations east of Phoenix and the Hualapai Reservation in the northwest. At least six smaller reservations are scattered around the state. Other large chunks of land include national forests, parks and monuments, wilderness, wildlife ranges and military property (in the Southwest Yuma area). As might be expected the most concentrated availability of internet access for the public is in Phoenix and Tucson, and then there are clusters around the state in other towns such as Flagstaff, Yuma, and up and down the interstate highways.²⁵ There

²⁵ <http://www.dslreports.com/gmaps/dslr>

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is some DSL access across the Navajo reservation, but no broadband available in the Tohono O'odham area. There is very little broadband availability across desert areas and the Grand Canyon. For those without home computers, most towns have libraries with computers available to the public,²⁶ and Indian reservations tend to have tribal offices with computers and internet access. There is also at least one MVD office in every county, and eleven of the fifteen counties have MVD offices with a ServiceArizona terminal available to customers.

In terms of racial and ethnic diversity, 5% of the state's year 2000 population as reported by the U.S. Census identified as American Indian and 25.3% as Latino.²⁷ While the border counties have high numbers of Latinos with 30-80% of each county's population, more than half of the state's Latino population resides in Maricopa County and another substantial portion resides in Pima County. Section 203 of the Voting Rights act requires that five counties provide election materials and assistance in Spanish, and nine counties in the Native American languages of Apache, Navajo, Pueblo, Tohono O'odham, Yaqui and Yuman. Statewide election materials are in both English and Spanish languages, as is the EZ Voter application, and OSOS advertisements about EZ Voter are disseminated through the state in both English and Spanish. According to Latino advocacy groups, language access is not a barrier to voting among this population. Assistance for Native American voters is primarily in the form of translators. In the northern counties an election glossary was developed for the Navajo voters, and there are plans to develop one for the Hopi (Pueblo) as well, but that is reported to be more challenging. Members of the Havasupai tribe, some of whom live in the Grand Canyon where they have their own polling station, all speak English but are also provided with bilingual poll workers on Election Day. In the southern part of the state, a university professor developed a general glossary for the Tohono O'odham, which is not a written language. This was reportedly also a rather challenging task and consequently quite limited. Because the Native languages are not widely written, translation for Section 203 compliance is often achieved with audio ballots. EZ Voter was not made available in any Native American languages.

In the administrative perspective section, this report touches on what the county recorder offices reported about the utilization of online registration by certain population segments. A brief summary is that county recorders generally encourage online registration to those who phone their office, and find a tendency among the elderly to either not have access to a computer or not to want to register online. Many other callers are delighted to learn about the opportunity. The uptake of online registration is greater among high school and college students who are often alerted to this opportunity through emails, press releases, and sometimes registration drives. The

²⁶ Access to the internet does not mean people are aware of or directed to EZ Voter. In one library in a smaller university town, researchers determined that the reference librarian was unaware about registering to vote online and would direct those seeking to register to the paper registration forms on hand or available at the nearby recorder's office.

²⁷ Data source: PL94-171, Census 2000

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Native American population has a mixed experience with voting and therefore registration. While some tribes, including the Navajo and the Havasupai, have a cadre of regular voters (), others are much less interested in voting (Hopi, Tohono O’Odham), and therefore they tend to not register as actively. County recorders speculated that if members of these tribes do register, it is likely not by going online, but rather with assistance at the MVD office, or via paper forms that were provided by county recorder outreach workers (who originally are from the reservations they visit). Also discussed below is the fact that online registration is rarely used by registration drives, because of the inability to keep and track the information on registrants. Discussions with Latino advocacy groups and Latino Party activists confirmed this. Efforts to register Latinos in large numbers rely on collecting paper registration forms and do not encourage online registration.

III - THE ADMINISTRATIVE PERSPECTIVE: Implementation and Operation of EZ Voter

PROCESS

Timeline/History – key events

Arizona's online voter registration program, EZ Voter, was launched in July 2002; however, Arizona's history with coordinating voter registrations and motor vehicle transactions began twenty-years earlier. On November 2, 1982, Arizona voters passed the state's own 'Motor-Voter Act,' eleven years before a much broader piece of legislation (The National Voter Registration Act of 1993) was enacted by Congress. Arizona's Motor-Voter Act recognized the similar data requirements in the driver license application and voter registration processes. The Act called for the state's transportation and voter registration authorities to work together to develop a common exchange of information and integrate the two application processes. While Arizona's electorate supported this idea, the spirit of the Act was not really implemented until 2002 and 2005 respectively. Information exchange between the agencies began in earnest in 2002 with the implementation of EZ Voter. Prior to 2005, driver license applicants could complete a separate voter registration form at the motor vehicle office that was forwarded by MVD to the appropriate county recorder, and then starting in October 2005 MVD could electronically register its customers.

Arizona was ahead of its time on another related trend when it began implementing 'e-government' in 1997. Primarily, this consisted of ADOT's motor vehicle division launching their online services website 'ServiceArizona.' ADOT contracted with IBM to set up the web portal. Also by 1997, Arizona driver licenses and identification cards were kept as digital images, and most importantly the signatures were 'digitized.' The signature images were stored on a central image server that was reserved solely for that purpose. Because voter registration requires an original signature, the ability to transmit the image of a signature electronically was the key to online voter registration.

Although the state was slow to implement the intent of the 1982 Motor-Voter initiative (and the 1993 federal version), the Secretary of State and the Director of the Transportation Department met annually to discuss ways to improve voter registration through the MVD. Around 1999, the discussion in this meeting turned to the idea of doing 'Motor-Voter' applications online because MVD's online services through ServiceArizona were so popular. (By 2002, 20% of vehicle registrations were done online in Arizona.) There was also a model for the MVD sharing data in a secure manner with other agencies, as it had a history of providing criminal justice agencies with access to driver and vehicle records. The SOS office had been receiving some data from MVD for their 18th Birthday Card program, through which they send Arizonans turning 18 a congratulations card along with a voter registration form. The MVD was interested in improving not only their ability to register voters (as mandated by federal law), but also

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in keeping addresses in MVD records more up-to-date and therefore improve customer transactions.

Starting in 1999 a group from MVD and the chief information officer (CIO) of the SOS office (who initiated and lead the project) began meeting weekly to develop the idea of online voter registration. They used the MVD project model, which involved gathering involved parties from the agency together in regular meetings, defining the project objective, and then through open discussion developing 'business rules' to implement that objective. From the business rules, specifications are written and passed on as directives to computer programmers. When the development of this project started, the ServiceArizona programming staff (both in-house and at IBM, the vendor for the ServiceArizona portal) had just added an application that allowed ordering a duplicate driver license. Adding the EZ Voter application followed easily from there. In addition to programming for ServiceArizona, MVD wrote a program to merge demographic data with signature images (on separate systems) and set up a dedicated server to store the voter registration data for the SOS office. Programmers working for the SOS had to develop software that moved these data from the dedicated EZ Voter server and superimposed the data on a voter registration form. These various programming tasks took about six months to complete. Meetings between the MVD and SOS about EZ Voter still continue on a monthly basis to check on the status of the program.

The SOS CIO was also meeting with the county recorders during this development phase and securing their 'buy-in' to online voter registration. His efforts included traveling to the county recorders' offices to discuss their particular concerns and needs, educating counties about the system through presentations at meetings, and generally building trust. County recorders were concerned that the increase in registrations might increase their workload and costs, especially if there were a great number of duplicate registrations to cull through. One way to allay the concern about duplicates was to do a one time clean up of the voter files with the counties, which was done in 2001 before the state had a statewide voter registration database. The CIO launched EZ Voter and moved on to another position. In 2003, a new CIO for the SOS along with the Help American Vote Act (HAVA) manager, took over management of EZ Voter. This management structure continues through the present, thus providing continuity. These two officials interact with the county recorders during weekly conference calls that cover enhancements to the VRAZ system and other concerns the county recorders may have, and they also try to have quarterly face-to-face meetings with the county recorders. The SOS and MVD also monitor feedback on EZ Voter and make adjustments accordingly to improve the application for the users.

Statutory authority for this program was already in place through the 1982 law and the 1993 federal NVRA; however implementation of EZ Voter did require regulations. The Secretary of State's Office opened a rule-making process in December 2001, and had the rules finalized on March 29, 2002. This new section of regulations entitled 'Electronic Voter Registration' laid out the procedures by which ADOT could transmit 'electronic

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voter registration forms.’ Specifically, a ‘digitized image of the registrant’s wet signature’ had to be available to ADOT, and the registrant had to be active and uniquely identifiable in the ADOT database. The rules specify that the concept of ‘electronically signing’ the ‘electronic registration form’ must include an acknowledgement by the registrant that all the information on the form can be transmitted to the county recorder.

Under Section 5 of the Voting Rights Act the state of Arizona must seek permission--or, "preclearance"--from the United States Department of Justice before any changes to election practices or procedures can be made. After the new regulations were adopted they were then submitted to the Department of Justice (DOJ) in April 2002 and precleared without delay in May 2002. The DOJ also approved the EZ Voter screens in English and Spanish, and subsequent changes to the screens over the years.

With legal authority, hardware, and software in place, EZ Voter was available to the public in July 2002. The application was popular with voters from the outset. (See the section on ‘Utilization’ above for more detail.) However, implementation on the administrative level was different. At first EZ Voter registrations were printed, sorted, and faxed to various county recorders by the SOS office. Once a week, the SOS staff spent half a day getting the registrations out to the counties. Sometime in 2003, the SOS office starting making the registrations into pdfs that the county recorders could download from the SOS website. Maricopa County was different from the beginning because they had already developed a way to grab data from the SOS system, and by the end of September 2002, Maricopa County Recorder’s Office was importing the EZ Voter registration data electronically into their own registration database.²⁸ This county, which contains about 58% of all registered voters in the state, saw an immediate reduction in paper work and data entry associated with EZ Voter. The other fourteen counties are still, in May 2009, downloading and printing the registration forms that are generated by EZ Voter, and then hand entering the voter information into their databases. The Secretary of State’s office intends to complete all enhancements to their VRAZ system on September 2009 including the ability of all the counties to receive EZ Voter registration data electronically.²⁹

Security and Privacy of Data

The approach to security issues with development of EZ Voter was to rely on standard protocols already in use in other state technology applications and limit data sharing to what is essential for the transactions to occur. Much of this was on the shoulders of the MVD. With the state’s most comprehensive database on the population, the MVD had experience sharing data with other agencies, courts and law enforcement, and

²⁸ For EZ Voter registrations, Maricopa receives from the state SOS office a .csv file with voter information, and a separate .tif file with corresponding images. These files are bundled, zipped and password protected before being sent.

²⁹ Update: As of January 2010, the testing of enhancements continues and the new target date for full implementation is April 2010.

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interacting with the public through web-based applications. ServiceArizona, developed by IBM, employs several security devices, including keeping electronic records locks inside an 'electronic vault,' 128-bit encryption of all data files transferred between agencies, encryption through secured socket layer (SSL) of all personal information going to and from the customer's computer, and regular and rigorous inspection and audits by IBM and MVD security experts. MVD itself has levels of oversight with security reviews by the ADOT security team and by the statewide Government Information Technology Agency (GITA). Maricopa County, because it was actually receiving data from the SOS, resolved security issues by setting up a secure encrypted VPN (on the dedicated connection it already had with the SOS) for EZ Voter data transfer to and from the SOS.

The attitude of the SOS with respect to maintaining the integrity of the registration database was that the same checks and balances that are in effect for paper-based registrations would also be in place with EZ Voter, and that there would be an improvement in the quality of the registration database because EZ Voter registrations were authenticated before being completed (unlike paper registrations). When asked if the SOS was concerned that one person might obtain other peoples' driver license numbers and register them or change their registration information, they responded simply that such fraud would be easier accomplished through use of hardcopy paper registrations. Also, when the counties did duplication checks or it came time to vote, fraudulent registrations would be discovered. In seven years this has not been detected as a problem.

To reassure voters there is the information about ServiceArizona's security features at https://servicearizona.com/webapp/evoter/show_info.do#691, which includes a description of the procedures in place by IBM such as confidential records inside an electronic vault protected by IBM Secureway, SSL encryption, security training of employees and regular security audits. In the EZ Voter 'Info' section, this security information is followed by information explaining how EZ Voter works at https://servicearizona.com/webapp/evoter/show_info.do#865. This explanation includes the statement that 'for privacy and confidentiality,' a 'partial address' only will be displayed to the user during EZ Voter registration.

County Experience

In the counties sampled, one half to two-thirds of all registrations received is from EZ Voter (either online or from the MVD office). One county commented that the percentage was not as high in election years as there were registration drives going on that generated paper forms. During off years many registrants use EZ Voter to re-register after an address change. Nevertheless this county did report an increase in EZ Voter registrations in 2008 with about half being new registrations and half being address changes. This county also tracks the source of the EZ Voter registrations and reports that about one third come from the MVD office rather than from the internet applications.

As discussed above, Maricopa County has seen a great deal of benefit from receiving electronic registrations and not needing to hand-enter data for those registrations. The other fourteen county recorder offices download the EZ voter forms off the SOS website and print them. The forms are two to a page, so the recorder staff cut the pages in half, scan the information, and enter the data. In terms of the labor of scanning and data entry this is the same as prior to July 2002 when all registrations came in on paper forms, although the absolute volume of registrations in each county has increased since EZ Voter was adopted. The printing and cutting of the pages is extra work associated with EZ Voter registrations as compared to paper registrations; however, county recorders did not report that this was a great workload burden. County recorder staff did however look forward to the electronic feed from the SOS of EZ Voter registrations and believed that would cut down on their work tremendously.

Although the data entry work is the same for EZ Voter and paper registration processing in the fourteen counties, they do benefit from the EZ Voter forms being typewritten as opposed to handwritten like the paper forms. While there is still potential for error on the part of the people doing the data entry, they have more legible visual data to input. The county recorder offices also report a difference in the content of the various ways to register. One county reports that the handwritten forms have more of the optional information completed, whereas the online registrations often skip the optional information and the driver license (MVD office) registrations actually don't collect the optional information such as place of birth, parent's name and occupation. Another county recorder's office praised the online registrations because they force the registrant to choose a party or 'none' from a dropdown menu whereas the handwritten form just has an empty box without any suggestions. The county must decide when the box is blank whether to put down 'Did Not Designate'; whereas it is unambiguous that the online registrant chose 'none.' Another difference with paper registrations and EZ Voter registrations is when the county recorder actually does a registration drive; if they collect paper registrations they have them right away, whereas if they encourage online registration they don't see the information for a few days. None of the county recorders visited reported offering laptops and online registration during their own registration drives. County-run registration efforts are often done at naturalization ceremonies, but new citizens cannot register the same day using EZ Voter, because the naturalization record has not reached the MVD at that point.

Implementation of EZ Voter has been a mixed experience for counties. One early issue was the quality of signatures that came from driver license applications, because the pens at MVD offices did not always produce legible signature images. This problem was discovered by county recorders for whom the ability to see the signature and compare to other voting materials was critical. One county reported that they had contacted many voters whose registrations came from EZ Voter and had them re-sign a form for voting purposes, and this was costly to the county. Eventually a better pen was placed

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in all MVD offices and this problem was resolved.³⁰ Another problem county recorders found early on was that when people updated their MVD records and re-registered to vote, sometimes incorrect data were sent to SOS, for example two people who registered at the same moment on ServiceArizona had their signatures switched. After the SOS was alerted by county recorders of this problem, it was fixed. One problem that persists is that if the registrant has moved and does not update their address with MVD before registering to vote or when prompted on EZ Voter, then the SOS (and county) get the old address. In this case it takes the county longer to process the registration. Another frustration for county recorders is that there is no mechanism for the county to send address corrections back to MVD for their own records. It is up to the voter to actually update their MVD address on ServiceArizona themselves. Another concern of county recorders is that ServiceArizona is vulnerable to outages, and for example, went down in January 2008 just when many Arizonans were trying to register for the Presidential Preference Primary. County recorder office staff do believe that the user interface of EZ Voter is very good and beneficial to Arizonans seeking to register and that the ServiceArizona terminals in the MVD offices provide a fast way to accomplish that as well.

In recent years, the county recorder staff experience with ServiceArizona is connected to and overshadowed by implementation of VRAZ-II. The topic of weekly conference calls is discussions about using Power Profile and implementation of enhancements related to VRAZ-II, including the eventual electronic feed of EZ Voter registrations and implementation of the HAVA Exception Interface (HEI), which involves instantaneous matching at the state level. There is concern among recorders that there is not enough testing of these enhancements with the counties and then getting their feedback, or that testing efforts have been delayed and fruitless. Five counties who were the first to adopt Power Profile formed a 'county advisory committee' to discuss implementing more uniform user policies and to support other counties as they came on board, but they encountered difficulties related to differences in county size affecting the way Power Profile works.

County recorder office staff had the following perspective on the role of EZ Voter in voter registration efforts. Registration drives conducted by outside parties almost always use paper registration forms, which are picked up at the office or delivered to the group or site. The belief among state and local election officials is that outside organizations prefer paper registrations, which after completed are left with the organization and can be copied before being forwarded to the county recorder. This

³⁰ Occasionally this county still gets illegible signatures from EZ Voter. They will still process the registration because it is not the voter's fault. And they will send a letter to the voter stating that they need a better signature in order to vote early (by mail) or sign a petition, and include a registration form to complete, sign and mail back. If the form is not mailed back, the county calls the voter to tell them there is a problem with their signature and goes through several steps before rejecting an early ballot for signature reasons. The voter can return the registration form with their early ballot. Some voters do EZ Voter again in response to the original letter and the same problem continues, so the county has to contact them again to straighten this out. If the signature on an EZ Voter registration is wrong (someone else's signature) the voter is directed to go to the motor vehicle office to correct this.

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allows follow up with the registrants during get-out-the-vote (GOTV) activities and other efforts. It also allows the advocate to track the number of registrations, which might affect how they are compensated (if paid per registration or if funding depends on numbers). If the person registers online, then the organization has no record of the number of registrations or any contact information. A discussion with advocates confirmed that they prefer paper to online registrations for these reasons.

The recorders office themselves go out to schools, fairs, supermarkets, and naturalization ceremonies to encourage and facilitate registration. None of the counties interviewed reported taking laptops to registration drives to allow online registration; however one county reported that a college student group wanted to use laptops for registration, and the county recorder office approved this but cautioned that the confirmation numbers should be written down so that any discrepancy can later be resolved. Neither the county offices (nor the state) had conducted outreach efforts to increase the use of online registration specifically among racial/ethnic minorities, such as Native Americans and Latinos.

When calls come into the local offices from Arizonans asking how to register the response is usually to ask if the person has access to the internet and a driver license or ID card and if so to suggest EZ Voter. If not, the caller is told where to find registration forms. The county recorder staff has found that it tends to be the elderly who either don't have access to a computer or do not want to register online. Many other callers are delighted to have the opportunity. The uptake of online registration is greater among high school and college students and while the county recorders tend to supply paper forms as needed to schools, they are also aware and support that online registration is encouraged among students through teachers, emails, and press releases.

According to county staff, the Native American population has very little experience with online registration. One county in the sample receives many Native American registrations completed at the MVD office, which are probably associated with driver license applications or address changes. While some tribes have a cadre of regular voters (Navajo, Havasupai), others are much less interested in voting (Hopi, Tohono O'Odham), and therefore they tend to not be actively registering. If they do register it is probably not by going online, although most tribal offices have computer terminals available. Two of the sample counties actively reach out to Native American communities using outreach workers who are originally from the reservations they visit; these visits include registering people using paper forms. These two recorder offices explained that they are the only county agency that provides services to Native Americans because their tribal governments provide all other services, and therefore they believe culturally sensitive outreach is essential.

IV: PERSPECTIVE AND DISCUSSION

Lessons Learned

State election officials report several actions that contributed to the success of the EZ Voter system as well as areas that are critical for other states to address when implementing such a program. First of all, the election agency must establish a good working relationship with the motor vehicle agency, make sure that agency has a stake in the implementation process, and make merging of the driver license and voter registration applications easy for motor vehicle front-line staff. The connection between the two agencies must go beyond what is required by the NVRA, but because HAVA matching is typically being done with the motor vehicle agency, the groundwork should be laid for a positive collaboration. One way to improve this interagency coordination is to convince the motor vehicle agency that the implementation of online voter registration will help that agency improve its own records, in particular, driver license records, mailing addresses and signatures. In the Arizona case, the ability to work this new function into the existing online services provided by the motor vehicle agency was not only easier for that agency to implement but also gave that agency a stake in the process. The success of the application reflected on MVD as well as the SOS. The fact that MVD monitors the feedback and is interested in making improvements demonstrates this well. It is also helpful if the staff at the MVD field offices are committed to implementing the program. This is more likely to happen if the online application is made easier for office staff as users. Because MVD staff can register driver license applicants by simply entering two pieces of information into the system (affirmation that the applicant wants to register and the applicant's party preference), and they have been trained to do this, their level of cooperation is high as well.

Another important partner is the group of county election officials who manage registration files. They must be on-board with the project and have the ability to provide input on planning and execution of the program. In Arizona, considerable work was done to reassure county recorders about online registration and what it would entail, including a one-time assistance in cleaning duplicates out of the files statewide. The counties must also be considered users who can detect problems with the data and help the state agencies to resolve these problems. This was the case in Arizona when the county recorders discovered the driver license signatures were not always readable, and instigated a change in the pens available in MVD offices.

Finally, it is critical to make the application user friendly for the front end users, people trying to register. Evidence that this was accomplished in Arizona is the rapid uptake of the online registration application as well as the positive feedback entered on the ServiceArizona website.

Benefits: Measured and Perceived

Arizona state officials report many benefits of EZ Voter. First of all, they boast that EZ Voter had the fastest 'adoption rate' of any e-government application in Arizona,

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because one quarter of all registrations were done on EZ Voter in its first full year (2003) and the largest increase in voter registration in any two-year period occurred between 2002 and 2004. The overwhelming positive response in terms of the number of registrations as well as the feedback from users (See section II above on the User Perspective) is also perceived as a benefit to both voters and to state and local election administration. State election officials are pleased, and consider it a benefit of the system, that the EZ Voter software has the capacity to generate reports on the number of online registration in different categories, and thus provides a tool for election administrators to measure the impact of the program on voters.

Administratively, EZ Voter makes the voter registration file cleaner, streamlines voter registration processes so that less staff are needed for data entry, cuts down on the number of paper registration forms that need to be produced and distributed, and allows county recorders to confirm registration to voters (through sending a voter registration card) in a more timely manner. In Maricopa, the only county who has been able to eliminate hand-entry of EZ Voter registration data, 240,000 registrations came over EZ Voter in 2006 and that eliminated the need for eight full time staff positions to complete data entry associate with those registrations. The calculation of costs savings is discussed in more depth below. Maricopa County has also found that EZ Voter registrations are much less likely than paper registrations to need a review because of some anomaly such as a problem address, signature or birth date. When a EZ Voter registration needs to be reviewed, it almost always has to do with the residence address.

Because of how EZ Voter is structured, voter records that originate in EZ Voter are much more accurate than paper records. In order to start an EZ Voter registration the individual must type in not only his/her driver license number but also his/her full name and birth date exactly as written in his/her driver license records; therefore, birth dates and names will be accurate. If what is typed in does not match, the user cannot continue. If the user does not have his/her driver license number, there are more items that must be entered correctly: social security number, residential street address on file with MVD, zip code, and eye color. In any case the address that is entered in an EZ Voter registration is the one on file with MVD, so it will never be incomplete. If the MVD address is incorrect, that is something that the recorder's office will discover when entering the voter registration into the local database.

Additionally, EZ Voter improves the processes of other agencies, particularly the MVD that, as a result of EZ Voter, has better addresses for all its transactions and therefore a more accurate distribution of vehicle license tax assessments, which are an important source of revenue in the state. The importance of the digitized signature for voting alerted SOS and MVD to issues impinging on the quality of the driver license signature. Working together they improved the signature through changes to MVD training, changing the pens used at the MVD offices for signing, and changes to the software used to digitize driver licenses. The SOS Office and MVD felt so strongly about the

success and benefits of EZ Voter that they sought several different awards for e-government innovation.³¹

Costs: Measured and Perceived

The start-up costs for EZ Voter were just under \$100,000, and the continuing costs are about \$125,000 per year. The initial costs were low because the infrastructure, most importantly ServiceArizona, was already in place. A server was purchased for the MVD and SOS, as well as a database license, and labor costs included project managers, business analysts and software developers. MVD used its own programming staff to design the ServiceArizona application and billed the SOS for that labor. The continuing costs include approximately \$60,000 for keeping the system operational through paying for EZ Voter jobs run on the state's mainframe (where ServiceArizona lives) and maintaining software licenses. Another \$25,000 goes to programming enhancements and another \$40,000 to outside consultants assisting the counties. Funding comes from two sources: i) general state appropriations to the SOS office and MVD and ii) federal HAVA funds for HAVA-related components of the system.

The outlays required by the state and counties for running the program are easier to measure than other potential costs, such as those that accrue to counties in terms of additional work associated with processing EZ Voter registrations or to voters who somehow lose out on registering because of problems with EZ Voter. Assessment of these costs requires some speculation. The costs to counties associated with implementation adjustments, such as the initial poor quality of signatures, have been noted but are not measured for the purposes of this study except to say these costs have been either temporary or minimal.

Another area to consider is potential costs to the electorate. Arizonan voters clearly benefit from the opportunity that EZ Voter provides, but does it also set up a situation where some voters are disadvantaged? Is it unfair that those that do not have a MVD-issued identification, especially students temporarily in the state for college or graduate school, cannot use the convenient registration system? The state estimates that less than 5% of Arizonans do not have this type of ID and are therefore relegated to only use paper forms. Also, it appears that paper registration forms and efforts to disseminate them are widespread and it is rarely the case that the internet is the only available option. Another potential harm to would-be-voters is if they think they have successfully registered on the EZ Voter system but something happens technically which delays, invalidates, or loses their registration and this would not have happened on a paper form. While crashes of the system have occurred, there is no evidence that people were unable to register explicitly because of those crashes. And again the prevalence of paper forms and the county recorders efforts to make them widely available would tend to counter any such problems.

³¹ EZ Voter was a finalist and semi-finalist in two awards, but unfortunately, not the winner in any of the four awards in which it was entered. Although the EZ Voter system met the criteria for these awards, each time the awards were given to other projects for unknown reasons.

Administrative Cost Savings: Measured

Maricopa County administrators were able to provide the following information about the substantial cost savings associated with EZ Voter:

- A paper registration costs at least \$.83 of staff time to process; whereas an EZ Voter registration takes an average of \$.033 to process; therefore every registration that comes in online save the county \$.80³²
- In 2006, Maricopa received 258,474 EZ Voter registrations, which saved the county about \$206,779.³³ At the same time, Maricopa was able to hire eight less temporary workers than they planned, resulting in a savings of \$70,400.³⁴
- In 2007, Maricopa received 219,132 EZ Voter registrations, resulting in an estimated savings of \$175,305.³⁵
- In 2008, Maricopa received 462,904 EZ Voter registrations, which meant a savings of about \$370,323 for the county.³⁶ Also, Maricopa was able to hire four less temporary workers than planned, and saved \$35,200.³⁷

Eventually the other 14 counties will receive EZ Voter registrations electronically. One of those counties received 34,370 EZ Voter registrations in the first half of 2009. Based on county estimates, if the county had received those EZ Voter registrations electronically (rather than by download of pdfs) they would have saved about \$30,933.³⁸ The other 13 counties, who all use Power Profile for their voter registration database,

³² Paper registrations take an average of five min per form and the workers are paid about \$10/hour (temp staff are paid \$10 with no benefits, permanent line staff start at \$10/hr and do have benefits); therefore, a paper registration form costs at least \$.83 each to process. Approximately, 90-95% of EZ Voter registrations that come into Maricopa County do not need to be looked at by staff so they cost \$.00 to process. 5-10% of EZ Voter registrations require a manual review taking about 1-2 minutes each. At 2 minutes each these registrations cost around \$.33 each to process. If 10% of the EZ Voter registrations cost \$.33 cents to process, then the average cost to process an EZ Voter registration is \$.033.

³³ If those EZ Voter registrations had come in paper that would have cost at least \$215,395. Assuming that 10% needed to be looked at (at 2 min each), the actual processing cost about \$8,615.80 instead, saving the county \$206,779.20

³⁴ Temporary staff worked July 1-November 30, so the calculation is 8 x 22 weeks x 40hrs/week x \$10/hr.

³⁵ If those EZ Voter registrations had come in on paper they would have cost \$182,610 to process. Assuming 10% needed to be looked at (at 2 min each), the actual processing cost around \$7304.4, saving the county \$175,305.60.

³⁶ If those EZ Voter registrations had come in on paper they would have cost \$385,753.33. Assuming 10% needed to be looked at (at 2 min each), the actual processing cost around \$15430.13, and the county saved about \$370,323.20.

³⁷ Note that the county actually received more than twice as many registrations as they planned for, but because 69% came in through EZ Voter, they were able to hire four less temporary workers than they had planned to hire to process the smaller expected number. Also, because so many registrations came in online, the county did not need to hire any temporary workers in January 2008 to process registrations for the Presidential Preference Primary in February 2008.

³⁸ This county currently pays about \$.80 a form in wages to process paper forms. With benefits added in the cost is more like \$1.00 to \$1.08 per form. Because EZ Voter registrations are printed and key punched, it cost approximately \$34,370 (wages and benefits) to process those registrations. This county plans, when they begin to receive EZ Voter registrations electronically, to look at each one to make sure the system is working. Eventually that they will (like Maricopa) need to manually process around 10% and that will be at the same rate as processing paper forms (at least \$1 per form). If they had received those electronically, and had to actually look at 10% of them (3,437) that would have cost at least \$3437 with wages and benefits, a savings of \$30,933 over actual costs.

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plan at this point to view every registration that comes in electronically on EZ Voter before they accept it into their database. In other words, they will not have any go automatically into their database like Maricopa does and won't have any that cost \$.00 to process. This is similar to the situation in Washington where the counties do look at every online registration before accepting it.

Cost-Benefit

Measuring the costs and benefits of a program like EZ Voter is not straightforward, and consequently, calculating an overall assessment is not either. Benefits clearly flow to the electorate, however administrative benefits are yet to be fully realized. Because the program was relatively inexpensive, most Arizonans would probably agree that the benefit to the voters has outweighed any monetary costs associated with the system. Therefore, the adoption of EZ Voter was clearly an improvement over the previous registration system. But most would also agree that substantial administrative savings have to occur for the program to be truly a success. The only actual savings to measure is the reduction of data entry and associated staff costs in Maricopa County. The other benefits in terms of cleaner records and streamlined processes are comforting and recognized but hardly demonstrable. When the same reduction in data entry in the other fourteen counties (collectively serving 42% of electorate) occurs during this year, substantial administrative savings will be realized and will more than outweigh any continuing maintenance costs.

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C. EXAMPLE NUMBER TWO: ONLINE VOTER REGISTRATION IN THE STATE OF WASHINGTON

I. BACKGROUND - Voter Registration in Washington

Voting-by-mail and Party Preference

Washington is relatively unique in its registration requirements for two reasons. First of all, voting in Washington in 2008 was almost entirely conducted by mail,³⁹ raising the importance of the voter's signature for election administration. When processing vote-by-mail ballots, the signature on a voter's ballot envelope must match the signature on the voter's registration; therefore, high resolution and correct registration signatures are essential to making sure every eligible vote counts. Secondly, Washington does not have registration by party, in other words, stating or changing party preference is not a function of the registration process.

Statewide Voter Registration Database

There were two mandates for a statewide registration database in Washington. In 2002, just before the passage of the Help America Vote Act (HAVA) by Congress, the Washington Legislature enacted a law requiring a statewide voter registration file. The state of Washington implemented its HAVA-compliant statewide voter registration database called 'VRDB' for 'Voter Registration Database' on time in January 2006. The system was developed 'in-house' beginning in October 2003 with three programmers employed by the Office of the Secretary of State (OSOS) Elections Division. While VRDB is located and was developed in-house, Microsoft was hired as a project contractor to consult and assist in software development.⁴⁰ The system was built using the Microsoft Application Platform, including Microsoft SQL Server® 2005 and Microsoft Visual Studio® Team System at a cost of approximately \$6 Million.

Before implementation of VRDB the state required each county to choose one of four vendors for its Election Management System (EMS) and local voter registration database software, and the state built VRDB to facilitate information exchange with those four system types (discussed in a section below). The VRDB system conducts the HAVA-required tasks, including using the Driver License and Social Security Administration databases to authenticate registrants, using death records to cancel the registration of deceased voters on a monthly basis, comparison of the VRDB with Department of Corrections records to identify felons in prison or under Department of Corrections supervision, as well as screening for duplicates registration records across counties.

³⁹ Two counties, Pierce and King, had polling place voting in 2008, but in both counties most voting is by mail. In 2009, King County implemented all mail elections.

⁴⁰ According to OSOS staff a competitive bid process was conducted for a contracting consultant which would build a system that would stay in-house, not be 'off-the-shelf,' and not be a top down system where counties would only have terminals to the state system. Because the state had these particular specifications, it only received three bids, and Microsoft submitted the winning bid.

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The WEI System:

Microsoft's contract was extended to consult and help build the Washington Election Information (WEI) system, which is also referred to by the OSOS staff as 'VRDB – Phase II' because it is a project that is built on and enhances the original VRDB.⁴¹ As with the original VRDB this system lives at the OSOS. The WEI system, as it exists currently, is a comprehensive election information technology project that encompasses VRDB, the state elections webpage, election night results reporting, 30 (of 39) county election websites,⁴² candidate filing, a personalized voter information service called MyVote,⁴³ and the online voter registration system (OLVR), which is discussed in detail below and throughout the report. Development of the WEI system started before authorizing legislation for OLVR passed, so OLVR was later added to the larger WEI project.

County Registration Databases

Election officials at the local level in Washington are the independently elected County Auditors, except in King County where the Election Director is elected separately from other County offices.⁴⁴ Before and after implementation of the VRDB, County Auditors maintained their own registration databases. The counties used a variety of software programs, but by 2005 (in preparation for implementation of VRDB) they were required to use one of four vendors for their registration database (also called their Election Management System or EMS). These four vendors were DFM Associates, Votec Corporation, Election Systems and Software (ES&S), and Premier Election Systems (which offered the registration system called 'DIMS').⁴⁵ By December 2005, all 39 counties were using one of these four vendors for their EMS systems. The ES&S 'PowerProfile' program is also in use in 13 of the 15 Arizona counties. Each county works directly with its vendor for upgrades and support of its EMS system. When a county enters or accepts registrations into its own system, the state VRDB is automatically updated as well, so there is no need to do daily batch uploads to the VRDB for that purpose.⁴⁶ While the state does the HAVA required list maintenance, each county must also do its own list maintenance, based on information sent daily from the state on such things as possible duplicates, registration transfers between counties, and cancellations due to death or felony convictions.

⁴¹ Because this project continued to use Microsoft products, the agency believed that extension of the contract with Microsoft was the only way to get the same level of expertise and service.

⁴² These 30 counties that chose to have a WEI website are counties that either didn't have a web presence or desired the improved website offered by the state. The OSOS built each to the specifications of the county, and trains the counties in how to update and customize their 'wei' sites for voter education and outreach.

⁴³ MyVote, fully launched in 2008, allows a registered voter to enter name and birth date, and then see registration status, vote history, where to drop off ballots (with map), link to all current elected officials (local-Pres), a complete voter guide including links to pictures and information on candidates up for election, and to change the voter's registration address if its within the same county.

⁴⁴ Prior to 2009 the Election Director in King County was appointed.

⁴⁵ Premier Election Systems (including the 'DIMS' product) was acquired by ES&S in September 2009.

⁴⁶ There are a few other reasons for which counties must do batch transactions with VRDB.

Paper Registrations

To register to vote in Washington the resident has several options to complete a paper form. He/she can print the 'Mail-In Voter Registration Form,' at <http://wei.secstate.wa.gov/osos/en/voterinformation/Pages/RegistertoVote.aspx> in eight different languages, have the form mailed to him/her, or pick up the form up in various places such as libraries, public schools, city halls, etc.⁴⁷ Registration forms are also provided at public agencies (as mandated under the National Voter Registration Act (NVRA) of 1993), and potential voters may complete the NVRA ('federal') form as well. Until the later part of 2009, hardcopy paper forms called 'Mail-In Voter Registration Form' were pre-addressed to the OSOS and the paper was meant be folded, sealed and mailed directly to the state. The OSOS received the forms, logged in which kind of forms they received (card stock, printed off the internet, NVRA form), and mailed them to the various counties. The County Auditors' addresses were not provided in instructions for the paper forms; however, sometimes paper forms were dropped off at or mailed to the County Auditors' offices rather than to the OSOS.⁴⁸

Registration deadlines

During 2008, the deadline to register to vote in an election in Washington State was 30 days before Election Day. Mail-in registration forms could be postmarked on or before the deadline. After the 30-day deadline passed, Washington residents who were not already registered in the state (i.e. 'new voters') could register in person (completing a paper registration form) at their County Auditors' office up to 15 days before the election. Those who were already registered in Washington and need to change their record (address, name, mailing address) must have done so on or before the 30 day deadline; however, if these voters did not update their registration by 30 days before the Election they could vote using their previous registration information. When voters mailed in registrations postmarked after the 30 day deadline, their new or changed registration became effective after that Election. The deadlines did not (and do not) apply to military and overseas voters who can submit registrations up through Election Day and still vote in that election.⁴⁹

Online Voter Registration:

As of Jan 7, 2008, Washington residents with a Washington Driver License or state ID card can register to vote completely online by going to <https://wei.secstate.wa.gov/osos/secure/Pages/OnlineVoterRegistration.aspx> and

⁴⁷ The online 'Mail-In' Form is not 'fill-able' online, so it must be printed and then completed by hand.

⁴⁸ This paragraph describes the process in place in 2008. The OSOS redesigned the 'mail-in registration form' in 2009. Currently, voters are directed to submit the form to their county elections offices, and each county's address is printed on the form. See the new form at:

<http://wei.secstate.wa.gov/osos/en/voterinformation/Documents/WAVRFSept2009.pdf>

⁴⁹ This paragraph describes the deadlines which were in effect in 2008. In 2009, the Legislature enacted and implemented a law that moved the deadlines closer to Election Day. Instead of 30 days before the election, WA voters now have 29 days before Election Day to complete a standard registration, and 8 days (rather than 15) for new WA registrants to register in-person.

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completing the process as described in Table 4.⁵⁰ (See Appendix B for a screen shot of the OLVR portal.) State election officials call this website and application 'OLVR' or 'Oliver,' but that is not a label used with the public like 'EZ Voter' in Arizona. Table 4 shows the progression of the user through the system if there are no errors made or problems with the registration, and if the individual is registering for the first time in Washington. Table 5 shows various warnings if the individual is already registered in Washington or if there are any errors or eligibility problems. One section on Washington's paper form but not on OLVR is a place to complete a previous registration name, address and signature.⁵¹

There are six major ways that OLVR compares with EZ Voter: 1) With OLVR there is a security number image that must be entered on the third screen (Step 2 where the first personal information is entered) which EZ Voter does not have; 2) there is no opportunity to enter feedback in OLVR as there is with EZ Voter; 3) there is no indication on OLVR of registration address already on record, whereas EZ Voter shows a partial address; 4) OLVR is not integrated with web-based motor vehicle applications (as in Arizona), so a change of driver license address entered online does not get communicated to the OSOS; 5) there is no confirmation number provided at the end of an OLVR registration which can be used to track the transaction, as there is on EZ Voter. 6) Washington's OSOS put up a warning message (described below) on OLVR after the online registration deadline for the November 2008 Election, and Arizona did not do the same on EZ Voter.

Registrations conducted on OLVR are received electronically at the OSOS Elections Division, where, depending on each county's capability, the information is either sent electronically to counties or OSOS staff print, sort, and mail forms to the counties. If the county is not yet receiving electronic registrations, the OSOS prints forms that look just like the mail-in paper form but instead of handwritten entries are completed with the OLVR registration information printed on the form. Counties that receive the OLVR registrations electronically get the information in a different looking format. In both cases, there is a signature image which has been taken from the state's driver license database.⁵² Whether received electronically or not, counties go through the same process of checking and accepting each registration; the main difference with processing electronic (compared to paper) registrations is that the counties do not have to type the data into their system or scan the signature. Eventually all OLVR registrations will be sent electronically to all counties reducing paper handling at the state level and paper handling, data entry, and other errors at the county level.⁵³

⁵⁰ In order to obtain a DL or ID card the WA resident must have appeared in person at the DL field office, so all users of this system have been authenticated in person by a state employee.

⁵¹ The OSOS will be adding this to OLVR in 2010 to facilitate cancellations of old registrations, but the resolution process conducted by the counties when a change of county comes in through OLVR takes care of cancellations.

⁵² Update: As of January 2010, all WA counties are receiving OLVR registrations electronically.

⁵³ Update: As of January 2010, all WA counties are receiving OLVR registrations electronically.

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Table 4: OLVR Process for Individual Registering in Washington for the First Time

Screen Title and Content	Action
<p>Screen 1: (no title) Explanation of Process and Selection of a Language</p> <ul style="list-style-type: none"> • Explains that user must have DL or state ID card to register online; if user does not have these documents, tells user to register on paper and click [here] for form • States that to change name on existing registration must use paper and click [here] for form • States that registration deadline is 30 days before election • Lists four steps of process (see below) • Asks to select a language 	<ul style="list-style-type: none"> • Choose English, Spanish or Chinese • Continue
<p>Screen 2: ‘Step 1 of 4 – Verify Voting Eligibility’</p> <ul style="list-style-type: none"> • Provides warning about providing false information • Asks to verify eligibility by answering four questions 	<ul style="list-style-type: none"> • Answer four eligibility questions correctly • Continue
<p>Screen 3: ‘Step 2 of 4 – Enter Identification Information’</p> <ul style="list-style-type: none"> • Restates that user must have a DL or state ID card to register online or otherwise must register on paper and click [here] for form • States that information entered in fields must match exactly the information printed on user’s DL or ID • Explains that typing number in image ensures that a person, not an automated program, is registering to vote • Six fields to complete including the recopying of the number image 	<ul style="list-style-type: none"> • Complete First and Last Name, DL or ID #, DOB, and Residential Zip Code • Enter 6 numbers see in image • Continue
<p>Screen 4: ‘Step 3 of 4 - Enter Personal Information’</p> <ul style="list-style-type: none"> • Shows name, DOB, Zip (not DOL#) entered in Step 2 at top of page 	<ul style="list-style-type: none"> • Complete several fields, four of which are required (Gender, Residential Address, City (drop down list) and County (drop down list))

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<ul style="list-style-type: none"> • Several fields to complete, four with asterisk denoting 'required field' • Provides 'Voter Declaration' text to read and confirm 	<ul style="list-style-type: none"> • Read Voter Declaration and check two boxes (one to affirm information is correct and not fraudulently submitting registration application, and one to authorize the OSOS to use DL signature for voter registration purposes)
<p>Screen 5: 'Step 4 of 4 – Confirm Personal Information'</p> <ul style="list-style-type: none"> • Displays and asks user to review all information entered so far including eligibility statements 	<ul style="list-style-type: none"> • Review all information on page • Click 'Edit' or 'Register'
<p>Screen 6: 'Step 4 of 4 – Confirm Personal Information'</p> <ul style="list-style-type: none"> • Thank you and notice to allow 10-14 days for registration to be processed and to check MyVote after 14 days • Presents information as on Screen 5 in a printable version 	<ul style="list-style-type: none"> • Option to print or close window

Table 5: Warning Screens

Screen and Warning Content	Action
<ul style="list-style-type: none"> If already registered to vote in Washington 	
<p>Screen 3: ‘You may already be registered to vote in Washington State. If you want to check your current registration status, please visit our MyVote page by clicking the Check MyVote button below. If you are moving from one county to another county within Washington State, please click on the Ignore Warning button below and proceed with this Online Voter Registration process. If you do not want to continue with this process, please click on the Close Window button.’</p>	<ul style="list-style-type: none"> Click ‘Check MyVote,’ ‘Ignore Warning,’ or ‘Close Window’ button
<ul style="list-style-type: none"> If answered four eligibility questions incorrectly 	
<p>Screen 3: ‘Based on your answers to the questions you are currently ineligible to vote. In order to protect your personal information this window should be closed.’</p>	<ul style="list-style-type: none"> Close Window OR Hit Back Button and correctly answer four eligibility questions
<ul style="list-style-type: none"> If entered birth date that makes user under 17 years old 	
<p>Screen 4: Next to Birth Date ‘You must be at least 18 years old to vote in an election. Washington State does not accept registration applications unless the person is at least 17 years old. Please register when you are at least 17 and eligible</p>	<ul style="list-style-type: none"> Close Window
<ul style="list-style-type: none"> If entered birth date that makes user 17 years old 	
<p>Screen 4: Bottom of Screen ‘We welcome your application and will forward it to your county. However your birth date indicates that you are not 18 years old at this time. As you will be committing a felony if you vote before you will be 18 by the day of the election, the county will not process your application until you are eligible’</p>	<ul style="list-style-type: none"> Close Window OR Ignore Warning and keep going.
<ul style="list-style-type: none"> If entered information that conflicts with information on DL or ID card 	
<p>Screen 4: ‘First name doesn’t match your driver license or ID card record’</p>	<ul style="list-style-type: none"> Action Required: <ul style="list-style-type: none"> Re-enter information correctly and type in new security number

Registration after 30 day deadline on OLVR

After the 30 day registration deadline ended for the November 2008 election, users who went onto OLVR were given a warning that they could no longer register or re-register online for the November election:

'WARNING

The deadline for registering or transferring your voter registration is midnight, October 4, 2008. If you register online after October 4 your registration will not become effective until after the election and you will not appear as a registered voter in MyVote until at least three weeks after Election Day. If you are not already registered to vote in Washington and you miss the October 4 deadline, you can register in person at your county elections department as late as October 20. Military personnel and voters living outside of the United States are exempt from these deadlines.'

Voter Identification Card

All registrants, regardless of method of registration, receive a voter identification card from their County Auditors' offices within 45 days of registering. This card lists the voter's name and residential address, registration date and card issue date, precinct number, and districts in which the voter is eligible to vote, and generally provides acknowledgement of registration. After registering through OLVR, this card is the confirmation that the registration was approved and accepted. For Washington residents voting at the polls (in Pierce and King County only during 2008), the voter ID card could be used for identification purposes (one ID was required), but the voter ID card itself was not mandatory to show at the polls.

My Vote:

MyVote is a personalized voter information service launched by the OSOS around the same time as OLVR. It is the public part of the bigger WEI project. A registered Washington voter enters name and birth date in MyVote, and is directed to a long page showing registration status, voting history, where to drop off ballots (with map), link to all current elected officials (from local to federal), and a complete voter guide including links to photos and information on candidates up for election. Once in a voter's personalized record there is an opportunity to change an address for those who recently moved *within* a county; however, the personalized information does not include the current registration address on record.⁵⁴ An early version of MyVote was first up and running in August 2007, and then on January 1, 2008, an enhanced version of MyVote was launched 'quietly' with no publicity; the OSOS simply put an icon up on their website. On August 4, 2008, Secretary of State Sam Reed issued a press release to

⁵⁴ A user of MyVote may want to see the address 'on record' in order to determine if it needs to be changed, but the OSOS did not put this feature on the system in order to protect the privacy of voters. This is especially critical in the case of domestic violence where a residence address should not be accessible by knowing a person's name and birth date. The OSOS reports that there will be a way to see current registration address on MyVote with changes to be implemented in 2010.

encourage registered voters to use MyVote in preparation for their statewide primary on August 19.

Voter's Change of Address

Voters who move within a county do not need to re-register but simply notify the County Auditors' office of the change in residence.⁵⁵ This can be done by phone, email, fax, in person, or on the MyVote system. Those who go into OLVR and are already registered will be directed to MyVote to change their address. Voters who move between counties must re-register either on paper or through OLVR.⁵⁶ If a voter who moves between counties re-registers on OLVR, he/she does not enter his/her previous address in order to facilitate cancellation of that registration. Instead the out-of-date registration will be cancelled when the new registration is identified as a duplicate by the new county, and the former county is notified that the individual has re-registered in another county. The VRDB system, as it interacts with the county systems, continuously identifies when a new registration (on paper or OLVR) is a duplicate of an existing registration in another county, and flags that registration for the previous county of residence.

Registrations at Driver License Field Offices

Driver licenses in Washington State are issued by the 'Department of Licensing' or DOL. Up through the first three weeks of OLVR implementation (January 7-27, 2008), Washington residents who were renewing driver licenses (at their local DOL Office) could register to vote by completing a separate voter registration form.⁵⁷ The DOL staff would also type this information into their database and would forward the paper and the electronic information to the OSOS. Starting in the fourth week of OLVR, DOL staff could register driver license applicants much more simply. They explain the eligibility requirements for registering to vote and then ask the customer if he/she wants to register to vote; if he/she says 'yes' the DOL clerk clicks one button, which automatically populates a registration form with data and the signature from that person's driver license. That form is then sent electronically to the OSOS. The OSOS calls this 'paper-less Motor Voter' registration. The main difference between this and OLVR registrations is that the personal data comes from the driver license rather than what the registrant enters on the OLVR website.

⁵⁵ The same applies to those voters who do not move but want to update a mailing address. The OSOS reports that this will be changing in 2010.

⁵⁶ If the voter who has moved between counties tries changing their address on MyVote instead of re-registering on OLVR, the MyVote system will take it but then the OSOS will contact the county and the county will send a new registration form to the voter and the process will take much longer than if the voter had just re-registered on OLVR.

⁵⁷ Washington residents must appear in person to get their first driver license, and along with requisite tests and completing an application, must prove their residency in WA, their identity, provide a SSN, and have a photo taken. A WA driver license must be renewed every five years, and under certain conditions that can be done online at <https://fortress.wa.gov/dol/olr/>, but otherwise must be done at a driver licensing office. Replacing lost or stolen licenses is the same, with online replacement available under some circumstances, and an office visit in others.

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If a voter goes to a DOL office to change some piece of information such as name or address, the voter must either answer 'yes' to registering to vote or specifically request that his/her voter registration information be updated. A change in driver license or vehicle registration records is not automatically sent to the Elections Division without this verbal exchange. While DOL sends updated information upon request to the Elections Division, the opposite is not true, that is, the Elections Division does not send information updates (through OLVR, My Vote, etc) to the DOL for update of driver or vehicle records.

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II – THE USER PERSPECTIVE: Voters and OLVR

Utilization

The following Table shows the statistics on registrations (either new or re-registrations) that came through the OSOS each month in 2008. All electronic registrations come through the OSOS, and many of the paper registrations also come through that office as the mail-in form was pre-addressed to the OSOS. However, paper registration forms are completed and left at the County Auditor’s office (especially during the 29-15 days before an Election) and also dropped off at those offices (especially from registration drives). Paper forms that are dropped off at the County Auditors’ offices do not go through the OSOS, and therefore are not reflected in the numbers below. This includes the new registrations completed at the county offices on the 29-15 days before an election. In order to be able to vote in that election, registrations had to be completed at the County Auditor’s office and therefore were not mailed to the state. Those registrations are of course reflected in the VRDB as active registrations once the counties accept and enter them. Table 6 figures are unrelated to the number of registered voters at anyone time, but simply show registration activity that the OSOS tracks. The last column over-estimates the ‘market share’ of registrations done electronically in the state, but the 40% to 84% that came through the OSOS electronically is still remarkable.

Table 6: OLVR Registrations by Month

Month ⁵⁸	OLVR Website	DOL Office – Paperless	Total Electronic Registrations	Paper Registrations Through OSOS ⁵⁹	Total Registrations Through OSOS	% Registrations submitted to OSOS electronically
Jan-08	17,999	2,276	20,275	30,163	50,438	40%
Feb-08	20,261	11,116	31,377	28,759	60,136	52%
Mar-08	3,566	11,909	15,475	14,816	30,291	51%
Apr-08	3,321	11,830	15,151	9,482	24,633	62%
May-08	4,013	14,839	18,852	20,205	39,057	48%
Jun-08	3,657	13,475	17,132	15,999	33,131	52%
Jul-08	6,515	17,796	24,311	18,312	42,623	57%
Aug-08	12,459	17,178	29,637	18,804	48,441	61%
Sep-08	22,125	18,722	40,847	49,911	90,758	45%
Oct-08	62,909	15,628	78,537	54,951	133,488	59%
Nov-08	802	10,513	11,315	3,922	15,237	74%
Dec-08	659	11,927	12,586	2,429	15,015	84%
Total	158,286	157,209	315,495	267,753	583,248	54%

The uptake of OLVR in the state of Washington was almost immediate as can be seen in Table 6 and in the weekly totals (not shown). During the first four weeks that the system was available, nearly 18,000 residents either registered or re-registered using OLVR.

⁵⁸ The OSOS tallied these numbers by week. The monthly figures are approximate, including the first partial week and last full week in each month.

⁵⁹ Paper registrations that go directly to the county are not reflected in these numbers.

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The first peak was in the fifth week of the system (February 1-7), when 12,724 registrations came through. The deadline to register online for Washington's February 19 Presidential Primary was Jan 19, so many of these registrations were probably those who were motivated by the upcoming primary to register, but, in fact, were establishing their registration for later elections. Paper registrations being recorded at the state level peaked during the week of February 11-15, probably also reflecting last minute registrations, which served to prepare those voters for elections later in the year.

The statewide primary was August 19, 2008, making the deadline for online registration and registration changes July 19. The weekly online registrations peaked during the August 1-7 week, and there was a slight peak in paper registrations coming to OSOS during July 21-25. Just after the actual election, starting Aug 22, both sources of registrations started climbing heavily in preparation for the November election. While many of these were new registrations, its possible that when voting in the primary voters learned what was incorrect in their registration record and many of these were also re-registrations. The online registrations peaked at 35,295 during the period September 26 through October 2, all of which made the October 4 deadline in time to vote in the November 4 Election. During the next seven day period, Oct 3-9, the OLVR registrations were down by one third but still high at 21,259. The weekly OLVR figures then drop substantially to under 2,000 and jump again October 24-20 to 3,420 before dropping to under 250 per week for the rest of the year. The state was still getting more and more paper forms through October 6-10 (just a little too late to vote November 4), but then even the paper forms coming in dropped substantially after October 10.

Usability

Because there is no comment form to complete at the end of registering online in Washington, there is no equivalent to the feedback analyzed in the previous section about EZVoter. As part of this overall study (see Section A of this report), a survey was conducted of a random sample of Washingtonians who registered online, and one opened-ended question collected feedback very similar to the online feedback on EZVoter. Just over 1000 online registrants completed the survey in October 2008, just before the November General Election. Of those, 416 respondents answered the question "Given your experience with Online Voter Registration, is there anything you would like to see changed to make the process more effective?" Just over 25% of these said simply 'no, nothing,' and another 22% said some form of 'no, it worked fine/great' or 'don't change a thing.' An additional fourteen respondents simply asked that the system be publicized more widely and another eighteen suggested expanding access to the system so more people, especially disadvantaged groups, could register. Just under 9% (36) of those answering the question reported that they had major problems registering online, including sixteen problems with moving between counties, eleven whose registrations did not go through as they should have, two who were registered twice as a result of a name change, and seven who complained that the system was either down or not working which required them to come back to it several times before it worked.

Almost 24% (98) respondents gave suggestions for improvement, including the 32 who recommended more outreach and access. Thirty respondents suggested that there be some kind of confirmation notice after registering online, most often an email that the registration was processed, but some suggesting simply an email or confirmation notice that the system accepted the application. One respondent suggested a confirmation number appear on the last screen to track the transaction, which is, interestingly, a feature of EZVoter. Twelve respondents requested a shorter processing time (than the '10-14 days' quoted on the site) to help avoid the anxiety over whether or not one is actually registered. Thirteen others gave suggestions on improving the web interface, including better instructions and navigation. Another 12.5% (52) expressed concern about the security of the site and the potential for fraud. Of these 28 were general fears about security and specific fears about the privacy of data, including two complaining that their email addresses were given out for the survey. Another 24 were specific concerns about the potential for fraud and most of these related to fear about non-citizens registering to vote through the system. About 9% of the responses were not about the online registration system but were other comments about voting-by-mail, tabulating votes, politics in Washington, the survey itself, and online voting (another topic of the survey).

Accessibility, Diversity, and Community Groups

The state of Washington has eight counties that are considered urban, six around the Seattle, Tacoma, and Olympia area (King, Snohomish, Pierce, Thurston, Island and Kitsap), Spokane on the eastern border and Clark on the south border near Portland, Oregon. According to this breakdown using 2006 population estimates, the other 31 'rural' counties are defined that way because they each have a population density less than 100 persons/square mile.⁶⁰ Large portions of the state, including the swath of mountains east of Seattle and the northeast corner, are National Parks, Forests, and Wildlife Ranges. Indian reservations are scattered around the western waterfront areas of the state and east of that there are two very large ones, one in the northeast (Colville Reservation) and one in the south central part of the state (Yakima Reservation), and a medium size one just outside of Spokane (Spokane Reservation). The rest of the rural areas are primarily agricultural, especially the southeast section of the state. The availability of broadband internet access to the public basically follows this schema,⁶¹ with large clusters in the urban/suburban areas, scattered clusters across the southeast border and across the middle between Seattle and Spokane, and very little broadband access in the north east corner of the state.

There is a variety of ethnic groups in the state of Washington. In 2000, about 7.5% of the state was Latino, 5% was Asian, 3% was African-American, and 1% was American Indian. The counties of King, Pierce and Snohomish made up 51% of the total state

⁶⁰ <http://www.workforceexplorer.com/article.asp?articleId=8989&PAGEID=&SUBID=>

⁶¹ <http://www.dslreports.com/gmaps/dslr>

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population, and the 36 other counties had less than 10% of the population each. King County itself was 29% of the population with over 1.7 Million residents, and consequently had the largest populations subgroups, including over 95,000 Latinos, over 91,000 African-Americans, over 14,000 American Indians and over 186,000 Asians. The large Chinese community in Seattle earned King County Section 203 coverage (under the Voting Rights Act) for Chinese. While King County has the largest Latino population, several rural counties in the center of the state have the largest proportion of their populations that is Latino, with almost 50% in Adams and Franklin Counties, and almost 36% in Yakima County. Adams, Franklin and Yakima Counties are covered under Section 203 for Spanish. Although the largest American Indian population is in King County, the Indian population is most densely concentrated in two counties on the northern border with Canada (Ferry and Okanogan) and is 3-5% of the other counties bordering Canada (Whatcom, Stevens, and Pend Orielle) and 3-5% of some of the coastal counties (Clallam, Gray's Harbor, and Mason) as well as Yakima and Klickitat in the south.

It is unclear how useful online registration is to the various ethnic groups or hard-to-reach populations in Washington. The most activity in terms of registering a more diverse electorate in Washington occurs in Seattle and other areas around Puget Sound. Early on during the implementation of OLVR, one advocacy organization asked the OSOS about assisting people to register by querying them over the telephone and typing their information into the OLVR program for them. The idea was this would be especially helpful to those who were homebound and without computers. The OSOS response was that assistance with OLVR should allow at least the ability of the registrant being assisted to see and approve the information entered on the screen and therefore phone assistance could not meet that standard.⁶² Discussions with advocacy groups and election officials confirmed that voter registration drives were typically conducted using paper forms that the group can use to track people and later get them to turnout and vote. The exception to this preference for paper might be registration drives on college campuses. One advocate noted that assisting registrants at a computer would be ideal for the situation where a public service provider, such as a social worker, was meeting with a client and therefore the client could see the information on the screen. It unclear if this idea has been presented to or is feasible for various 'NVRA' agencies, which typically provide paper registration, forms to their clients. Although OLVR can be completed in three languages (English, Spanish, and Chinese, state and local election officials have not conducted outreach about OLVR targeted to minority groups.

At one Indian Reservation north of Seattle, efforts to register tribe members were heating up in the fall of 2008; however, using the internet was not a focus of this initiative. A journalist covering this effort reported that the topic of online voter registration never came up in his research and he believes there is still a great digital

⁶² Note that this act of registering the person over the phone is different from talking a registrant, who is on the internet him/herself, through the process while on the phone with him/her. If the applicant is on the internet rather than the assistant, phone assistance is perfectly acceptable and encouraged among local election offices.

divide between reservation residents and urban residents. Later a representative of a local 'Native Vote' advocacy group reported,

'We did most of our registrations the old-fashioned way: asking voters to fill out paper applications at door-to-door, community events, and pow-wows. We had volunteers then drop off the applications. We had a Rock-the-Vote on-line registration widget on our website but we actually didn't get a lot of registrations that way. We think we could improve that with some new mobile router technology and a few more laptops that we could set up at events.'

III - THE ADMINISTRATIVE PERSPECTIVE: Implementation and Operation of OLVR

PROCESS

Timeline/History – key implementation events

Sam Reed was first elected as Washington's Secretary of State in 2000, and has since been re-elected twice. Before that Sam Reed had been elected Thurston County Auditor for five terms and served as Assistant Secretary of State under two different Secretaries, so he came to the office with a background in election administration. One of Secretary Reed's major goals has been to increase the use of technology, and in particular the internet, to improve the state's voting processes, and to be on the forefront of election-related internet applications in the country. One example of this is the Washington Election Information project (described in Section I), which is a comprehensive set of election technology applications for all users of the system, including state and local election officials, candidates, news media reporting results, and voters. Washington state was going to be a participant in the SERVE internet voting project slated for military and overseas voters in the 2004 election, but that project was cancelled in response to security concerns raised by computer security experts.

Even before HAVA was enacted at the federal level, Secretary Reed successfully proposed legislation (enacted in early 2002) to create a statewide voter registration database. After the contested 2004 gubernatorial race, Secretary Reed focused on implementing the statewide registration database and other reforms to prevent fraud and improve voting processes across the state. The Washington Legislature meets for longer 105 day sessions in the odd years and the 2005 session was consumed with election reform measures. In the shorter (60 day) 2006 session, Secretary Reed proposed online voter registration (patterned after Arizona's system), but the timing was not yet right for this legislation and it failed after its first hearing.⁶³ Reed's office tried again in 2007 and was successful in enacting HB 1528 which authorized 'electronic

⁶³ The Democratic chair of one committee said about Reed's proposals for 2006 'this is a very ambitious agenda, we're going to have to go slow' citing, in particular, public skepticism of electronic voting issues. [KOMU News Dec 14, 2005]

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voter registration' as soon as January 1, 2008. Governor Gregoire signed HB 1528 on April 21, 2007.

The OSOS arguments in favor of the legislation included 1) that the system would be secure because driver licenses must be obtained in person and require applicants to produce more identifying information than voter registration; 2) it would make registration easier for military and overseas citizens, students, and people with disabilities, and 3) it would decrease paper, increase efficiency, and save costs for the state and local election agencies. In both 2006 and 2007 the Washington Student Lobby testified for the legislation explaining how students move often and are accustomed to doing tasks on the internet so online registration would be very helpful to them. According to the OSOS, the County Auditors' association was supportive of the legislation once they learned that it would save them time and money in processing registrations. In addition, the OSOS had support from the Federal Voting Assistance Program (FVAP) which is the Department of Defense agency responsible for improving the ability of military and overseas citizens to vote. The Evergreen Freedom Foundation (EFF), a conservative group that advocates tightening voter registration rules, testified against the bill in 2006, citing security concerns. EFF's concern was that because non-citizens can obtain driver licenses, OLVR would allow them to register to vote as well. At the time EFF and WA Senate Republicans were advocating 100% re-registration of everyone in WA state and requiring proof of citizenship at registration. As far as the records show, there was no organized opposition to the legislation in either year from left-leaning voting verification activists. The Washington House overwhelmingly passed the legislation in 2007 (91-6), but the Washington Senate split along party lines (30-17) with the Republican minority opposed.⁶⁴

HB 1528 did not mandate implementation on January 1, 2008, but the OSOS was determined to launch the system in time for the critical 2008 elections, the first one being a Presidential Primary on Feb 19 with a registration deadline of Jan 19. The enactment of legislation on April 21, 2007 allowed just a little over eight months to achieve this ambitious task. The first four months (May through August) were spent negotiating with the four EMS vendors for the programming needed to allow receipt of the electronic registrations into county systems; it was not until September that all four contracts were finalized.

EMS Vendors

Much to the frustration of the OSOS, the four EMS vendors took varying amounts of time to complete the work specified in these contracts. Reportedly the specifications for this work were nothing out of the ordinary. The OSOS had no particular leverage to force the vendors to meet the deadlines, and monitoring was done through weekly conference calls with each vendor. DFM and Votec were the first to deliver to the

⁶⁴ The only vocalized reason to oppose this legislation on the Republican side was 'security' concerns. [KOMO News Dec 14, 2005]

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counties, and starting in January 2008 some of the DFM and Votec counties were able to receive electronic registrations. These two companies rolled out their product to various counties over the first few months, learning from the first 'test' counties as they went along. Premier had a product early on that it tested in one county in January 2008, but that product failed and it started over in June 2008 and encountered similar problems. By September 2008 Premier had worked out most of these bugs and most of its counties were online. ES&S was the slowest to develop a product and only began testing it in one county in September 2008. Regardless of the relationship with the EMS vendors, none of the counties were able to get the OLVR registrations electronically during the first week the system came online for voters. Therefore the OSOS printed, sorted and mailed to the counties all the early registrations that came through. This was a substantial undertaking because even without publication, registration transactions on OLVR started at about 30 per hour.

Negotiations with the vendors and the subsequent efforts to get delivery on the vendors' products were the most difficult parts of implementation from the point of view of the OSOS staff. The other components, working with the Department of Licensing and with Microsoft were relatively easy. Microsoft's role in OLVR was simply a continuation of work they have been doing developing the VRDB and WEI systems and collaborating with OSOS and DOL.

Collaborating with DOL

The collaboration with DOL began in July 2007 and was guided by a Memorandum of Understanding between the two agencies. The DOL labeled implementation of HB 1528 the "Electronic Voter Registration Project" (EVR), assigned ten employees to have a role in the project, and wrote a project management plan that gave a deadline of October 22, 2007 to complete the programming. DOL used their standard project management methodology, which includes various phases: initiation, planning, analysis, design, development, user testing, implementation and closeout. During all phases the DOL project team met weekly with the OSOS team, testing proceeded well, and the work was completed on schedule in October 2007.

In terms of scope and workload, the DOL already had a 'HAVA web service' for OSOS, in other words, a system whereby OSOS could do HAVA matching with DOL data. The addition of authentication for OLVR registrations and transmission of the signature images was built as an enhancement of this existing service, which limited the magnitude of the EVR project for DOL. According to both OSOS and DOL, the implementation of OLVR also dramatically improved 'Motor-Voter' registrations at the driver licensing offices, because it made those applications paperless and therefore eliminated the loss of voter registrations conducted at those offices.

A major DOL project being implemented around the same time, the 'Enhanced Driver License (EDL),' also made the Electronic Voter Registration (EVR) project easier for DOL.

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The EDL substitutes for a passport when Washingtonians cross the border into Canada, because the US immigration agents can scan the EDL and access the DOL system to authenticate the person. DOL contracts to a firm called 'Digimarc' to produce all driver licenses, and in order to do so sends all images, including the signature, to Digimarc. To implement the EDL project, DOL had to request images back from Digimarc, so that laid the groundwork to ask Digimarc for the signature images for the EVR project. If EDL has not come first, there might have been a cost for getting the signatures from Digimarc.

Washington's Approach to Security and Privacy Concerns

Washington's first advantage in the security area was that OSOS staff could query Arizona about security measures. Arizona's success with security was apparently reassuring to Legislators when HB 1528 was being considered. Like Arizona, Washington built upon the existing security of the state data systems. Voter registration data and driver license data are all on a state network (operated by the state Department of Information Services) that is actually named 'the fortress.' All data sent across the network is encrypted, and the network functions almost like a dedicated line, using 'service to service' communication. In the case of the HAVA web service set up on the DOL server, the firewall only allows OSOS staff who have the proper IP address, user name and password, to authenticate into and access the service. The web service is also SSL-encrypted. The OSOS and DOL teams reportedly spent a considerable amount of time on these security issues and the DOL not only made sure that its data grabbed by OSOS was safe but also wrote into the interagency agreement (MOU) the responsibility of the OSOS in keeping that data safe. Also, the DOL data used by OSOS is copied into a mirror data center that can be used in an emergency if the web is down, and the DOL keeps a record of all requests by OSOS for data. During development of the software by DOL, there were three levels of security reviews conducted by internal and external security experts.

The user interface on OLVR, developed by OSOS and Microsoft, has standard web security measures as well; it is SSL-encrypted and is tested against a robot. The user interacts with their own record only and has no access to the actual OSOS or DOL databases. At first the user must type in the security number that appears in order to stop automated interactions with the system. Then the system sends an inquiry from OSOS to DOL to check the users entered driver license number against the DOL Driver License Number database; if its not found the DOL system sends an error message to OSOS which is seen by the user. The DOL system also checks (in another database) for a signature on file, and if that is on file the DOL sends the OSOS the signature, name, birth date and residence address on file. If the DOL information is validated, found and sent to the OSOS system, the system then checks the VRDB to see if the individual is already registered and if he/she is registered the user is notified of that. If the user continues with and submits the registration or re-registration the system then checks if the information provided is entered correctly (against the DOL data), and if correct it submits this registration to a queue for automated processing. Before submitting the registration the user has checked a box declaring not only that he/she is eligible to vote

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and has entered correct information, but also that he/she allows the transfer of the driver license signature to the OSOS for voting purposes. The user is able to print a confirmation of the information entered.

The OSOS answers security concerns in the Frequently Asked Questions for online voter registration at http://www.secstate.wa.gov/elections/online_reg_faq.aspx. In addition to discussing the standard ('used by banks and retailers') encryption technology used and the randomly generated security number that must be entered, the FAQs state 'Since only people who have a driver's license or state ID card can register to vote online, each applicant will have personally stood before a state employee, presented proper documentation, and had their pictures taken.' This is the same reasoning used when the OSOS successfully advocated the legislation authorizing online voter registration; in other words, all online registrants will have gone through more of an identity check based on obtaining a driver license or state ID card than if they simply registered to vote on paper.

The OSOS also tries to protect the privacy of registration data. In both OLVR and MyVote the registration address already on record is not displayed to the user because of concerns that this might violate the privacy of the user to have the actual database record available on the screen. In OLVR the user simply sees the information that he/she has entered.

Finally, the concern has been raised in Washington, as in Arizona, that third parties who obtain another person's driver license number may fraudulently register or re-register that person at a different address. The OSOS response to this was the same as in Arizona. It is just as easy if not easier to do that with paper registrations and if registrations were incorrectly changed by third parties this would be detected at the county level or when the individual tried to vote. Because Washington voting is almost entirely conducted by mail in which signatures on ballot envelopes are matched to registration records, it would be almost impossible to fraudulently register someone through OLVR, then vote for them and sign the envelope with a matching signature. In fact, by grabbing the driver license signature, OLVR registrations prevent the possibility of placing fraudulent but matching signatures on both a registration form and ballot envelope. By checking a box on the OLVR form, an individual declares 'under penalty of perjury' that the information is correct information about himself/herself and his/her driver license or identification card signature can be released for voting purposes. Consequently, it would be illegal to complete this for another person, even *with* that person's permission.

County Experience

Five counties were visited in Washington, one representing each of the four EMS vendors and also King County, the largest and most diverse county. Since September 2008, all sample counties, with the exception of King County, have been 'online' with OLVR, meaning that they receive OLVR registrations electronically.

As discussed above, implementation was easiest with Votec and DFM and hardest with Premier (DIMS) and ES&S. Partly this was because Votec and DFM asked their county clients for input as they developed their products and also provided substantial support (visits, phone calls, training) as needed during the transition. Premier and ES&S reportedly did not get input from their county clients before developing their products, and support was sparsely available. During 2008, each vendor participated in user group conference calls every other week with its county clients and the OSOS. The main topic of these calls was issues related to the VRDB and larger WEI system, including implementation of various components including MyVote and OLVR. The calls were an opportunity for counties to discuss problems and ask questions and generally share their concerns. Another opportunity for county input into general IT activities (regardless of vendor) at the OSOS was a 'Technical Advisory Committee' of county election staff that was formed during implementation of VRDB and re-activated by the OSOS in August 2008.

The ES&S product took the longest to develop and test. One of the counties using the ES&S program (Power Profile) was getting electronic registrations in September 2008 on a test basis. This county actually started pulling in some registration records in August, but there were still problems and they restarted in September. This county planned to work with and train the other ES&S counties as they began implementation.

Premier (DIMS) had a program to receive OLVR registrations when OLVR started in January but it did not work in one of the test counties. After attempts in other counties, this test county got back on in June and still found many of the same bugs as in January; however, this county persevered and was able to work around and resolve many of the problems. Other Premier counties slowly came online, but not all are yet online. Some of the problems this test county found were DOL signatures that did not appear on the electronic records received by the county and incomplete addresses transferred into the records. Depending on how the registrant might have typed in the address, it might not appear correctly on the record the county received and also the DIMS record sometime dropped numbers if the street number was longer than two digits. In one county there are complex directionals (E, W, SE) in the address and this was difficult to translate into the DIMS record, especially because other DIMS counties did not have those same address types and therefore did not need the same capabilities.

Another problem one county found with the DIMS records is that it was hard to see right away if the voter was an overseas or military voter and therefore could register up until election day. They resolved this by processing all the post-deadline OLVR applications, right away and then making sure that the non-military and overseas ones were not sent a ballot. This county also found the brevity of the OLVR application (6 screens), which was clearly good for voters, meant that the county received less clarifying information, and that voters were unsatisfied with the message, 'Thank you for your application. Please allow 10-14 days for processing,' and would submit the

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application over and over. The county also was concerned this was too short a time to promise voters right before an election and would have like the state to lengthen that time estimate during election season. While the signature blocks received were clean, that is they didn't have stray marks, this county often found the signature (coming from DOL) was old and ended up mailing a form to the voter to ask for a new signature. OLVR does not detect name changes, so to find name changes that went through OLVR the county searches on birth date. Also the DIMS software doesn't flag if the registrant is under eighteen so attention had to be given to that as well. These are both examples of how the OLVR registrations took extra thought and therefore only full time (not seasonal) staff processed OLVR registrations in this county, but county managers noted on the positive side that these staff could do the processing from home if telecommuting was necessary.

The Votec and DFM counties also experienced problems with the data coming in from the OLVR system. Some of this was what the state sent and was out of control of the vendors, and some could be fixed in the transfer of the information into the county system. Both companies provided any fixes they could right away.

Starting in January 2008, all Washington counties started receiving registrations (on paper or electronically) that were submitted on OLVR. The sample counties varied in how many of these they received, but they reported in August that one third to one half of all incoming registrations were coming through the OLVR system. By this time, the counties also reported an increase in overall registrations probably due to either the excitement over the Presidential Election or the ability to register online or both. All counties saw differences between OLVR registrations (whether received electronically or on paper) and handwritten paper registrations. For example, several counties noted that OLVR registrations were more complete, as people tended to fill out less when they handwrite. Also, two counties noted that the DOL signature was sometimes an old version, either because the voter had not updated that signature or because the DOL was mistakenly sending an old signature.

The bottom line for Washington counties is that those that receive OLVR registrations electronically have a substantial decrease in workload and those that receive OLVR registrations on paper have no increase in workload.. The fact that paper OLVR registrations are type-written and more legible than handwritten registrations does not seem to be a major workload factor. Processing registrations is a large part of what the county election staff do. In at least one county there is a time-consuming quality control process that all registrations from any source and in any format must go through, so OLVR does not change that. Despite that several of the counties did report substantial time savings with OLVR registrations. In one county an OLVR registration must be viewed and accepted which takes one fifth of the time that it takes to process a paper registration which requires doing checks, entering the information, and scanning the paper. In this case, various checks are completed before the OLVR registration gets to the county. Another estimate was that registration work that took 5 hours had been

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reduced to 3 hours. In two medium size counties, only 2 people out of the large staff processing registrations are needed to process OLVR registrations. Generally, only a few staff members in a county are trained in processing electronic OLVR registrations (whereas many more staff can enter and accept paper registrations), but more electronic registrations can be processed at one time as compared to paper.

The counties visited seemed very positive about online registration and encouraged its use among organized registration drives and individual county residents seeking to register. One County Auditor's office even brought laptops to its own booth at the county fair. All the counties visited reported that when people call their offices about registering, they tell them about all options for registering including OLVR, and some ask the caller right off if they have internet access. One county found that it helped to walk people through using the online system over the phone, especially if they were cautious about it. The elderly populations seemed the most cautious about using computers. When discussing registration drives with political parties, students, and other groups, most of the county staff said they encourage use of OLVR during drives; but they recognize that it's hard for these groups to keep track of voter information if registrations aren't completed on paper forms. In one county, the League of Woman Voters has a contract to deliver registration forms to places around the county, so they have no incentive to encourage online registration. Students are the easiest target for online registration, and in fact a promo of OLVR was being shown at some colleges.

In terms of reaching different language groups, the counties did not see OLVR as a tool for this. They seemed to be unaware that OLVR was available in Spanish and Chinese, which must mean that they were not getting any applications in those languages. Very little was known about the registration of various Indian tribes, and whether OLVR might be helpful. A couple of the counties talked about their growing Russian populations and how that language group might be a focus in future voter registration efforts.

IV. PERSPECTIVE AND DISCUSSION

Lessons Learned

From the perspective of the Office of the Secretary of State (OSOS) the major lesson learned was about working with the EMS vendors. Ideally, the state might have required all counties to have the same EMS program and then only had one vendor build the software for OLVR transmission into county systems. This would have required going against the counties auditors' wishes (they preferred a choice) and possibly passing legislation, but it would have made implementation much smoother and perhaps eliminated the need to print, sort, and mail thousands of forms. It also would have been better to have more time for planning, development and testing. The part that Microsoft did had to be done in about four months in order to launch in January 2008, and while that did get done it was more costly than it might have been with more time. Also the OSOS staff realize that it would have been much easier if the counties were involved earlier on with input into what the EMS vendors needed to do and testing of the products as they were being developed, rather than going online after the whole system was launched with products untested at the county level. The OSOS recommends to other states to leave adequate time for testing online registration systems as well as involving the local jurisdictions. In terms of working with the agency in charge of driver license data, the OSOS recommends drawing on any existing relationships with that agency, especially building on what is already being done for HAVA matching if possible. And finally, the OSOS believes it is important to think carefully how to balance the goals of producing a user-friendly interface with ensuring security and privacy of data, as this had been a challenge for them but they believe they achieved it.

Benefits-Measured and Perceived

Just as in Arizona, the only measurable benefits are those seen in county time savings from processing electronic registrations as opposed to paper registrations. As discussed above, counties seemed to find this was a reduction of 2/5 to 4/5 of time spent. However, this occurred during busy election seasons and still required the expertise of the permanent staff rather than the seasonal staff. Time savings for permanent staff meant they could spend more time on other pressing election tasks. In the first year of the program many issues were still being worked out with the quality and the transfer of the data from the state to the counties, so they had not yet reaped the benefits of not having data entry errors. Another agency did experience a reduction of data entry workload, and that was the DOL driver license field staff who were no longer typing voter registration form information into a database for the OSOS.

From the point of view of the OSOS the benefits to the electorate have been great. Without any promotion the registrations came in at 30 per hour and eventually went to sixty per hour in that first month, and OLVR registrations were 40-52% of the registrations the OSOS received in the first three months, rising to 84% in the last month of 2008, and 54% for the year as a whole. From the survey discussed above, almost half

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of the group who used the OLVR system had no problems and/or were very pleased with their registration process.

As in Arizona, the accuracy of voter records that come through Washington's OLVR is much higher than paper records. Just as with Arizona's EZ Voter, the first set of personal information enter in OLVR must match driver license records exactly; this includes first and last name, license or identification number, birth date, and residential zip code. Therefore OLVR registrations will not have inaccurate or missing names or birthdates. Unlike EZ Voter which pulls the address off the driver license records, addresses are entered by the user on Washington's OLVR. Therefore addresses can be entered incorrectly on OLVR, but the incorrect address will be caught and reconciled at the county level when the county auditor's staff is unable to find the address and assign the voter record to a precinct.

Costs – Measured and Perceived

The total cost to develop OLVR was estimated in March 2008 at \$278,000, which breaks down into \$170,000 to Microsoft, \$58,610 to Premier (11 counties), \$21,660 to ES&S (10 counties), \$16,884 to Votec (11 counties), and \$12,000 to DFM (7 counties). Microsoft already had substantial contracts to build the WEI project and although OLVR was added to that, the short time period and competing demands on Microsoft time resulted in overtime charges for OLVR. The EMS vendors already had been paid by the state (using HAVA funds) to set up their systems in the counties. The above costs were for the development of the software to transfer OLVR registrations coming from the state into the county systems, but do not reflect the additional costs to the state resulting from the delay in receiving the product from ES&S and Premier. Notably these costs accrue from printing, sorting and mailing OLVR registrations to twelve counties, and also from the costs associated with ongoing discussions with the vendors and the counties as the problems and delays are worked out. The counties, who now must pay for maintenance of their EMS systems, also incur costs from continued discussions with the vendors about OLVR implementation and training. Finally counties incur costs to the extent that the existence of OLVR substantially increases the total number of registrations to process and/or that the processing of OLVR registrations is more complex than the entering of data off a paper form. For the counties getting electronic registrations most of the complexities (e.g. addresses getting transferred incorrectly, signatures missing) have been identified and resolved. For those not yet getting electronic registrations these complexities are yet to be worked through.

The survey answers discussed above in the section on 'usability' suggest that there may be costs to voters as well. Almost 9% of those commenting on the OLVR system had major problems with their registration after using the system and may not have been able to vote in the November 2008 election. While these 'mess ups' are relatively rare and not necessarily the fault of the system itself, it gives rise to concern if even a few people truly lose the ability to vote because they used this registration system. Another cost raised in the comments is the worry about whether the registration did and will go

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through with nothing but a promise the registration will show on MyVote in 14 days. The County Auditors' offices noticed that registrants were unsure and therefore would register over and over in one sitting. Of course mailing off a paper form results in the same type of uncertainty, but somehow it appeared more pronounced among OLVR users perhaps because many of them were registering at the last minute and/or because it actually took more than 14 days to get a confirmation.

Cost Savings: Measured

The state Office of the Secretary of State Elections Division calculated cost savings associated with not having to ship paper registrations form to the counties. For every registration that came through OLVR, the OSOS saved \$.25 that it would have cost if that same registration came into the OSOS on paper. In 2008 and the first half of 2009, most of mail-in registration forms were mailed to the OSOS, where they were sorted and sent to the counties. The same savings accrued when a voter changed their address (within a county) on MyVote and therefore did not have to send in a new registration form. The savings associated with motor-voter registrations that came in through OLVR was even greater at \$.43. In the old paper-based motor-voter system, OSOS had paid for the postage from the DOL to the OSOS as well as the cost of sorting and shipping the forms to the counties. Using these numbers, the OSOS estimates it saved over \$176,000 for every electronic transaction that replaced a paper one. Over 60% of the cost of implementing OLVR (\$278,000) has been recouped in that saving of \$176,000. In addition, the OSOS estimates that Washington residents saved about \$200,000 in postage by not having to mail voter registrations that they completed online. (See Appendix C for a more detailed accounting of this savings estimate).

Savings at the county level was estimated for four of the five sample counties. In these four counties, a registration received electronically from OLVR is anywhere from \$.50 to \$2.00 less expensive to process in terms of staff time. The actual savings depends on which type of employees (full-time or temporary) is processing the registrations, and that depends on the size of the county elections office and whether it is 'election season' or not. The savings is greater when permanent employees are processing registrations, which was often the case in the early implementation stage of OLVR. Cost savings should vary with the voter registration database software used in the county; however, there was no pattern seen among those four counties using four different registration systems. (See Appendix D for an explanation of the estimated labor cost savings at the county level)

Cost-Benefit

As in Arizona an overall assessment of the program cannot be made until the system is fully implemented administratively. While implementation is fairly young in Washington as compared to Arizona, in one sense more adjustments have been made in the first year than in Arizona in seven years as more counties in Washington have worked through the issues of translating data from OLVR to their own systems. Though fairly inexpensive, Washington's system was not quite as inexpensive as Arizona's to develop,

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probably because the four vendors added a complexity and because Washington did not have a system like 'ServiceArizona' to which it could add OLVR. Ongoing costs in Washington are yet to be known, but the equivalent cost of the online feed being developed in Arizona is also unknown. In both cases, it is hard to make a final assessment of costs and benefits, but state officials in Washington are very especially pleased with the rapid utilization of the system and believe it has and will continue to be a worthwhile project.

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D. COMPARISON OF TWO STATES AND GENERAL DISCUSSION:

Comparison of Washington and Arizona systems

The main similarity between Arizona's and Washington's online voter registration systems is that they use the registrant's state driver license or state identification (ID) card number to facilitate the registration. The two systems have many differences in structure, functionality, and administrative implementation. Arizona's system is simply an addition to the other online services available at the Motor Vehicle Division; whereas, the Washington system is a stand-alone service that is maintained by the Secretary of State's (SOS) Office. This difference is both administrative and on the front-end for the user. While the user may locate both systems through the respective Secretary of State's website, the actual application resides in vastly different locations. One consequence of Arizona's EZ Voter application being part of the Motor Vehicle set of online services is that the two systems are easily updated by one another, for example address changes can be simultaneously conducted on both motor vehicle and voter registration records. This simultaneity does not occur in Washington where information only flows on direction from the driver license records to the state Elections Division, and that only occurs if the individual agrees to or requests a voter registration update. Both systems do require that voters input personal information that matches exactly what is on their driver license records, therefore resulting in much more accurate voter records than paper registrations.

The actual web interface is also somewhat different, although Washington looked at Arizona's screens before developing its own. Arizona has had almost seven years of feedback from users and therefore has had more time to adapt the screens based on user needs. There is a basic core of similarity in that each system has the user chose a language, answer some questions about eligibility to register, enter name and ID number, enter personal information (both required and optional), a voter declaration of permission to use the signature off the identification card, and the ability to review the information before submitting. The following lists the differences, some of which clearly follow from state laws and some of which have to do with the interaction of various state agency databases. One major reason for these differences is that Arizona's online registration system automatically pulls more information from the individual's driver license data and therefore requires less to be entered manually. The voter registration process at the driver license offices in Washington, which requires no data entry, is more like Arizona's EZ Voter system in that way.

- EZ Voter has three more screens: an introductory description, a step to change one's address, and a feedback survey. Washington's OLVR is 6 screens total with more of the text and functions combined into single screens (eg. description and language chose on one screen) and no feedback form.
- EZ Voter returns a partial address for those who are already registered so a registrant may see if that address is correct and needs to be changed, and Washington does not. Arizona had not always had the partial address feature; it

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was added in early 2008 after reading comments from users that seeing the address on record would be helpful.

- Early on in the OLVR application a registered voter is encouraged to check their registration on the MyVote system, whereas there is no way to check registration record (other than the partial address) on the EZ Voter system. Arizona has a similar website to MyVote called “VoterView” but its not integrated with EZVoter at this time.
- Washington has four eligibility questions (citizenship, age, resident of state, not a felon) whereas Arizona has those plus a fifth about not being adjudicated incompetent. But more interesting is that Washington asks each as a yes/no question and the reader must be careful to answer three ‘yes’ and one ‘no’; whereas Arizona has three declarations requiring a box to be checked and then two yes/no questions. Because they found that people were getting stuck from not actually answering all five questions, Arizona added numbers in front of them to alert users.
- Washington requires more address related-information, whereas Arizona’s system pulls all address related information from the driver license database. The only required information on the EZ Voter form besides name, ID number and birth date at the beginning is party preference. Washington’s system requires residential zip code, address, city, and county, as well as gender.
- The Washington ‘voter declaration’ is labeled as such, restates that the user meets the 4 eligibility requirements and requires the user to check two boxes. The EZVoter declaration is basically the same but does not repeat the eligibility statements and has only one button ‘finish voter registration’ to make the declaration.
- Finally, EZVoter produces a printable ‘Registration Receipt’ with a confirmation number and application date; where as Washington’s system simply allows printing of the information entered.

The other major differences relate to the administrative implementation of the two systems, particularly the electronic transmission of online registrations to the local level. The two states vary in terms of which counties came or will come ‘online’ at what time. From the point of view of the county level ‘user,’ implementation is not complete in either state. Arizona’s system was not developed with a way to transfer information to county databases. At the time of implementation, the state did not have a statewide registration file and the counties in general were using different methods to maintain registration lists than they are using now. The largest Arizona county invested considerable resources into facilitating electronic transfer of EZ Voter registrations into it’s database, but the others are waiting for the state to produce this capability. The major difference between the two states in terms of sending/receiving the online registrations on paper is that Arizona counties download and print pdfs while in Washington the state prints and mails the registrations. As of April 2009, twenty-eight of the thirty-nine counties in Washington are receiving electronic registrations. Unlike

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Arizona, the largest county in Washington (King) is not one of them, because King has chosen to test the product (DIMS) before actually deploying it.⁶⁵

Overall Lessons for Other States

A critical component to the implementation of online voter registration is the collaboration of the state election agency with other organizations, including the driver licensing agency, technology vendors, county registration officials and their professional organizations. In both states, the relationship with the driver licensing agency was relatively unproblematic, in particular because it was demonstrated that online voter registration would benefit both agencies. State election administrators that will implement online voter registration in the future have already been working with their state driver license agency since 2006 to match driver license information for voter registration verifications in compliance with the Help America Vote Act, and they will be able to build on the existing relationship. In addition, the collaboration and implementation of OLVR should help improve and simplify 'motor voter' registrations, and even (as was the case in Arizona) could help improve the correctness of motor vehicle addresses.

The relationship with technology vendors is more challenging. In both states, development of the county interface with the online voter registration system relied upon existing technology contractors, and in both cases this raised its own set of challenges. States might consider bidding the county interface separately from other projects.

Implementation of the county interface has been the most difficult and delayed aspect of the program in both states. This of course only applies in states where the counties maintain their own registration databases.

Both states voiced the importance of working with the counties and involving them in the process from the beginning whether they were able to achieve this or not. As one person said the people registering are not the only users, as the counties are 'users' too. County election officials need to be involved in planning, development and testing of the software and applications they will be using. It is inevitable that there will be problems with the transfer of data from the state to the county systems. Rather than inputting data themselves, county staff receive data from the state which comes from two different sources (statewide registration database and driver license); those data may not be in the same format as the data that are entered from handwritten forms. In Washington, the counties that did receive electronic registrations spent some time working out or learning to work around these 'bugs.' Ideally there will be time for testing the system, and the product will go through an iterative design to eventually address all special cases that might arise.

⁶⁵ Testing has been impossible with back-to-back elections.

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On the voter side, several things should be kept in mind. Many online registrants will be pleased by the convenience of the system, but many will also be nervous about security, privacy and the wait to find out if they actually become registered. Arizona's use of a confirmation number is an especially good way to reassure registrants that there is some way to track what was done online. There will inevitably be users who get confused and do not read or understand the directions clearly. The design must balance simplicity with explanation which in itself is very challenging. Users will inevitably get hung up on address change issues, and will desire that the address on record is displayed. Arizona's showing of partial address is a good way to balance privacy concerns with the need for this critical piece of information that allows voters to see whether an address change is necessary or has already been done.

The issue of the security of online voter registration from the perspective of all involved entities, the public, voters, counties, and state agencies, is worth further discussion. In 2000 the California Internet Voting Task Force put out a report that included an argument for why internet registration is fundamentally not secure and not recommended. The three main reasons include the inability to authenticate the individual, assess eligibility for voting, and avoid fraudulent registrations. This report was written before HAVA was enacted which required construction of statewide registration files which could be checked for fraudulent registrations through matching with other databases and checking for duplicates across local jurisdictions. Online registration can build on that system (in place in most states), and by using the driver license or state ID number allows some of the HAVA matching to be done earlier than it would be with paper registrations; in fact the progression of the online registration can be stopped if vital information does not match. In both states the registration is not accepted by the online system if it does not match a real person with a driver license or state identification card.

Registering online does not have to be 'automatic' in terms of establishing a registration record at the local jurisdiction. It can be set up so that local officials must actually accept into their database the registration that was made online; in this case there are opportunities to discover duplicates or ineligible people before they are actually 'registered.'

It is important to note that a perpetrator of a fraudulent online registration (registering someone else by knowing their license or id number) could not follow that up with fraudulent voting-by-mail, because the perpetrator does not see the signature (associated with the license or id) and could not copy it onto the vote-by-mail envelope. For the purposes of actually voting fraudulently with fraudulent registrations, completing paper registration forms would be easier.

Finally, there is one method to stop or at least slow down registrations being conducted by an automated process. Washington requires the user to type in a number that appears on the screen; Arizona has not had this kind of security measure, but it has had

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almost seven years of experience during which widespread automation of fraudulent registrations would have been discovered. In addition to these measures both states employ standard web security measures, such as SSL-encryption and dedicated lines between agencies. In both cases, the databases accessed during online registration are part of the existing state network which already has a firewall protecting it from all kinds of public access. Again, if malicious code from a voter's personal computer had infected any of the state systems in Arizona, that would be known by now. Both states have shown that it is possible for an individual to interact with his/her own record in a database without having access or even risking access to the entire database. Regardless of security measures already in place, states conducted additional security reviews of online voter registration using both in house and external security teams.

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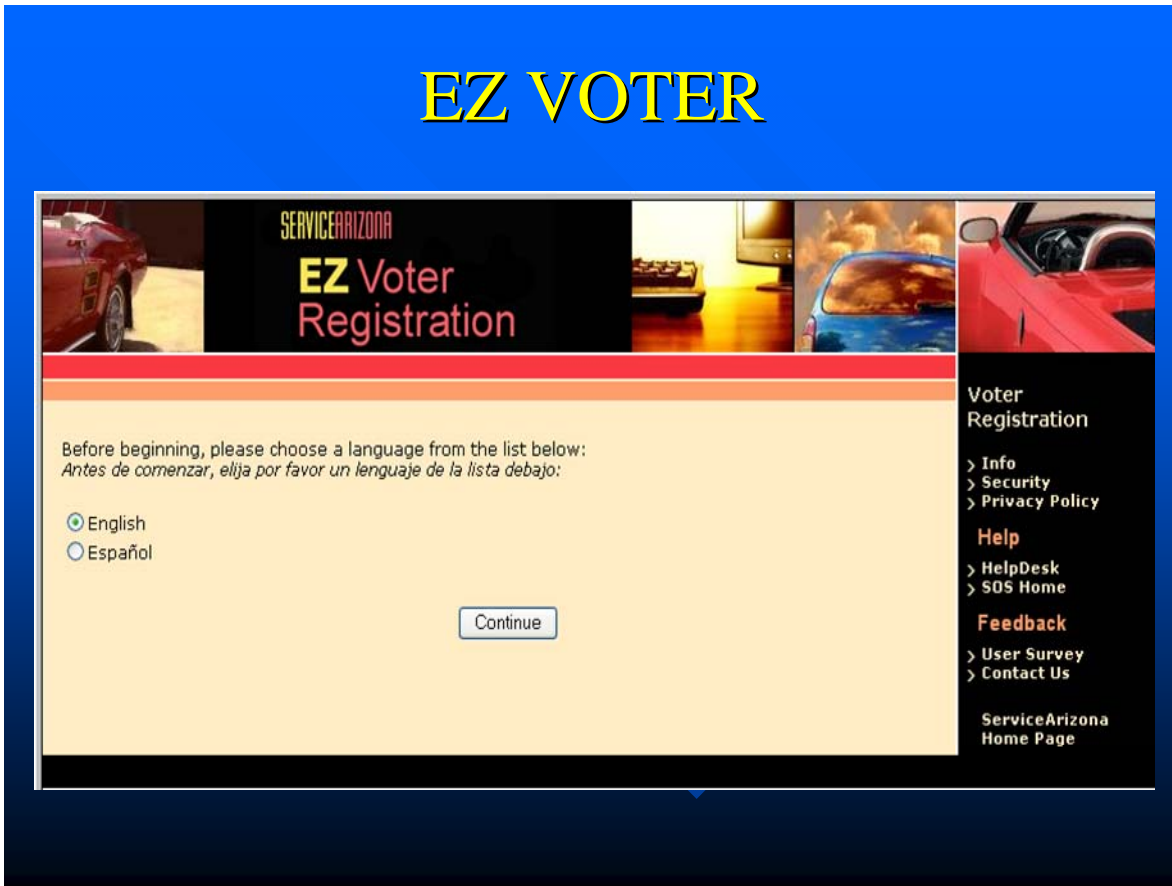
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Appendix A: Screen Shot of EZ Voter portal



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Appendix B: Screen Shot of Washington’s OLVR portal

Washington Secretary of State

Online Voter Registration

vs Internet Explorer
www.vote.wa.gov

Go | Bookmarks | Paperflair | 1 blocked | Check | AVAST | AVAST | Send to

Active Bugs - T... | http://havadev/ | Add Edit Candid... | http://havadev... | Washington Sec... | Garfield County... | Online Voter...

Washington Secretary of State
HOME | SAM REED

Online Voter Registration

To register to vote using this online program, you must have either a valid Washington State:

- driver's license, or
- state identification (ID) card.

Select a language:
 English
 Español
 中文

If you do not have either of these documents, you may still register to vote by using the paper voter registration form. [Click here for a paper voter registration form.](#)

If you are already a registered voter in Washington State and you want to change your name on your voter registration record, you must use the paper voter registration form. [Click here for a paper voter registration form.](#)

To vote in the next election, you must register at least 30 days before Election Day.

Below are the steps you must take to complete the Online Voter Registration process.

- Verify your voting eligibility
- Enter your identification information
- Enter your personal information
- Print your voter registration acknowledgment.

Washington Secretary of State
520 Union Ave SE
PO Box 40229, Olympia WA 98504-0229
(360) 902-4180

[Phone Numbers](#) | [Privacy Policy](#) | [Accessibility](#)

- People will access this screen via www.vote.wa.gov
- Prospective voter chooses the language to proceed with
- Prospective voter clicks Continue button

Appendix C: Savings at State-level⁶⁶ Associated with OLVR and MyVote

1) Paper forms NOT mailed in by voters

Until November 2009⁶⁷, in Washington, all mail-in paper registration forms were pre-addressed to go to the Office of the Secretary of State (OSOS). Then these forms were sorted and mailed to counties. For every registration that came in through OLVR or address change that came in via MyVote, it is possible to calculate what it would have cost if the registrations and registrations had come in on paper instead.⁶⁸

The OSOS estimates that the cost to WA Elections Division of a paper voter registration application is \$.25 per application which includes:

- \$.008 in shipping costs to mail/FedEx to the appropriate county;
- \$.217 in staff time for processing: opening/sorting/recordkeeping/packaging for shipment to counties;
- \$.025 in paper costs (each state-printed application costs a nickel, but about half of incoming forms are printed by applicants from our website using their PCs).

So the savings for going to OLVR and MyVote address changes:

2008: 49,436 MyVote address changes +
158,286 OLVR submissions
= 207,722 paper submissions saved x \$.25 = \$51,930.50

2009 (Jan thru July):
3,956 MyVote address changes +
7,886 OLVR submissions
= 11,842 paper submissions saved x \$.25 = \$2,960.50

Total estimated savings since inception (from OLVR and MyVote):
= \$54,891.00

⁶⁶ Estimates calculated and provided by staff at the OSOS Elections Division.

⁶⁷ In November 2009, the OSOS implemented a new mail-in voter registration form. The form was redesigned by a Design for Democracy fellow, improving the usability of the form. As part of the redesign, the forms are no longer pre-addressed to be sent to the OSOS. The new form provides each county election's office address and the applicant puts his or her county's address on the form and mails it directly to the county. This change reduced the state's voter registration processing costs, but increased county processing costs. The new form can be viewed here: <http://wei.secstate.wa.gov/osos/en/voterinformation/Documents/WAVRFSept2009.pdf>

⁶⁸ This is ignoring the costs for OLVR registrations that had to be printed at the state level and mailed to the counties. At implementation (January 2008), this was all incoming OLVR registrations as no county was able to receive them electronically. As of August 2009, 34 of the 39 counties receive the OLVR registrations online, leaving only 5 for which the OSOS has to print and mail their OLVR registrations.

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2) Paper forms NOT mailed in from Department of Licensing (DOL) driver license offices ('motor voter').

Implementation of OLVR enabled OSOS to automate the "motor voter" process with DOL. OSOS paid DOL's postage to mail paper to OSOS, and "motor voter" applications had higher recordkeeping costs than mail-in, paper applications. The cost to OSOS was \$.43 per "motor voter" transaction.

Saved "motor voter" costs:

2008: 172,623 transactions x \$.43 = \$74,227.89

2009 (Jan thru July): 109,244 transactions x \$.43 = \$46,974.92

Total estimated savings since inception (from DOL)

= \$121,202.81

Total savings from OLVR, MyVote, DOL

= **\$176,093.81**

3) Recoup Costs of System:

OLVR development done at the state level cost about \$170,000 and that the bill for vendors to adjust the local voter reg systems to receive OLVR input was about \$110,000.

Total development costs = \$280,000.

Ongoing maintenance for servers and electricity is about \$22,000 per year. So development costs and server upkeep/electricity costs, inception through July 2009 = about \$316,000.

Savings over the old "paper" and "motor voter" registration processes

= about \$176,093.81 .

= 55.7% of costs⁶⁹ so far.

4) Conclusions about Savings:

As of the end of July 2009, estimate that

- Office of the Secretary of State has recouped approximately 55% of the cost of implementing and maintaining OLVR
- OLVR has saved voters roughly \$200,000 worth of postage stamps on paper applications. (The price of a stamp changed during the period.)

⁶⁹ Not counting the staff time for supporting OLVR/automated motor voter on a day-to-day basis, which at this point is minimal.

Appendix D: Savings at the county-level associated with OLVR

In Washington the counties receive OLVR registration info as typed in so the county must look at each registration (to check for duplicates, if already registered in county, verify matches, etc) and then accept them. This is unlike Maricopa County, Arizona where the state does matching before the records are sent to the county, and the county does not need to look at the online registrations that are 'hard matches' with existing information (name, birth date, DL number, and SSN all match voter records [if already registered] or driver license records) and instead those go directly into the County database (cost of \$.00). So there is a cost to processing all OLVR registrations in Washington, but it is still less costly than processing paper forms (opening mail, sorting into type of form, scanning, data entry, accepting into database).

As of August 2009, 34 of the 39 counties in Washington receive OLVR registrations electronically, and 5 do not (which means they received OLVR registrations printed at the OSOS and mailed to them). There are four types of county registration database software in the State of Washington: Premier (DIMS), DFM, Votec, ES&S (Power Profile). Each vendor wrote a program to receive OLVR registrations electronically into their registration databases. Because ES&S was the latest to develop this capability, only one county (the test county) uses this Power Profile capability and actually receives OLVR registrations electronically. Five counties using Power Profile in 2008 switched to DFM or Votec and are 'online' with OLVR. Five (of the six) counties still using Power Profile are the five counties that are 'not online' with OLVR.

The DIMS county in the research sample estimated a savings of \$.44 for each registration processed. This county reports that about 60 OLVR registrations are processed per hour and only about 30 paper registrations are processed in an hour. Both types of processing are paid at \$20/hr + 30% benefits = \$26/hr, making the cost \$.43/OLVR registration and \$.87/paper registration.⁷⁰ This savings of \$.44 is underestimated because it does not include the cost of opening and sorting paper forms and putting them into piles of 30.

The Votec county in the sample reports that about 50 OLVR registrations are processed per hour and 12 paper registrations per hour; in this small county both activities are done by the same person who is paid \$18.57 hr plus .25% benefits = \$23.21/hr. The estimated costs are \$.46/OLVR registration and \$1.93/paper registration, for a savings of \$1.47 for every registration sent through OLVR.

In the ES&S Power Profile county, employees process about 45-60 OLVR registrations per hour, and 12-15 paper registrations per hour (including all prep of the forms, not just data entry). The average wage is \$30.12/hr for all staff members who process

⁷⁰ This county reports that DIMS does not flag all the OLVR registrations of people already registered in the county and when the program does eventually get this capability, the OLVR registrations will go faster.

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registrations. The costs are \$.50-\$.67 each for OLVR and \$2.01-\$2.51 for paper, resulting in a savings between \$1.34 and \$2.01 for every OLVR registration.

The DFM county in the sample processes about 60 OLVR registrations per hour, and 15 paper registrations per hour (including all prep of the forms). In busy election years (2008) temps do the processing and are paid \$10/hr, and during other times (like August 2009) full-time employees are processing the registrations and being paid an average of \$27.04/hr (including benefits). So when temps are working, the cost is \$.167 for an OLVR registration and about \$.667 for a paper form for a savings of \$1.35 per online registration, and in slower times it costs \$.45/form for OLVR registrations and \$1.80/form for paper registrations and \$.50 is saved with every OLVR registration.

Please note that these counties vary in their size and therefore how many staff (and at what level) touch registrations, as well as how much they pay these employees (wages likely vary with a county's location in the state). Variation in staffing and wages contribute to variation in the average pay associated with processing registrations.