

Google Maps API Draft Issue Paper

August 10, 2011

INTRODUCTION

On April 8, 2011, Google changed their Terms of Service for the Google Maps API. The new terms allow Google to include advertising in the places results that is provided in the customer's Maps API. By using Google Maps API(s) to obtain places results, DWR agrees to display such advertising in the form provided by Google.

To date, Google has not invoked this right. According to their Terms of Service (Attachment A), Google will provide DWR with a 90 day notice prior to the commencement of advertising in the maps images by posting this notice on their website at the Google Geo Developer Blog.

Subsection b(ii) of Google's Terms of Service states that all websites registered with Google prior to April 8, 2011 have a limited right to opt out of the advertising by submitting a written notice during the 90 day "Ads Notice" period. In anticipation of the Ads Notice period, DTS subscribed to Google's Website to ensure the Department is informed of our 90 day notice period. DWR's legal office should review and pursue the appropriate action to resolve this issue for any of our existing websites that could be impacted by Google's new Terms of Service.

Currently, DWR has thirteen GIS web applications that could be impacted by Google's new Terms of Service (Attachment B). Five of the GIS web applications are available to the Public and eight are for internal use only. One of the GIS web applications, [Best Available Maps](#), is not eligible for the "opt out" option because it was registered with Google as recently as June 2011.

The Division of Technology Services completed an assessment to identify the number and type of GIS Web applications in production in order to determine a course of action in response to Google's new Terms of Service. The results of the assessment are included in Attachment B. All of the GIS Web applications that were identified in the assessment are user friendly and provide valuable information to DWR's staff, business partners, and the Public.

Six alternatives were evaluated for consideration as possible solutions to meet Google's new Terms of Service and to ensure no disruption of service to our staff, customers, and the Public. The alternatives are discussed below.

ALTERNATIVES

1. Remove all GIS Web applications impacted by Google's new Terms of Service.
2. Submit a request to Google to "opt out" of their advertisements.
3. Modify existing Web applications to use an alternative API and/or data source(s).
4. Purchase Google Enterprise License, which meets Google's new Terms of Service for all of our existing Web applications.
5. State CIO negotiates with Google for a statewide exception to advertisements on data provided by Google.
- 6.

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ALTERNATIVE 1 – Remove all GIS Web applications impacted by Google’s new Terms of Service.

Advantages:

- No additional resources required (application development time).
- No additional licensing costs.
- Complies with State policy regarding advertisements on websites.

Disadvantages:

- Does not meet the business need as identified by the business community.

ALTERNATIVE 2 - Request to “opt out” of advertisements.

Advantages:

- No additional resource costs required (application development time).
- No additional licensing costs.

Disadvantages:

- Does not meet the business community requirements because the Best Available Map application is not eligible for the “opt-out” option due to its recent deployment on the Internet.
- Possibility that Google will not approve DWR’s request for choosing the “opt out” option.
- Does not address future applications that may require Public access to water planning or flood control information.

In Alternative 2, DWR is planning on notifying Google of our desire to “opt out” of advertisements via the “opt out” process that is identified by Google in their new Terms of Service contract.

Dependencies Associated with Alternative 2 include the following:

1. Google has identified that the user has a “limited right” to opt out of advertisements. This could lead some or all of DWR’s GIS Web applications being denied as an “opt out” status.

ALTERNATIVE 3 - Modify existing GIS Web applications to use alternative API and/or data source(s).

Advantages:

- Meets the business community needs.
- Moves GIS Web applications from Google Maps API to an alternative API and data source(s).

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- Removes possible software license violation of existing internal GIS applications.
- Complies with State policy regarding advertisements on websites.

Disadvantages:

- Requires staff or contractor resources (cost) to rewrite GIS applications using a different API.

In Alternative 3, existing GIS Web applications would be redeveloped using alternative programming languages or APIs. In the case of some GIS applications, this would require significant resources and increase costs.

Dependencies associated with Alternative 3 are as follows:

1. Business owners of the GIS applications would need to provide the necessary resources and participate cooperatively in redeveloping the applications.
2. Google will provide a 90-day notice prior to delivering advertisements. It is unknown, when, if ever, this notice will start. However, the time required to convert applications could extend beyond this time period.

ALTERNATIVE 4 - Purchase Google Enterprise License.

Advantages:

- Meets the business community needs.
- No additional resources (development cost) needed.
- Removes possible license violation of internal applications.
- Complies with State policy regarding advertisements on websites.

Disadvantages:

- Requires annual licensing costs.

In Alternative 4, DWR will purchase an Enterprise license for Google Maps and size the licensing based on total number of hits to all Public facing applications.

Dependencies associated with Alternative 4 are as follows:

1. Business owners will need to provide funding to maintain the annual license contract.
2. Google License is tiered by total number of page views. If page views increase beyond the initial level allocated in the contract, DWR would be subject to overage charges or required to increase service to the next tier level.
3. Google License fee could increase overtime.

ALTERNATIVE 5 - State CIO negotiates statewide exception.

Advantages:

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- Meets the business community needs.
- No additional resources (development cost) needed.
- Removes possible license violation of internal applications.
- Complies with State policy regarding advertisements on websites.
- No additional licensing costs.

Disadvantages:

- Relies on interagency cooperation to accomplish.

In Alternative 5, DWR will approach State CIO's Office and request that the Office negotiate a statewide exemption from advertisements being included with data received from Google.

Dependencies associated with Alternative 5 are as follows:

1. Requires cooperation from State CIO's office.
2. Requires Google to exempt all state websites from advertisements.

ALTERNATIVE 6 - DWR to purchase a Google Earth appliance which includes unlimited licenses, unlimited use, and without corporate advertising. The approximate one-time cost is \$200,000 and the ongoing cost is 25 percent of the subscription cost. This appliance will reside in DWR's Data Center and will be made available to all as a shared service.

RECOMMENDATION

The Enterprise GIS Committee should consider the six alternatives and determine which alternative best meets the business needs and is cost effective.

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ESTIMATED COST ANALYSIS

NOTE: Cost based on average hourly rate of Staff Programmer Analyst (State) or Staff Programmer (Consultant)

Estimated Cost Analysis Alternative 1 - Remove web applications using Google API.			
	Ea	qty	Total
One Time Costs			
<i>Software</i>	\$ 0.00	0	\$ 0.00
Total One Time Costs			\$ 0.00
Ongoing Costs/yr			
	\$ 0.00	0	\$ 0.00
Total Ongoing Costs			\$ 0.00
Total Alternative 1 Cost			\$ 0.00

Estimated Cost Analysis Alternative 2 - Request to opt out of advertisements.			
	Ea	qty	Total
One Time Costs			
<i>Software</i>	\$ 0.00	0	\$ 0.00
Total One Time Costs			\$ 0.00
Ongoing Costs/yr			
	\$ 0.00	0	\$ 0.00
Total Ongoing Costs			\$ 0.00
Total Alternative 2 Cost			\$ 0.00

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Estimated Cost Analysis Alternative 3 - Modify web applications to use alternative API and/or data source(s).				
	Ea		qty	Total
One Time Costs				
<i>Development time</i>				
<i>Public Sites</i>				
BAM/LFPZ (4-5 months)	\$ 131.25		<800	\$ 105000.00
CIMIS (underway)				
IWRIS (unknown)	\$ 100.00		10	\$ 1000.00
Water Data Library	\$ 33.00		100	\$ 3300.00
<i>Internal Sites</i>				
ShakeCast (Estimation)	\$ 33.00		40	\$ 1320.00
SFDmaps	\$ 33.00		20	\$ 660.00
SFDshake	\$ 33.00		20	\$ 660.00
SFD quake	\$ 33.00		40	\$ 1320.00
SDF Dig Alert	\$ 33.00		24	\$ 792.00
Total One Time Costs				\$ 114,052.00
Ongoing Costs/yr				
	\$ 0.00		0	\$ 0.00
Total Ongoing Costs				\$ 0.00
Total Alternative 3 Cost				\$ 114,052.00

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	Ea	qty	Total
Estimated Cost Analysis Alternative 4 - Purchase Google Enterprise License.			
One Time Costs			
	\$ 0.00	0	\$ 0.00
Total One Time Costs			\$ 0.00
Ongoing Costs/yr			
Google Enterprise License (1 million views)	\$ 10,000.00	1	\$ 10,000.00
Google Enterprise License (5 million views)	\$ 40,000.00	1	\$ 40,000.00
Google Enterprise License (15 million views)	\$100,000.00	1	\$100,000.00
Total Ongoing Costs			\$ 10,000.00
Total Alternative 4 Cost			\$ 10,000.00

Estimated Cost Analysis Alternative 5 - State CIO negotiates statewide exception.

Total one-time and ongoing costs unknown.

Estimated Cost Analysis Alternative 6 – Purchase Google Appliance.

Total One-time cost is \$200,000

Ongoing cost is 25 percent of the subscription cost.

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Attachment A – Google’s Terms of Service

Section 4.3 (Advertising) of Google’s Terms of Service:

4.3 Advertising.

(a) Google reserves the right to include advertising in the places results provided to you in the Maps API(s). By using the Maps API(s) to obtain places results, you agree to display such advertising in the form provided to you by Google.

(b) Although the Service currently does not include advertising in the maps images, Google reserves the right to include advertising in the maps images provided to you through the Service.

(i) Google will provide you with 90 days notice prior to the commencement of advertising in the maps images (the "Ads Notice period"). Such notice (the "Ads Notice") may be provided on relevant Google websites, including but not limited to the [Google Geo Developers Blog](#) (or such successor URLs that Google may designate from time to time) and the applicable Google Maps API Groups.

(ii) If your Maps API implementation incorporated the Maps API(s) prior to April 8, 2011, you have a limited right to opt out of advertising in the maps images by providing written notice to Google during the Ads Notice Period; your notice must state that you refuse to accept advertising in the maps images and must be provided to Google in accordance with Google's notice requirements (as specified in Google's Ads Notice).

(c) You may at any time opt out of advertising in the places results and the maps images by either:

(i) contacting the [Google Maps API Premier sales team](#) to obtain a Google enterprise license; or

(ii) terminating your use of the Service.