

The following is used to create a similarity score for the various states' lobbyist applications. This is intended to measure how similar the application function is to the desired user function for the new PDC system. It is not strictly a suitability score, since this would need to take into account state laws and system implementation details.

There are a total of seven forms to be handled: L1, L2, L2 Memo, L3, L3c, L5 and L7. If the state application does something that has a similar function, the application is rated as follows:

- 1** – The application has minimal or substantially different function. This includes problems such as:
- Multiple registration or reporting forms are needed for different lobbyist types not recognized by PDC
 - Registration only accepts basic name and address information (no employer or lobbying information)
 - Reporting only accepts totals and not details

3 – The application function is similar, but differs in some important detail blocks or processing. This includes:

- Important data fields missing or substantially different for registration or reporting
- All details are lumped into a single category (lack of separate expense categories)
- Details do not add into total

5 – Application function is similar to desired for the new PDC system. There may still be changes needed to make it fit exactly.

Many of the states have limited online information available for their electronic lobbying systems. If there was not enough information to fully evaluate registration or reporting processes, a maximum score of 3 was given for any form. However, it is unlikely that any of these would have rated higher given information available.

Scores were also given for implementation details, as follows:

The new PDC system will need to handle signature card. Ideally, information should be input online, producing a printed form that is then signed and physically submitted. The application gets a rating of 5 if it does this. It would also be ideal if the original information input could be saved and matched up to the form to save data entry later, but there is no way to verify this for other states' applications.

Other states that require a signature card generally require filling out an offline form (possibly provided as a PDF or Word template) or formatted request at least for the original registration. This is given a rating of 3. Some states do not have a signature requirement and get a rating of 0.

The PDC system distinguishes between the lobbyist and employer as separate but related entities. They are registered together on a single form, each entity signs the form separately and they do separate reporting. This process rates a 5. If the entities register separately, or there is not separate reporting or signature for the employer, a rating of 3 is given. States without separate lobbyist and employer get zero here.

A point was given for frequency of reporting if states that have lobbyists report do monthly reporting. Illinois, which reports from the employer's perspective, would have received a point if reporting was yearly (as is the case for the L3 form). This may be an easy feature to change, so relatively low weight was given.

Consideration was given to the states' reporting functions. The following features were given one point each:

- Public can view detailed expenditure reports (up to the point details are collected by each state).
- Public can view summary reports, including some ability to view selected lobbyists or expenditure totals.
- A means of indexing of lobbyists is provided, either as a separate index or as links from summary views.
- Pictorial data is provided as a directory, index or with lobbyist detail data.

Some notes about the results:

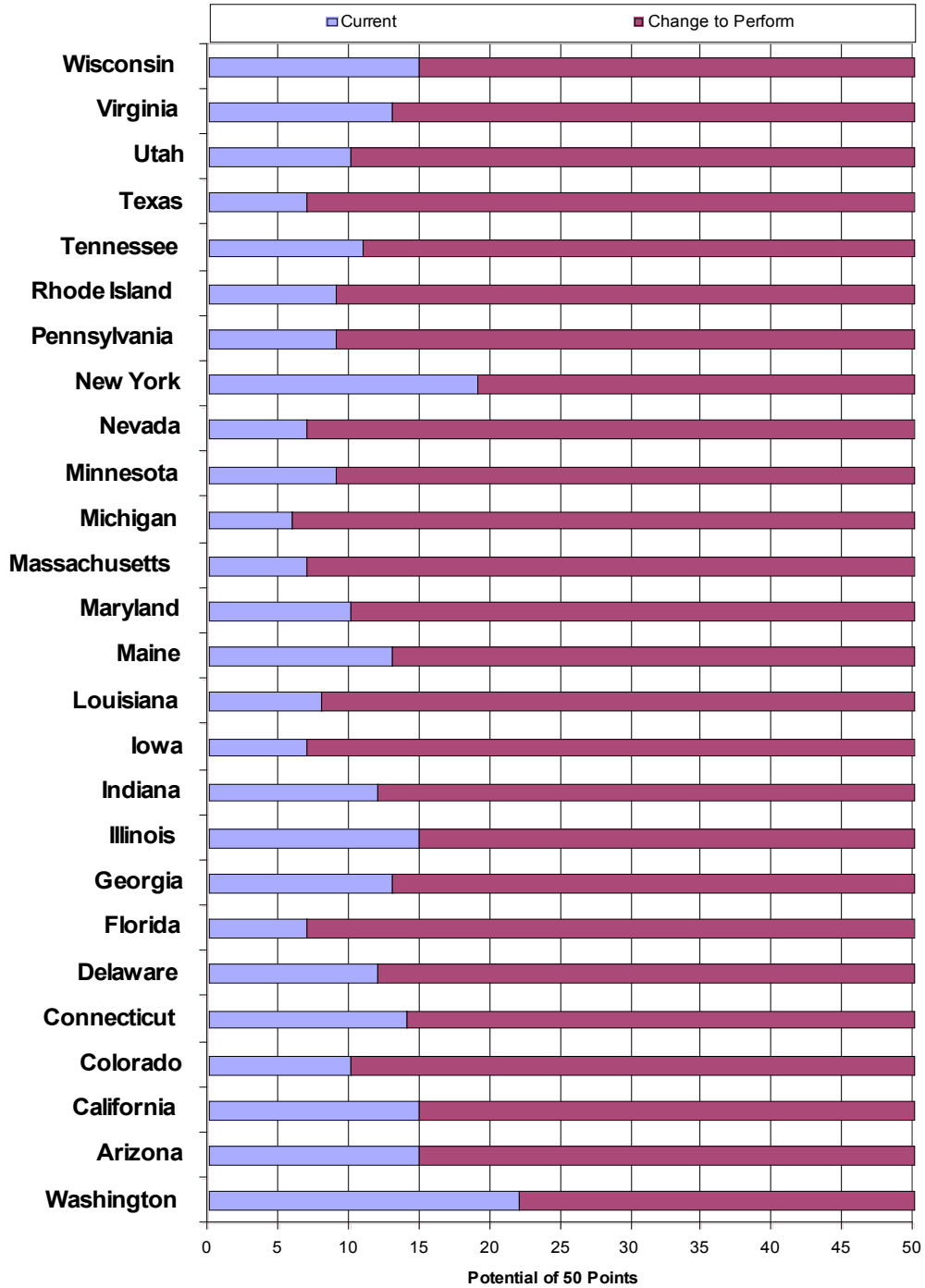
- A rating is given for the current PDC application, in part to emphasize the limits on this analysis and in part to gauge how complete other states' systems are. The current application does L1, L2 and L3 forms but does not collect all critical data or total details, so they get a 3 rating each. Other than signature, the implementation details rated maximum scores. Signature was given a lower rating because online instructions state that the form cannot be submitted, so it is effectively an offline form. Overall, this still gives Washington a higher score than the other states.
- The states that rate 30% or higher (15 + score) include **Arizona, California, Illinois, New York and Wisconsin**. Arizona has major differences in lobbyist reporting and California in registration and employer reporting that could be difficult to reconcile with Washington state practices. Illinois is known to have some technical implementation issues that would cause problems adapting it for the PDC. On the Campaign Disclosure Project site, New York and Wisconsin received high marks for their electronic campaign disclosure systems, but low marks overall due to problems with disclosure laws. If there are similar problems with lobbying, there could be problems adapting the systems to conform to Washington law.
- **Georgia** has a particularly simple and flexible implementation for lobbyist reporting. Main problem is lack of support in that state for separate lobbyist and employer entities. This would pose a problem in using the Georgia application as a whole.
- **Illinois** has very complete registration and employer reporting applications, though more complicated and likely not as adaptable as the Georgia lobbyist application.
- **Wisconsin** has a similar registration form to the one used by Washington, but it is offline only. There is no electronic version.
- **New York** is the only state that seems to handle lobbyist and employer the way the PDC does (single registration, separate reporting). Other states use separate registrations or have no separate reporting for lobbyists and employers.
- Other states handle signature differently than the desired model for the new PDC system. An offline document is required in all cases for at least initial registration. This may be an offline version of the regular registration or a completely separate first-time registration document.
- It is a bit surprising that none of the other states received a score of 4 for reporting. The most common missing item was pictorial information, but the states that provided this generally were lacking summary reports.

Scores (50 points possible)

State/Jurisdiction	L1	L2	L2Mem	L3	L3c	L5	L7	Sig.	Lb/Emp	Freq	Report	Total
Washington	3	3	0	3	0	0	0	3	5	1	4	22
Arizona	3	1	0	3	0	1	0	3	3	0	1	15
California	1	3	0	1	0	1	0	3	3	0	3	15
Colorado	1	3	0	0	0	0	0	3	0	1	2	10
Connecticut	1	1	0	3	0	0	0	3	3	0	3	14
Delaware	1	3	0	0	0	0	0	3	3	0	2	12
Florida	1	1	0	0	0	0	0	3	0	0	2	7
Georgia	3	5	0	0	0	0	0	3	0	0	2	13
Illinois	5	0	0	5	0	0	0	0	3	0	2	15
Indiana	1	3	0	0	0	0	0	3	3	0	2	12
Iowa	0	1	0	1	0	0	0	0	3	0	2	7
Louisiana	1	1	0	0	0	0	0	3	0	0	3	8
Maine	3	1	0	0	0	0	0	3	3	1	2	13
Maryland	0	3	0	0	0	0	0	3	3	0	1	10
Massachusetts	1	1	0	1	0	0	0	0	3	0	1	7
Michigan	1	3	0	0	0	0	0	0	0	0	2	6
Minnesota	1	3	0	0	0	0	0	3	0	0	2	9
Nevada	3	0	0	0	0	0	0	0	0	1	3	7
New York	3	3	0	3	0	3	0	0	5	0	2	19
Pennsylvania	1	3	0	0	0	0	0	0	3	0	2	9
Rhode Island	1	3	0	0	0	0	0	0	3	1	1	9
Tennessee	3	0	0	0	0	0	0	3	3	0	2	11
Texas	1	3	0	0	0	0	0	0	0	1	2	7
Utah	1	3	0	1	0	0	0	0	3	0	2	10
Virginia	3	3	0	0	0	0	0	3	3	0	1	13
Wisconsin	0	3	0	3	0	0	0	3	3	0	3	15

Following are the scores in graphical form. “Change...” represents the amount of improvement that would be needed for a system to do what PDC has defined for the replacement of the current system. None of the states have a system that is close to what Washington needs.

Lobbyist Solution



Links are provided below to the various state lobbying system web pages. The “Info” page provides a link to lobbyist forms and information. If there is an online reporting system, the login page is also listed. Notes of particular interest for each state are listed below the page links.

State	Lobbyist Website:
Alabama	Info: http://www.ethics.alalinc.net/
Alaska	Info: http://www.state.ak.us/apoc/lobcov.htm
Arizona	Info: http://www.azsos.gov/election/lobbyist/default.htm Login: http://www.azsos.gov/election/lobbyist/elf/
Arkansas	Info: http://www.arkansasethics.com/
California	Info: http://www.sos.ca.gov/prd/electronic_filing_info.htm Login: https://cafile.ss.ca.gov/CalOnline/
Colorado	Info: http://www.sos.state.co.us/lobby/inquiryHome.do Login: http://www.sos.state.co.us/lobby/pages/Login.jsp
Connecticut	Info: http://www.ct.gov/ethics/site/default.asp Login: https://www.ctose.net/
Delaware	Info: http://depic.delaware.gov/ Login: http://www.delawaregov.us/pic/index.cfm?ref=99123
Florida	Info: http://www.leg.state.fl.us/Lobbyist/index.cfm?Tab=lobbyist Login: https://secure3.leg.state.fl.us/
Georgia	Info: http://www.ethics.ga.gov/EthicsWeb/help/Help_Menu.aspx Login: http://www.ethics.state.ga.us/efiling/EFilingLogin.aspx
Hawaii	Info: http://www.hawaii.gov/ethics/noindex/forms.htm
Idaho	Info: http://www.idsos.state.id.us/elect/lobbyist/lobinfo.htm
Illinois	Info: http://www.cyberdriveillinois.com/departments/index/lobintro.html Login: https://www.ilsos.gov/lobbyistweb/
Indiana	Info: http://www.in.gov/ilrc/forms/onLine.html Login: http://www.in.gov/ilrc/forms/onLine.html
Iowa	Info: http://www.state.ia.us/ethics/lobbying/lobbying_index.htm Login: http://www.state.ia.us/ethics/filing/lobbyist_filing.htm
Kansas	Info: http://www.accesskansas.org/ethics/
Kentucky	Info: http://klec.ky.gov/default.htm
Louisiana	Info: http://www.ethics.state.la.us/leaders.htm Login: No login, this is an offline electronic reporting system
Maine	Info: http://www.maine.gov/ethics/lobbyists/index.htm Login: http://www.maine.gov/ethics/lobbyists/efile.htm Note: Direct login is not available, need permission from the Registrar.
Maryland	Info: http://ethics.gov.state.md.us/ Login: https://lobby.ethics.state.md.us/
Massachusetts	Info: http://www.sec.state.ma.us/pre/preidx.htm Login: http://www.sec.state.ma.us/lobbyist/LobbyistLoginsystem/welcome.asp
Michigan	Info: http://www.michigan.gov/sos/0,1607,7-127-1633_11945---,00.html Login: https://miboecfr.nictusa.com/elobby/elobby
Minnesota	Info: http://www.cfboard.state.mn.us/lob_overview.htm Login: http://www.cfbreport.state.mn.us/Lweb/logon.jsp
Mississippi	Info: http://www.sos.state.ms.us/elections/Lobbying/
Missouri	Info: http://www.moethics.mo.gov/Ethics/Lobbying/Lobbying.aspx
Montana	Info: http://politicalpractices.mt.gov/4lobbying/forms.asp
Nebraska	Info: http://nadc.nol.org/l/index.html
Nevada	Info: http://www.leg.state.nv.us/lobbyist/ Login: http://www.leg.state.nv.us/lobbyist/LobbyistRegistration.cfm Note: Currently only registration online.

New Hampshire	Info: http://www.sos.nh.gov/lobbyist%20information.htm
New Jersey	Info: http://www.elec.state.nj.us/ForCandidates/gaa_forms.htm
New Mexico	Info: http://www.sos.state.nm.us/ Note: Follow the link “Lobbyist Information Page” under “Ethics Administration”.
New York	Info: http://www.nylobby.state.ny.us/onlinefiling.htm Login: https://www.nytscol.org/
North Carolina	Info: http://www.secretary.state.nc.us/lobbyists/
North Dakota	Info: http://www.nd.gov/sos/lobbylegislate/
Ohio	Info: http://www.jlec-olig.state.oh.us/
Oklahoma	Info: http://www.ethics.state.ok.us/
Oregon	Info: http://www.oregon.gov/OGEC/forms_publications.shtml
Pennsylvania	Info: http://www.palobbyingservices.state.pa.us/Act134/default.aspx Login: Here (Link is too long for page)
Rhode Island	Info: http://www.sec.state.ri.us/pubinfo/lobbying/lobby_guide.html Login: http://www2.sec.state.ri.us/lt_filing/login/
South Carolina	Info: http://ethics.sc.gov/lobbying/
South Dakota	Info: http://www.sdsos.gov/adminservices/lobbyistreg.shtm
Tennessee	Info: https://www.tennesseeanytime.org/lobreg/ Login: https://www.tennesseeanytime.org/lobreg/ Note: Currently only registration online
Texas	Info: http://www.ethics.state.tx.us/whatsnew/elf_info_lobby.htm Login: No login, this is an offline electronic reporting system
Utah	Login: https://secure.utah.gov/lobbyist/lobb
Vermont	Info: http://vermont-elections.org/elections1/lobbyist.html
Virginia	Info: Here (Link is too long for page) Login: Here (Link is too long for page) Note: Lobbyist-in-a-box is not related to reporting. It is a legislation tracking tool.
West Virginia	Info: http://www.wvethicscommission.org/lobby.htm
Wisconsin	Info: http://ethics.state.wi.us/scripts/SLAEOOnline/SLAEOOnlineMain.htm Login: http://ethics.state.wi.us/scripts/SLAEOOnline/SLAEOOnlineMain.htm
Wyoming	Info: http://soswy.state.wy.us/election/lobby.htm

Costs for the Various Alternatives

Introduction

Costs were developed for the eight scenarios listed in the Alternatives section. In addition, quotes are provided for the current application, as well as two options for the outsource scenario.

Estimated initial and ten year costs (includes the initial cost plus ongoing support) for each option are summarized below:

#	Alternatives	Initial Cost (Million)	10-year Cost (Million)
1	Current application -- wait	\$0	\$0.5
2	Re-host -- as is	\$0.01	\$0.5 to \$0.7
3	Modify application – some change	\$0.4 to \$0.9	\$1.5 to \$2.6
4	Replace -- agency developed	\$0.5 to \$1.2	\$1.4 to \$3.0
5	Replace -- vendor developed	\$1.1 to \$2.7	\$2.2 to \$4.6
6	Replace -- combined agency/vendor development	\$0.8 to \$2.0	\$1.7 to \$3.8
7	Replace -- purchased application	\$0.2 to \$0.3	\$1.4 to \$2.4
8	Replace -- public domain - State rate	\$0.4 to \$1.3	\$1.6 to \$3.0
9	Outsource -- purchase	\$0.2	\$0.5 to \$0.6
10	Outsource -- vendor developed	\$1.1 to \$2.7	\$1.7 to \$3.3

The current and re-host options provide a lower level of service than the others, since several forms are not automated and can only be submitted on paper. The replace and outsource scenarios would eliminate Access 2000 portions of the application which could cause additional unspecified support costs in the future. The public domain option does not consider fees from the application State of origin (if any).

Bottom line: The most viable options seem to be 4, 5, & 6 where the replacement is developed. Each approach has its strengths and weaknesses.

Methodology

Separate estimates were made by PDC and by TSG of time required for development of the full application. The TSG estimate was made in early September, prior to the RFI document. The information was not provided to PDC or to the vendors. The independent PDC estimate was made in late October. After adjusting to use the same categories, the numbers are as follows:

Activity	PDC estimated hours	TSG estimated hours	High estimated hours
Team Training	160	160	160
User Interface Development	1352	1200	1352
User Management Console	64	80	80
Administrator Management Console	64	80	80
XML Creation	120	120	120
Database Development	240	160	240
Data Migration	280	240	280
Data Entry Front End	320	400	400
Imaging	320	280	320
Query System	680	760	760
Quality Assurance/Acceptance Testing	368	320	368
Vendor Kit	480	320	480
Technical Writing	560	520	560
Total Hours	5008	4640	5200

Since the two estimates fall within a 10% of each other, 5,000 hours looks like a reasonable estimate for the size of the task. For an extra safety margin, taking the high estimate for each activity gives a total of 5,200 hours, or 130 weeks development time. This gives the base estimate for development time for the agency developed scenario.

In the case of the **vendor developed** scenario, there is only one response that was a new web development estimate. In this case, the estimates are much lower than expected and there are no circumstances that lead to the conclusion that the vendor could deliver within the time specified. As a result, this will not be used as a basis for the vendor scenario. Instead, hours will be based on agency developed, with a vendor hourly rate used. The vendor numbers will be used to try to gain an idea of PDC staff time required for support. Out of the 20 week schedule, four weeks for requirements gathering, one week for datacenter preparation and three weeks for testing will likely require agency staff participation. This gives an estimate of eight weeks for one full-time staff. The vendor is likely to employ multiple developers, so actual schedule time for this scenario is considered to be 65 weeks, half the total of 130 work weeks from the agency developed scenario. To adjust from the vendor 20 week schedule to the 65 week schedule expected, the eight weeks' agency staff time should be multiplied by 3.25, giving 26 weeks. This results in 130 weeks' work, schedule time expected to be 65 weeks, with 26 weeks' agency staff support time.

For the **modify** scenario, the current application would be used as a starting point, with only changes as needed to achieve the desired features. Currently only three of the eight desired

user screens exist, the other five would need to be developed. In addition, the actual user interfaces for the existing screens would need to be replaced, though some business rules code may be salvageable. Will estimate a total savings of six weeks (two weeks per existing screen). Much of the XML, imaging and data entry front end already exist and could be reused with some modifications. The existing database and query system might also be retained with relatively minor changes. Few changes to the database would result in a lower degree of effort in data migration. Most other activities would see little or no change.

For the **public domain** scenario, the New York state application is being used as a starting point, since it has the most features in common with the desired PDC system. Currently four of the eight desired user screens have a match (to some degree) on the New York system. The remaining four would need to be developed. There would also need to be changes to the existing screens and business rules. A total savings of 12 weeks (three weeks per existing screen) will be taken. Although there is some support for XML, imaging and data entry, unlike the case for the current PDC system, the undeveloped user screens will have no background support. Likely existing screens would also need changes for these items. These three tasks and the database development activity will see less savings than for the modify scenario. In addition, the database will be entirely new, so there is no savings expected for data migration. The query system also is less complete than the current PDC system, so there will need to be additional work there to complete this. Most other activities would see little or no change. The New York system (as is the case with many of the outside state system) is older technology (Visual Basic and VB Script) that probably should be converted where possible to current standards. An additional five weeks has been added to support this activity.

The table below summarizes the expected effort required for these last two tasks:

Activity	Modify	Public Domain
Team Training	160	160
User Interface Development	1120	880
User Management Console	80	80
Administrator Management Console	80	80
XML Creation	40	80
Database Development	80	200
Data Migration	120	280
Data Entry Front End	120	280
Imaging	120	280
Query System	320	640
Quality Assurance/Acceptance Testing	360	360
Vendor Kit	480	480
Technical Writing	560	560
Code Conversion	0	200
Total Hours	3640	4560

This corresponds to 91 weeks for the modify scenario and 107 weeks for public domain.

For the joint **vendor and agency** developed, the simplest split seems to assume half the development effort being taken by the vendor and half by agency staff. However, this could vary depending on how tasks were split.

From a **project management** standpoint, all the agency developed projects are assuming a worst case scenario where there is no additional project staff. As a result, the actual scheduled time is assumed to be the same as the total weeks' effort, with an average of one full time staff working on development. For each of these options, project management is assumed as half-time for the duration of the project. If the project allows for additional staff to be added, the management time will likely decrease.

The **vendor developed and combined** scenarios assume there are multiple staff available so that the actual schedule time is half the 130 weeks effort. However, as is usually the case, separate project managers are estimated for the agency and for the vendor. The vendor project manager fills the usual role directing development, while the agency manager does tracking and provides agency resources as needed for questions or problems that need to be resolved. Both are estimated at half time for the project duration.

The **purchase** option is based on vendor input. Staff time required is again taken from the vendor schedule, assuming a full-time staff during needs assessment (2-3 months) and half time during pilot study, implementation and training (10 weeks total). Schedule time is 12-16 months, with a half-time agency manager assumed for the duration as in the vendor developed scenario. The miscellaneous costs listed include estimated travel cost for the vendor developers (not included in the quoted price) and additional costs for hardware and licensing that would be needed for minimal support of non-Windows systems. Outside hosting rates for the re-host scenario were based on information available online for public and private hosting providers.

Yearly fees for the vendor developed option are based on the vendor responses to the RFI. It would be desirable in most of these options for PDC to retain one of the staff involved in development permanently to help with support of the application. The basic support scenarios for the developed options all include cost of adding a permanent staff position. In the case of the modify and public domain scenarios, there is additional risk due to older or unfamiliar code that may eventually need revision or replacement. To take this into account, a higher base support cost is used here, actually 1.25 staff. The safety margin numbers include two additional staff in all cases, even for the riskier scenarios this should be more than sufficient.

Expected costs for server hardware to support the system were provided by PDC based on recent purchases. This includes \$24,800 for server hardware, \$1,900 for Windows Server 2003 licenses and \$6,300 for additional disk storage. An estimate of \$2,500 per year was also provided for expected maintenance costs. These are included with the appropriate options.

1. Current Application—be aware but not change

Current application is in service and provides a known level of service. There are a number of problems that need to be addressed, however.

- Maintenance costs are high due in part to lack of edits, data prompts and automation of calculations on the current forms. This requires considerable staff time to correct information originally input by the lobbyist users. To a large extent, these problems cannot be fixed with the current form software.
- There are also periodic support problems due to changes in Adobe PDF and Crystal Reports plug-ins that are critical to the function of the application.
- Some parts of the application are written in Access 2000. These cannot be updated to a newer version of Access without losing critical functionality. This may become a support problem in a few years, possibly requiring replacement.
- There is also a desire for increased public reporting capabilities. Although this is important to the mission of PDC and application function, there are no clear cost impacts associated with this.

	Low Range	High Range
Current estimated monthly agency support costs	\$2,500	\$3,000
Current yearly licensing fees	\$15,000	
Yearly hardware maintenance costs	\$2,500	
Ten-year costs for current application	\$475,000	\$535,000

2. Re-Host—move it but no functional changes

This option entails moving the application to another commercial or state host, with minimal changes to the application. Primary support for the application would still be provided by PDC.

- The IT environment at PDC is at current standards and the application servers and support software are up-to-date. The re-host environment will not be more modern than current environment, so there is no measurable savings in this regard.
- Application maintenance costs for PDC would not change much, since they would still need to handle application fixes, data correction and user support.
- Potential problems with Access 2000 support are not addressed. May still be additional support or replacement costs for Access code within this time period.
- There are no costs for server maintenance. The actual server hardware is provided by the hosting vendor, who will provide their own maintenance.
- Costs would be incurred for initial planning, setup and transfer of application. There would also be monthly hosting costs.
- Re-host would eliminate one application server at PDC, but would require two servers at hosting site (one for application and one for data storage).

	Low Range	High Range
Setup fees for hosting (two servers)	\$1,000	\$1,500
PDC planning and testing costs for re-host 3 weeks at ITS-5 (\$61/hour)	\$6,317	

	Low Range	High Range
Total initial cost	\$7,317	\$7,817
Current estimated monthly agency support costs	\$2,500	\$3,000
Monthly fees for hosting (two servers)	\$550	\$1150
Current yearly licensing fees	\$15,000	
Ten year costs for re-host scenario	\$523,317	\$655,817

3. Modify Existing Application

The current application could be revised to fix the major identified problems with the lobbyist interface and with public reporting. The lobbyist interfaces would be largely replaced. Existing reports and in-house screens would only be changed as needed. New reports and lobbyist forms would be added as needed.

- Some savings can result from re-use of existing code base, although much of the lobbyist interface will need to be replaced.
- New lobbyist screens would decrease the need for entry and correction of lobbyist data.
- Dependence on PDF forms would be eliminated, saving support for the PDF plug-ins.
- Could possibly consider migrating existing reports from Crystal Reports to SQL Reporting, depending on time and budget. This would eliminate support needs for another plug-in. New reports would be added as needed.
- Most likely, the Access 2000 parts of the application would remain and be revised as needed. As a result, there may still be additional support or replacement costs for Access code within this time period.
- Yearly support fees for the forms software will be eliminated.

	Base Cost	150% Safety Margin
Estimated development time 91 weeks (3640 hours) at ITS-5 (\$52.64/hour)	\$191,612	
Project management 91 weeks half time (1820 hours) at ITS-6 (\$57.61/hour)	\$104,843	
Total development costs (estimated)	\$296,455	\$741,137
Server Hardware	\$32,000	
External QA (10% of development cost)	\$29,646	\$74,114
Total initial costs (estimated)	\$358,101	\$847,251
Yearly agency support costs (at 1.25 ITS-5 base) , nine years	\$122,030	\$195,248
Yearly server maintenance, nine years	\$2,500	
Ten year costs for modify scenario	\$1,478,871	\$2,626,983

4. Replace Application with Agency Developed

For this option, a complete new application would be developed in-house, possibly using parts of the current application as a guide. Entire application would be rewritten, including Access 2000 administration screens and most or all reports.

- Two and a half staff years development effort is expected. Half time project management is included for this period. Actual time could be shortened by adding additional staff.
- Existing reports would be ported to SQL reporting and rewritten as required. This would eliminate support needs for Crystal plug-in. New reports would be added as needed.
- New lobbyist screens would decrease the need for entry and correction of lobbyist data.
- Dependence on PDF forms would be eliminated, saving support for the PDF plug-ins.
- Access 2000 parts of the application would be rewritten in a .Net language (likely C#).
- Yearly support fees for the forms software will be eliminated.

	Base Cost	150% Safety Margin
Estimated development time 130 weeks (5200 hours) at ITS-5 (\$52.64/hour)	\$273,731	
Project management 130 weeks half time (2600 hours) at ITS-6 (\$57.61/hour)	\$149,776	
Total development costs (estimated)	\$423,507	\$1,058,767
Server Hardware	\$32,000	
External QA (10% of development cost)	\$42,350	\$105,876
Total initial costs (estimated)	\$497,857	\$1,196,643
Yearly agency support costs (at ITS-5), nine years	\$97,624	\$195,248
Yearly server maintenance, nine years	\$2,500	
Ten year costs for agency developed scenario	\$1,398,973	\$2,976,375

5. Replace Application with Vendor Developed

For this option, a complete new application would be developed by a vendor. The existing application might be used as a guide, along with input from PDC staff for design and testing. There were not many vendor responses, and there are some questions as to the quality of the estimates. Allowances are made in the analysis to try to account for this.

There will still be major support needs at PDC, so the staff support requirement is being maintained similar to the in-house developed applications. Due to this and the added vendor licensing and support costs, overall support will be higher for this option than for other developed options.

- Development is done by an outside vendor. Development effort should be similar to agency developed, 130 weeks. Actual schedule time is taken as half this (65 weeks)

since the vendor should be able to provide higher staffing levels. Project management time is based on this shorter schedule.

- PDC staff time would be required during the development process. One full-time staff will be needed during identified design and testing tasks. This is estimated at 26 weeks PDC staff time.
- In addition to the usual maintenance costs, there likely will be yearly fees for license and support from the vendor. These are taken from vendor supplied quotes.
- The entire application would be developed new by the vendor, including forms, reports and data entry screens. The vendor would be required to develop to current application standards, so there would not be problems with plug-ins or Access 200 code.
- New reporting system would eliminate support needs for Crystal plug-in.
- New lobbyist screens would decrease the need for entry and correction of lobbyist data.
- Yearly support fees for the forms software will be eliminated.

	Base Cost	150% Safety Margin
Estimated development time 130 weeks (5200 hours) at vendor rate (\$125.00/hour)	\$650,000	
Agency development support 26 weeks (1040 hours) at ITS-5 (\$52.64/hour)	\$54,746	
Vendor project management 65 weeks half time (1300 hours) at vendor rate (\$150.00/hour)	\$195,000	
Agency project management 65 weeks half time (1300 hours) at ITS-6 (\$57.61/hour)	\$74,888	
Total development costs (estimated)	\$974,634	\$2,436,585
Server Hardware	\$32,000	
External QA (10% of development cost)	\$97,463	\$243,659
Total initial costs (estimated)	\$1,104,097	\$2,712,244
Yearly agency support costs (at ITS-5), nine years	\$97,624	\$195,248
Yearly vendor license/support fees, nine years	\$18,000	
Yearly server maintenance, nine years	\$2,500	
Ten year costs for agency developed scenario	\$2,167,213	\$4,653,976

6. Replace Application with Combined Agency/Vendor Development

For this option, a complete new application would be developed by a team of vendor and PDC personnel, possibly using parts of the current application as a guide.

- Since this is a jointly developed project, the ongoing cost for training and support by the vendor could be eliminated. PDC staff would have full knowledge of the application and could fully handle application support within normal support tasks.
- The entire application would be developed new by the vendor with PDC staff support, including forms, reports and data entry screens. The vendor would be required to develop to current application standards, so there would not be problems with plug-ins or Access 2000 code.
- New reporting system would eliminate support needs for Crystal plug-in.
- New lobbyist screens would decrease the need for entry and correction of lobbyist data.
- Yearly support fees for the forms software will be eliminated.

	Base Cost	150% Safety Margin
Half of total vendor development costs (less management)	\$325,000	
Half of total agency development costs (less management)	\$136,865	
Vendor project management 65 weeks half time (1300 hours) at vendor rate (\$150.00/hour)	\$195,000	
Agency project management 65 weeks half time (1300 hours) at ITS-6 (\$57.61/hour)	\$74,888	
Total development costs (estimated)	\$731,753	\$1,829,383
Server Hardware	\$32,000	
External QA (10% of development cost)	\$73,175	\$182,938
Total initial costs (estimated)	\$836,928	\$2,044,321
Yearly agency support costs (at ITS-5), nine years	\$97,624	\$195,248
Yearly server maintenance, nine years	\$2,500	
Ten year costs for combined development scenario	\$1,738,044	\$3,824,053

7. Purchase Product to Replace Application

There is no existing application software that can replace the PDC application directly out of the box. There is some Web-capable workflow software that can be modified by the vendor to fit the needs of the PDC. For this option, a complete new application would be developed by a vendor with assistance from PDC.

In general, with this type of solution some compromises may need to be made to the appearance and flow of the application. Packaged solutions do not offer the flexibility of new development. There may also be reduced compatibility for non-Windows (Mac and Linux) users, since few vendors in this application niche have the resources to satisfy these relatively small markets.

- Existing application screens and reports would be recoded using specialized software.

- Development is done by an outside vendor. Cost and time is taken from best estimates provided by an outside vendor for a packaged application from the RFI responses.
- Savings here are due primarily to flat up-front license costs from the vendor. While there is some development work done by the vendor, this is largely included in license fee.
- Actual vendor development time estimates are fairly similar to new web development, ranging from 12 to 16 months (52 to 70 weeks).
- There is a yearly license and support fee for the vendor-supplied software, which is substantially higher than for the vendor developed scenario.
- PDC staff time would be required during the development process. One half staff is estimated for the duration of the project for coordination tasks. One full additional staff is estimated for 13-17 weeks during identified design and testing tasks.

	Low Range	High Range
Fixed vendor license and development costs	\$74,500	
Full time staff for design and test support 13 to 17 weeks (520 to 680 hours) at ITS-5 (\$52.64/hour)	\$27,373	\$35,791
Agency project management 52 to 69 weeks (1040 to 1380 hours) at ITS-6 (\$57.61/hour)	\$59,910	\$79,501
Total development costs (estimated)	\$161,783	\$189,792
Vendor travel and miscellaneous	\$18,000	
Server Hardware	\$32,000	
External QA (10% of development cost)	\$16,178	\$18,979
Total initial costs (estimated)	\$227,961	\$258,771
Yearly agency support costs (at ITS-5 base), nine years	\$97,624	\$195,248
Yearly vendor license and support costs, nine years	\$35,200	
Yearly server maintenance, nine years	\$2,500	
Ten year costs for purchase scenario	\$1,445,877	\$2,355,303

8. Replace Application with Public Domain (Agency Modified)

The closest option available to public domain software in this field is to use an existing application from another state. For this option, a state lobbyist application from another state would be acquired and modified to fit the needs of the PDC.

Currently, each of the state applications is unique to that state. There is fairly low similarity between different state applications and no established vendors that serve multiple states. As a result, there will be significant effort required to adapt another state's application for the PDC. There is also a greater level of risk that development effort may increase because there may be problems adapting the new application that are not apparent prior to acquisition. There is a significant chance that this could even exceed the nominal 150% added safety margin. As a result, safety margin for this is being taken as 200% added.

For this option, modification by the agency is expected. It may be possible to find a state with a vendor created system where the vendor may be willing to make changes to its system to fit Washington state needs. However, this likely will be very similar in cost and concept to the existing vendor-developed option, so this will not be considered separately. Also, it does not seem reasonable to take a system from a separate state and then hire a third party vendor to make the actual changes for the agency. Without familiarity with the other state's system at either PDC or the vendor, it would be very difficult to create a satisfactory system.

- Development effort would vary by state chosen. However, given the relatively poor fit to PDC needs even for the best case states, the savings is likely no more than 20% of new development.
- Existing screens and process from the outside state would be used to the extent possible. However, none of the other state applications is close to the desired features of the new application. New screens would be required and existing ones may still need substantial revision.
- Considerable work would also be required for data entry screens and business rules.
- Many of the other states do fairly well with reporting, but there would still be revisions and additions needed here as well. In addition, many of the states that have good on-line applications do not have especially good reporting functions.
- Design and testing tasks are likely to be similar to new development, since the application is entirely new to PDC.
- Many of the other state applications are written in part or in full in languages that are not currently supported at PDC (such as COBOL), or that are currently obsolete (such as Visual Basic 6). Some conversion time may be required to update the code to decrease ongoing support costs.
- Some states may want to charge a fee for use of their code or to cover their support costs to the PDC during development. This may further increase costs.

	Base Cost	200% Safety Margin
Estimated development time 114 weeks (4360 hours) at ITS-5 (\$52.64/hour)	\$240,041	
Project management 114 weeks half time (2280 hours) at ITS-6 (\$57.61/hour)	\$131,342	
Total development costs (estimated)	\$371,383	\$1,114,148
Server Hardware	\$32,000	
External QA (10% of development cost)	\$37,138	\$111,415
Total initial costs (estimated)	\$440,521	\$1,257,563
Yearly agency support costs (at ITS-5), nine years	\$122,030	\$195,248
Yearly server maintenance, nine years	\$2,500	
Ten year costs for public domain scenario	\$1,561,291	\$3,037,295

Outsource Replacement

The new application would be developed by an outside vendor, who would then host the application on their servers and take over primary support for the application.

- Costs for this option are quoted below for the purchase scenario and for the vendor developed scenario.
- Ongoing support at PDC should be minimal, since the vendor will be taking over primary user support.
- Initial and yearly vendor fees vary somewhat from the agency hosted scenarios.
- Benefits and limitations of the vendor developed and purchased scenarios would still apply to the appropriate outsourcing options.

9. Purchase

	Low Range	High Range
Fixed vendor license and development costs	\$74,500	
Half staff for coordination at ITS-6 (\$61/hour), 1040 to 1400 hours	\$59,910	\$85,400
Full staff for design and test at ITS-6, 520 to 680 hours	\$27,373	\$41,480
Total development costs (estimated)	\$161,783	\$201,380
Vendor travel and miscellaneous	\$18,000	
External QA (10% of development cost)	\$16,178	\$18,979
Total initial costs (estimated)		
Yearly vendor hosting, license and support costs, nine years	\$36,800	
Ten year costs for purchased outsource option	\$527,162	\$557,971

10. Develop

	Low Range	High Range
Total development costs (from vendor developed scenario)	\$974,634	\$2,436,585
External QA (10% of development cost)	\$97,463	\$243,659
Total initial costs (estimated)	\$1,072,097	\$2,680,244
Yearly vendor hosting, training and support costs	\$72,000	
Ten year costs for the vendor developed outsource	\$1,720,097	\$3,328,244