Briefing:

Financial and technical implications of moving government public notice advertising to government-run Web sites

February 28, 2011

Publication Requirements for Minnesota's Political Subdivisions (Local Governments)

Section 331A of the Minnesota statutes requires counties, municipalities, school districts and all other local political subdivisions, including districts, commissions, boards or authorities, to notify the public of certain government actions and proceedings, including but not limited to notices of meetings, hearings and elections as well as financial reports and other information. Public notice is given via publication in printed newspapers meeting certain criteria. By law these political subdivisions can be charged no more than the lowest classified advertising rate paid by commercial advertisers, and by law all standard discounts and benefits must be applied.

Section 331A.12 provides an exception allowing transportation-related information to be posted on the local government's Web site rather than being published in a newspaper.

H.F. No. 162 (Draskowski) proposes to broaden the 331A.12 exception to allow, at local option, all local government notices to be posted on the government's Web site as an alternative to newspapers. It would require that online notices remain in the same formats as previously required for print, and it would mandate that any political subdivision using this option maintain the information permanently in a form accessible by the public. The companion bill is S.F. No. 412 (Peterson).

We have explored the implications of HF162/SF412 and the possible financial impact on local political subdivisions. A broad range of political subdivisions could be affected, including 87 counties, 854 municipalities, 519 school districts, and more than 200 other districts and authorities.

Our Approach

Technical staff at The Dolan Company took a conservative approach to deriving the costs associated with moving government public notice advertising away from newspapers and onto Web sites operated by local political subdivisions. We drew on our years of experience in providing systems and workflow to local governments, handling exactly this kind of advertising content.

Based on the information provided by the Minnesota Department of Administration, we have assumed that the state has both existing human resources and equipment to provide startup guidance to the many local governments that would have to begin new processes.

We also assumed optimal use of open source software. The Dolan Company is a big advocate of open source software. All of our estimates are based on the technical approach listed in the

Minnesota Department of Administration web site (http://www.demography.state.mn.us/resource.html?Id=16260). We presume the new local government Web sites would make maximum possible use of Linux operating systems, Apache 2.0 Web servers, Sql Server, Mapserver, PERL, Apache:ASP, and PHP. We are active WordPress users and we have verified that WordPress does not provide any widgets or modules applicable to this usage.

We note that a comparison among the Department of Administration Web site, the Web site for the Minnesota Department of Labor and Industry (http://www.dli.mn.gov/main.asp) and the Web site for Hennepin County (http://hennepin.us/) indicates that there is no consistent technical approach to how information is managed or presented. **This strongly implies that that there will be additional costs either to assure consistency and accuracy of the data across multiple platforms, or to bridge the differences among data formats to account for inconsistencies. We have not estimated any of those costs in this analysis.**

We also assume that the local political subdivisions will make all reasonable efforts to ensure that Web sites and Web applications are accessible in commonly used browsers and operating system platforms. We further assume that these sites will meet the accessibility standards required of federal government Web sites (section 508) and accessibility guidelines of the world Wide Web Consortium (W3C) as described at http://www.w3.org.

For purposes of this analysis, we built models for three different local government sizes and estimated ranges of cost requirements.

Summaries of our findings appear on following pages. More detailed information is available upon request. All hardware quotes are from PC Connections, a major national supplier, and reflects government pricing, which is below list prices.

Our analysis indicates that total statewide start-up costs as outlined below would range from $14.33 million to $31.58 million. The analysis also indicates that first year annual operating costs statewide would range from $24.53 million to $31.62 million.

These estimates relate to counties, municipalities and school districts. They do not include estimates for special districts or authorities.

Summary Example 1: Typical Large Local Unit of Government

This might be a large-population county or a city. We assume the local government has existing computer systems and would add to its infrastructure to support the new services. The differences between high and low estimates represent cheapest possible alternatives vs. industry best practices for robust systems with minimal downtime and acceptable security.

We believe this applies to approximately 100 Minnesota large local government units. For those 100 governments, total one-time costs in aggregate would total $2.62 to $5.58 million and annual operating costs would total $6.00 million to $6.45 million.

One-time capital costs	High, Year 1	Low, Year 1
Dell servers	$24,658	$12,329
Network (Storage Area Network EqualLogic)	25,060	12,530
Set-up costs (installation and training)	2,720	680
Online content management system	3,400	680
Total one-time capital costs	**$55,838**	**$26,219**

Operating costs	High, Annual	Low, Annual
Staffing costs (assumed done with one FTE, incl/benefits)	$53,404	$53,404
Systems maintenance	11,050	6,630
Total annual operating costs in first year	**$64,454**	**$60,034**

Possible additional costs, not quantified above:

There will be annual **audit costs** but this is not quantifiable here and will vary widely from one entity to another.

Errors and omissions insurance would be optional. Sovereign immunity usually offers some protection against legal risks, but some local governments do purchase errors and omissions insurance. Depending upon coverage details, this would cost from $15,000 to $25,000 per year

If the local government wishes to enable **historical searching, comparisons or trend analyses** by online users, it may be necessary to retrieve historical information. We did not quantify those costs. We note that local newspapers typically do maintain such archives of previously published information in historical public notices, and if the archives are not available in government files, it may be possible to buy them from large-market local publishers for a one-time cost of $50,000 to $75,000.

Summary Example 2: Typical Mid-Sized Local Unit of Government

This might be a county or a city. We assume the local government has existing computer systems and would add to its infrastructure to support the new services. The differences between high and low estimates represent cheapest possible alternatives vs. industry best practices for robust systems with minimal downtime and acceptable security. We believe this applies to approximately 400 Minnesota mid-sized government units. By implication, one-time costs in aggregate would total $10.49 million to $22.33 million and annual operating costs would total $12.45 million to $13.33 million.

One-time capital costs	High, Year 1	Low, Year 1
Dell servers	$24,658	$12,329
Network (Storage Area Network Equallogic)	25,060	12,530
Set-up costs (installation and training)	2,720	680
Online content management system	3,400	680
Total one-time capital costs	**$55,838**	**$26,219**

Operating costs	High, Annual	Low, Annual
Staffing costs (assumed done with one half FTE, incl/benefits)	$26,702	$26,702
Systems maintenance	6,630	4,420
Total annual operating costs in first year	**$33,332**	**$31,122**

Possible additional costs, not quantified above:

There will be annual **audit costs** but this is not quantifiable here and will vary widely from one entity to another.

Errors and omissions insurance would be optional. Sovereign immunity usually offers some protection against legal risks, but some local governments do purchase errors and omissions insurance. Depending upon coverage details, this would cost from $10,000 to $18,000 per year.

If the local government wishes to enable **historical searching, comparisons or trend analyses** by online users, it may be necessary to retrieve historical information from government files. We did not quantify those costs. We note that local newspapers typically do maintain such archives of previously published information in historical public notices, and if the archives are not available in government files, it may be possible to buy them from mid-market local publishers for a one-time cost of $25,000 to $50,000.

Summary Example 3: Typical Small Local Unit of Government

Assumes the local government has minimal existing computer systems and would use a vendor for hosting and support services.

This projection assumes none of the industry's accepted best practices are put into place.

We believe this applies to approximately 900 Minnesota small government units, mostly small municipalities and school districts. By implication, one-time costs in aggregate would total $1.22 million to $3.67 million and annual operating costs would total $6.08 million to $11.84 million.

One-time capital costs	High, Year 1	Low, Year 1
Set-up costs (installation and training)	$1,360	$ 680
Online content management system	2,720	680
Total one-time capital costs	**$4,080**	**$1,360**

Operating costs	High, Annual	Low, Annual
Staffing charges	$ 5,135	$1,284
Hosting charges	3,600	2,160
Systems maintenance	4,420	3,315
Total annual operating costs in first year	**$13,155**	**$6,759**

Possible additional costs, not quantified above:

There will be annual **audit costs** but this is not quantifiable here and will vary widely from one entity to another.

Errors and omissions insurance would be optional. Sovereign immunity usually offers some protection against legal risks, but some local governments do purchase errors and omissions insurance. Depending upon coverage details, this would cost from $8,000 to $10,000 per year.

If the local government wishes to enable **historical searching, comparisons or trend analyses** by online users, it may be necessary to retrieve historical information. We did not quantify those costs. We note that local newspapers typically do maintain such archives of previously published information in historical public notices, and if the archives are not available in government files, it may be possible to buy them from small-market local publishers for a one-time cost of $10,000 to $25,000.

Detail Behind Example 1: Typical Large Local Unit of Government

Assumptions: The local government has existing computer systems and would add to its infrastructure to support the new services.   The differences between high and low estimates represent cheapest possible alternatives vs. industry best practices for robust systems with minimal downtime and acceptable security.

One-time capital costs	High, Year 1	Low, Year 1
Dell servers Dell Proliant ML 150 G6 with 1TB disk space, 2.0 GHz Quad core processors, 2GB memory, 4GB NICS, 3 year next business day onsite warranty, advanced ILO, internal SAS cable, SAS PCI card, cleaning tape, backup tapes and tape drive. Systems are presumed to use the following software: Linux operating system, Apache 2.0 Web server, Mapserver, PERL scripting, SQL Server, Apache::ASP active server pages port, and PHP server-side embedded HTML scripting language.	$24,658 4 units: 1 for development, 1 for backup, 2 for public access. Best industry practice.	$12,329 2 units: 1 for development, 1 for public access.
Network (Storage Area Network EqualLogic 2 or 4 TB) EqualLogic Storage Area Network (SAN), with 1 year NBD onsite warranty.	25,060 4TB storage	12,530 2TB storage
System set-up costs (installation and training) Presumed hourly costs at $85 per hour, current market rates experienced by The Dolan Company with IT contractors in 2009 and 2010.	2,720 32 hours	680 8 hours
Online content management system Presumed hourly costs at $85 per hour, current market rates experienced by The Dolan Company with IT contractors in 2009 and 2010. (N.B.: Dolan has spent more than 1,000 hours developing such a system.)	3,400 40 hours	680 8 hours
Total one-time capital costs	**$55,838**	**$26,219**

Operating costs	High, Annual	Low, Annual
Staffing costs (assumed done with one FTE, incl/benefits) Hourly staff cost of $19.75, based on comparables at TwinCities.com and StarTribune.com. Benefits and overhead assumed at 30%.	$53,404	$53,404
Systems maintenance IT contractor based on $85 per hour	11,050 2.5 hours per week	6,630 1.5 hours per week
Total annual operating costs in first year	**$64,454**	**$60,034**

Detail Behind Example 2: Typical Mid-Sized Local Unit of Government

Assumptions: The local government has existing computer systems and would add to its infrastructure to support the new services. The differences between high and low estimates represent cheapest possible alternatives vs. industry best practices for robust systems with minimal downtime and acceptable security.

One-time capital cost	High, Year 1	Low, Year 1
Dell servers	$24,658	$12,329
Dell Proliant ML 150 G6 with 1TB disk space, 2.0 GHz Quad core processors, 2GB memory, 4GB NICS, 3 year next business day onsite warranty, advanced ILO, internal SAS cable, SAS PCI card, cleaning tape, backup tapes and tape drive. Systems are presumed to use the following software: Linux operating system, Apache 2.0 Web server, Mapserver, PERL scripting, SQL Server, Apache::ASP active server pages port, and PHP server-side embedded HTML scripting language.	4 units: 1 for development, 1 for backup, 2 for public access. Best industry practice.	2 units: 1 for development, 1 for public access.
Network (Storage Area Network EqualLogic)	25,060	12,530
EqualLogic Storage Area Network (SAN), with 1 year NBD onsite warranty.	4TB storage	2TB storage
System set-up costs (installation and training)	2,720	680
Presumed hourly costs at $85 per hour, current market rates experienced by The Dolan Company with IT contractors in 2009 and 2010.	32 hours	8 hours
Online content management system	3,400	680
Presumed hourly costs at $85 per hour, current market rates experienced by The Dolan Company with IT contractors in 2009 and 2010. (N.B.: Dolan has spent more than 1,000 hours developing such a system.)	40 hours	8 hours
Total one-time capital costs	**$55,838**	**$26,219**

Operating costs	High, Annual	Low, Annual
Staffing costs (assumed done with one half FTE, incl/benefits)	$26,702	$26,702
Hourly staff cost of $19.75, based on comparables at TwinCities.com and StarTribune.com. Benefits and overhead assumed at 30%.		
Systems maintenance	6,630	4,420
IT contractor based on $85 per hour	1.5 hours per week	1 hour per week
Total annual operating costs in first year	**$33,332**	**$31,122**

Detail Behind Example 3: Typical Small Local Unit of Government

Assumptions: The local government has existing computer systems and would add to its infrastructure to support the new services.   The differences between high and low estimates represent cheapest possible alternatives vs. industry best practices for robust systems with minimal downtime and acceptable security.

One-time capital costs	**High, Year 1**	**Low, Year 1**
System set-up costs (installation and training	1,360	680
Presumed hourly costs at $85 per hour, current market rates experienced by The Dolan Company with IT contractors in 2009 and 2010.	16 hours	8 hours
Online content management system	2,720	680
Presumed hourly costs at $85 per hour, current market rates experienced by The Dolan Company with IT contractors in 2009 and 2010. (N.B.: Dolan has spent more than 1,000 hours developing such a system.)	32 hours	8 hours
Total one-time capital costs	**$4,080**	**$1,360**

Operating costs	**High, Annual**	**Low, Annual**
Staffing costs	$5,135	$1,284
Hourly staff cost of $19.75, based on comparables at TwinCities.com and StarTribune.com. Benefits and overhead assumed at 30%.	200 hours of labor or 3.85 hours/week	50 hours of labor or 1 hour/week
Hosting charges	3,600	2,160
Quotes from local ISPs. Variations based on amount of memory used and bandwidth required.	$300/month	$180/month
Systems maintenance	4,420	3,315
IT contractor based on $85 per hour	1 hour per week	45 minutes per week
Total annual operating costs in first year	**$13,155**	**$6,759**