

Report to the VT Legislative Joint Fiscal Committee on the Vermont Center for Geographic Information's Long-Term Business Plan

As requested in of Act 50 Sec E.123(a) of the FY 2014 Vermont Legislative Session

Version - Final

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With contributions from the VCGI Board of Directors, VCGI Employees, and the National
Geospatial Coordination Community

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1. INTRODUCTION

The passage of Act 50 Sec E.123(a) in the FY 2014 Vermont Legislative Session contained the following language;

“(a) No transfer of functions of the Geographic Information System (GIS) program shall occur in fiscal year 2014 without legislative approval. The Executive Director of the GIS program shall report on or before November 30, 2013 to the Joint Fiscal Committee on potential options for administrative and business office functions to be supported by an appropriate state entity and any other recommendations for long-term financial sustainability of the program.”

The following report created by the Executive Director of the Vermont Center for Geographic Information (VCGI) and reviewed by the VCGI Board of Directors is intended as the response to the legislature’s request.

The Vermont Center for Geographic Information, the state entity that is statutorily charged with the development and implementation of a comprehensive strategy for the Vermont Geographic Information System, proposes to change its business model from being a state, non-profit 501(c)4 organization to being a Division within an existing State Agency. By bringing VCGI’s existing organizational skills, resources and responsibilities into state government the organization will be more effective in meeting the geospatial coordination needs of the technology community. This proposed change will reduce the current operational burden of the organization to meet approximately 40% of VCGI’s yearly funding needs through grants and contracts. VCGI, as a Division within state government, will be able to focus existing skills and resources to support the growing technology coordination needs of state agency and non-governmental communities throughout Vermont.

2. EXECUTIVE SUMMARY

Government has historically been a primary provider of authoritative geospatial information, but it is now recognized that public and private consumer demand for spatial information has triggered a major shift toward commercial and local providers.¹ As a result it is necessary for federal and state government to meet the increasing demands of consuming as well as creating geospatial information. The state’s role is shifting toward coordinating and managing geospatial data and facilitating partnerships among the producers and consumers of geospatial information in government. A sustainable coordinating entity that is fully integrated within state government is critical for enabling the best use of government GIS resources in the new environment.

By moving inside state government, VCGI would eliminate all of the business costs of being a 501(c) 4 corporation and many of the current business management and employee benefit costs will be reduced through resource sharing available within an agency. The overall impact of this cost reduction will enable

¹ Congressional Research Service, **Geospatial Information and Geographic Information Systems (GIS): Current Issues and Future Challenges.**

VCGI employees to focus more on state coordination activities and reduce the organization's need for grants and contracts to sustain staffing.

Discussions about the need for VCGI to reconsider its business model go all the way back to the Board of Director's meeting in June 2012. The VCGI Board of Directors and VCGI management have been continuously discussing VCGI's upcoming financial squeeze since that time. In the Fall of 2012 the VCGI Board of Directors performed three Strategic Planning meetings. In those meetings the Board systematically considered all the elements that are driving the need for this change, the relative value of VCGI's services to all of its stakeholders, the future evolution of GIS technology, and the best course of action. Following that effort, at the December 2012 Board of Director's meeting the Board voted on a resolution to "give the ED permission to pursue a merge into DI&I and that the ED maintain core services ... to serve and benefit the community"². The motion carried, with all voting in favor except for Melissa Prindiville (representing ACCD), who voted as opposed, and Richard Boes (representing DII), who abstained.

By becoming a Division within state government VCGI hopes to be more fully involved with supporting the needs of agencies and the public by creating a sustainable GIS organization that will support state government, other state data needs, and provide an open data philosophy in support of state transparency goals.

Additional benefits of the recommended transition include;

- Elimination of confusion among agencies about VCGI's status as a state government organization
- Consistent treatment of VCGI on an agency by agency basis in establishing agreements related to contracts, grants, MOUs, and work orders.
- Standards established by VCGI with support from the geospatial community will formally become state standards for geospatial activities.
- A state entity will be responsible for coordinating the evaluation and maintenance of shared private sector GIS software, data services, and platforms in conjunction with the Enterprise GIS Consortium (EGC).
- The organization will be better able to provide direct support to all agencies developing GIS requirements for RFPs or contracts.
- VCGI would be fully included in the Vision system for accounting purposes making agency financial interactivity simpler.
- Improved coordination with Federal Agencies on GIS data initiatives and GIS program development.
- Full integration into the state's technology management infrastructure enabling better support to data related initiatives.

In order to accomplish the goal of becoming a Division within state government, VCGI needs the support of the Vermont Legislature, the State Administration, and State agencies. VCGI's current statutory language will need to be modified to eliminate the language supporting its non-profit status and direct

² Minutes of the December 2012 meeting of the VCGI Board of Directors.

VCGI to be administratively and legally within an existing state agency. The purpose of this transition is to reduce or eliminate VCGI's business costs, increase its available technical resources and better position state resources to meet the changing geospatial technology environment.

There is a risk to the valuable services VCGI currently provides if no action is taken on this matter. VCGI services that support governmental collaboration and greater efficiencies will be eliminated or reduced. Making VCGI a full state government organization as proposed provides sustainability to both the organization and services provided.

VCGI receives approximately 60% of its current yearly revenue needs through its state appropriation. The organization currently supplements the necessary additional 40% of its yearly revenue through grants, contracts and awards. Revenue from these sources is projected to be reduced significantly in early FY 2015 due to the close of a large federal grant. While there are future funding opportunities such as the state's statewide LiDAR and parcel data efforts as well as the FirstNet broadband grant. Each of these efforts will require GIS or mapping support, but the anticipated revenue from those grants will not fully replace the loss of the larger grant.

On a yearly basis VCGI contracts with state agencies and departments to provide GIS and mapping services on a task by task basis. Our experience over the years has shown that grant and contract opportunities will continue, although availability and revenue value will vary. VCGI also offers web based geospatial services to state agencies and our strategic intent is to increase those service offerings.

Grant, contract and award revenue projections for FY 2015 range from \$175,000 to \$275,000. Projections for FY 2016 are similar amounts. The organization could continue to apply for grant and award opportunities that serve our community if VCGI were transitioned inside state government. The organization also has approximately \$180,000 in savings that could be used to reduce the impact of any budgetary shortfall in the short term.

Budget estimations for VCGI in Fiscal Year 2015, if the organization were to remain outside of state government, show a projected deficit of \$133,020. If the organization were to transition inside of state government there could be a projected savings of \$74, 087. This savings alone would reduce the projected deficit for FY 2015 to \$58,933, a significant reduction to the contracts and awards necessary for sustainability of the organization. Similar numbers are projected for FY 2016.

3. PROGRAMMATIC GOALS

VCGI is proposing to make this organizational transition in order to better focus its available resources toward accomplishing its statutory charge to;

1. Assure that all VGIS data is of high quality and is compatible with, useful to, and shared with other public-sector and private-sector data users;
2. Encourage the same high standards of quality and compatibility in other Vermont GIS cooperators;

3. Promote the efficient development and use of geographic information by agencies of the state, its political subdivisions, Vermont businesses and citizens;
4. And, facilitate the growth of commercial services within Vermont for the provision of spatial data, products, and services.

This proposed transition is not intended to change the role of any existing GIS resource managers or technicians within any of the state’s agencies. This transition is intended to increase the availability of coordinating support resources for GIS in the agencies and for the public. Individual agency subject area experience and expertise is not replaceable with a generalized pool of external resources. Additionally, individual agencies need to retain direct control of critical business area support resources.

Nationally, experience has shown that without an organization charged with the responsibility of coordinating in-state government GIS resources, collaborative efficiencies will decline and significant opportunities for cost sharing will be missed. This is as true in Vermont as it is true in the remaining forty nine states.

VCGI’s activities are directed by its enabling statutory language. The statutory language in turn informs the development of the organization’s programmatic responsibilities. The organization then establishes more specific priorities within its Strategic Plan³.

Current Programmatic Responsibilities Linked to VCGI’s Enabling Legislation

Programmatic Responsibilities	Link to Enabling Legislation ⁴
1. Geospatial data warehouse and catalog (archive of geospatial data and imagery)	122a(10), 123b(1), 123c(1,10)
2. Ensure data/imagery is in consistent format	122a(11), 123b(1), 123c(1,3), 123c(5)a
3. Ensure that all data/imagery has consistent metadata/documentation	122a(11), 123b(1), 123c(1,3), 123c(5)a
4. Distribute data 4.1. Make data available for free download 4.2. Provide method to search for data 4.3. Provide access to metadata/documentation	122a(10), 123b(1,4), 123c(1,2,3,10,), 123c(5)b
5. Develop and update data standards (with participation of VT GIS Community)	122a(1,4,5), 123b(1,2), 123c(1,3,4)

³ VCGI Strategic Plan 2012
<http://vcgi.vermont.gov/sites/vcgi/files/aboutvcgi/Strategic%20Plan%202012%20Final.pdf>

⁴ VCGI’s Enabling Legislation
<http://www.leg.state.vt.us/statutes/fullchapter.cfm?Title=10&Chapter=008>

6. Provide technical support for geospatial data development and management	122a(3), 123c(1)
7. Design, develop, and deploy geospatial web services and applications	122a(2), 123b(3,4), 123c(1,2,10)
8. Provide data analysis technical support	123c(1)
9. Provide data management support (surface waters, sustainable energy, emergency management, imagery program)	123b(3), 123c(1,11)
10. Facilitate and support interagency collaboration, coordination and standardization relating to GIS software, systems, services and policy	122a(2,6), 123b(2,3), 123c(1,3,4,11)
11. Coordinate priority statewide data collection/management efforts	122a(3), 123c(1,11)
12. Coordinate and provide professional development and networking opportunities for GIS users at all levels	123c(1)
13. Coordination at regional and national levels	123c(1)
14. Promote awareness of GIS in other sectors (see customers listed above)	122a(2), 123b(2,3,4), 123c(1)
15. Respond to direct inquiries for information and resources	123c(1)
16. Utilize Return On Investment (ROI) analyses to document cost/benefits of GIS	122a(8), 123c(1,6)
17. Leverage external financial resources (eg: grants, contracts) to help support VCGI's core mission and other	122a(9), 123c(1)
18. Help agencies draft RFPs and select contractors	123b(4), 123c(1,8)
19. Promote Private Sector consulting opportunities	123c(1,7)
20. Grant, contract, MOU, SLA, and any other inter-organizational agreement management	123c(7)
21. Budget, personnel, Orthoimagery Program and general business area management	123c(7)

Transitioning the organization to within state government would allow for inter-agency access to its extensive data management and data distribution expertise. In the long term, it is anticipated the organization’s data coordination and management expertise will be increasingly utilized in the development of Open Data solutions and associated governance within Vermont state government. Additional data management responsibilities could also be added to the organization, such as Census Data, a critical state resource requiring the attention of better coordination.

Stakeholders

For the last 15+ years VCGI has provided GIS coordination, education and data management support to many agencies, organizations, academic institutions as well as the public. Below is a listing of these stakeholders followed by a list of the Products and Services provided by VCGI to the stakeholder community.

State Government

- Office of the Governor
- Office of the Lt. Governor
- Office of the Secretary of State
 - Archives and Records Administration
- VT Legislature
 - Joint Fiscal Office
 - Legislative Council
- Agency of Administration
 - Dept. of Libraries
- Agency of Natural Resources
 - Dept. of Environmental Conservation
 - Dept. of Fish and Wildlife
 - Dept. of Forests Parks and Recreation
 - Natural Resources Board
- Agency of Transportation
 - Program Development Dept.
 - Operations Dept.
 - Planning and Intermodal Development Dept.
- Agency of Agriculture, Food, and Markets
- Agency of Commerce and Community Development
 - Dept. of Economic, Housing, and Community Development
 - Dept. of Tourism and Marketing
- Agency of Human Services
 - Dept. for Children and Families
 - Dept. of Corrections
 - Dept. of Health
- Department of Buildings and General Services
- Utilities
- Renewable Energy Installers and Developers
- Land Owners

- Department of Public Safety
 - State Police
 - Emergency Management
 - Fire Safety
 - Criminal Justice Services
 - Homeland Security
- Department of Public Service
 - Energy Efficiency
 - Engineering
 - Planning
 - Telecommunications
 - Public Service Board
- Department of Education
- Department of Taxes
 - Property Valuation and Review
- Enhanced 911 Board
- Historical Society
- State Colleges
- National Guard
- Municipalities
 - Planning Commissions
 - Town Listers
 - Conservation Commissions
 - Public Works

Private Sector

- Surveyors
- Foresters
- Schools
- Environmental Consultants
- Realtors
- Appraisers

Non-Profits

- Vermont Sustainable Jobs Fund
- Vermont Land Trust
- Regional Planning Commissions
- Vermont Housing and Conservation Board
- Nonprofits of all kinds

Academic Institutions

- University of Vermont
- Green Mountain College
- Middlebury College
- VT Technical College
- Lyndon State College
- VT K-12 Schools

Federal Agencies

- US Geological Survey
- US Dept. of Agriculture
 - Farm Services Administration
 - Natural Resources Conservation Service
- US Fish and Wildlife Service
- US Dept. of Transportation
- Federal Emergency Management Agency
- Federal Communications Commission
- US Census Bureau
- US Environmental Protection Agency

Products and Services Provided by VCGI

(note: all or most of these products and services are used by the state government customers identified above)

- ❖ Public data access - geospatial data warehouse (Archive of geospatial data and imagery)
- ❖ Ensure data/imagery is in consistent format
- ❖ Ensure that all data/imagery has consistent metadata/documentation
- ❖ Manage data distribution platform
 - Make data available for free download
 - Coordinate evaluation and selection of data distribution platform
 - Provide method to search for data
 - Provide access to metadata/documentation
- ❖ Develop and update data standards (with participation of VT GIS Community)
- ❖ Provide data development technical support
- ❖ Assist with the design, development, and deployment of geospatial web services and applications
- ❖ Provide data access/analysis technical support
- ❖ Provide data management support (surface waters, sustainable energy, emergency management, imagery program)
- ❖ Facilitate and support interagency collaboration and coordination, (eg: Enterprise GIS Consortium activities)
- ❖ Identify data and resource (eg: servers, software, etc) sharing opportunities
- ❖ Coordinate statewide data collection/management efforts when needed
- ❖ Coordinate and provide professional development and networking opportunities for GIS users at all levels
- ❖ Coordination/networking at regional and national levels
- ❖ Promote awareness of GIS in many sectors (education, nonprofits, small business, gov't, see customers listed above)
- ❖ Provide direct access to mapping info through VT Interactive Map Viewer
- ❖ Respond to direct inquiries for information and resources
- ❖ Map production support

4. BENEFITS AND JUSTIFICATION

Transitioning the organization to within state government and reducing the business costs for the organization will markedly improve its ability to provide sustained support for GIS coordination within the state. Without VCGI there would be no state entity tasked with the responsibilities of leading GIS resource sharing and coordination. Several of the programmatic responsibilities that have primarily been implemented through the coordinating efforts of VCGI result in the development of standards that support consistent formatting, metadata, and documentation of GIS data.

Direct Benefits to Stakeholders

Federal and state governments generally recognize the following advantages in having a healthy and sustainable GIS coordinating organization;

1. Reduce the cost of geographic information gathering and access by state, regional, and local government agencies – a single coordinating organization eliminates the need to search external resources and supports a single sharing mechanism
2. Encourage inter-agency and inter-organizational collaboration and integration of resources, including collaboration among federal, state, regional, and local organizations – Collaboration coordination ensures all participants receive an opportunity to benefit.
3. Provide increased access to technology and information statewide with an emphasis on rural areas where resources for independent data development is limited.
4. Improve opportunities for business development at the local level and increase the state's competitiveness and position in major economic development initiatives of statewide significance.
5. Support effective emergency planning and operations and the ability and efficiency of state and local response to emergencies with a resulting savings of life and property
6. Enable better planning and more efficient provision of citizen services in the public health, education, housing, and employment support areas
7. Provide a more efficient and cost-effective means for managing, maintaining, and tracking the state's public infrastructure and assets—roads, utilities, public land, and all public real property
8. Manage the state's environmental quality and natural resources to sustain economic viability, enhance tourism, and to provide a resource to improve the quality of life of Vermont's citizens
9. Support the state's business community and encourage public-private partnerships for information technology initiatives.

The Federal Office of Management and Budget in Circular A-16 defines spatial data as a ‘capital asset’ and further states “A coordinated approach for developing spatial data standards that apply to collecting, maintaining, distributing, using, and preservation of data will improve the quality of federal spatial data and reduce the cost of derivative products created by federal and non-federal users.”⁵

The creation of accepted GIS data standards could not be done without the generous participation of the larger GIS community. However, standards development would occur only rarely without the initiation and coordinating resources provided by a state coordinating body such as VCGI..

A sustainable geospatial coordinating division supports the business needs of the broader GIS community, including state agencies, city and county governments, federal agencies, regional agencies and special districts, utilities, private companies, the academic community, not-for-profit organizations, and the general public.

Indirect Benefits to Stakeholders

The value of VCGI’s products and services goes beyond the direct support of agency, town or public needs. As a state resource engaged in expanding the utility of GIS technology, VCGI’s activities increase the effectiveness of existing agency programs and reduce the cost of implementing these programs. For example, as the state provides support to local disaster or economic development needs the implementation of these programs requires geospatial resources to develop and visualize potential solutions.

Without coordinated GIS resources towns and private contractors will often individually collect the necessary data, adding to the cost, or go without and reduce the effectiveness of the effort. To be sure, VCGI is not the only GIS resource in the state. There is an extensive GIS community both in and out of Vermont state government. There will be GIS data available at some quality level even without a coordinating organization. However, the value of consistent and authoritative data that results from coordination has a significant positive impact on program cost and effectiveness. Even if an agency does not use geospatial resources at a high level internally, their stakeholder community most likely does.

The value of a coordinated GIS community is not limited to planning efforts. State and local programs that support disaster response, natural resource management, public infrastructure management, human services distribution, agricultural resource management, alternative energy solutions and many others all have increased efficiencies when indirectly supported by robust, coordinated GIS resources.

VCGI's products and services foster efficiencies, enhance capabilities, and minimize costs indirectly by:

- Reducing redundant data collection and management.

⁵ Coordination of Geographic Information and Related Spatial Data Activities, Office of Management and Budget, Circular A-16, Revised August 19, 2002, http://www.whitehouse.gov/omb/circulars/a016/a016_rev.html

- Enabling one-stop access to data created by multiple organizations via data downloads and web services eliminating the need for other public organizations to create data access portals.
- Providing professional development opportunities for which costs are shared.
- Sharing software and hardware costs across state agencies, rather than each agency paying individually.
- Sharing of technical expertise, which allows all agencies to benefit from professional development through informal networking as well as paid training.

Every stakeholder that is active in the state's GIS community benefits from efficiencies that result from the active coordination of a valuable information resource.

5. MEETING PUBLIC NEEDS

VCGI's existing statutory language instructs that VCGI has GIS resource and coordination responsibilities to more than just state agencies. VCGI is responsible for broad support to the private sector, academic institutions, towns and regional entities and the general public. Historically, VCGI has treated all of those non-state entities as being equally deserving of our resources as state entities. VCGI considers these non-state partners to be critical to the success of our coordination activities. The real success of coordination activities is judged by the breadth of the community of those that actively participate.

Critical to the continuation of that broader support has been VCGI's receipt of a state appropriation as directed through the state's Property Transfer Tax distribution formula. That appropriation is provided directly to VCGI. It is not included as part of any other agency's appropriation and as a result is not subject to agency reprioritization. Each year VCGI's Executive Director is required to defend the use of the appropriation and propose uses for the next year's appropriation. This yearly responsibility for the Executive Director to report directly to the legislature for the use of the appropriation will go a long way in ensuring existing services continue to be supported for non-state entities. Because of that, the yearly appropriation should be retained. VCGI management and employees have always respected the intent of the organization's statutory requirements by creating programs that support involvement of the broader community.

6. COST MODEL

Currently VCGI receives a yearly appropriation of \$378,000. It is possible this appropriation could be increased, but there is no expectation that will occur. On a yearly basis the state appropriation provides approximately 60% of the revenue necessary for the organization to continue at current levels. The remaining 40% of the revenue necessary to meet budgetary needs is provided through additional grants, contracts, and awards. These grants contracts and awards continue to be predominately sourced from state and federal opportunities and that is unlikely to change in the near future. For the past 13 years, VCGI has consistently met the yearly business expense requirements of the organization by supplementing revenue through grants and contracts while at the same time steering clear of competing with the private sector for business. This has not always been an easy task, but the organization is respected for its past efforts at non-competition.

Budget Analysis – VCGI Standalone and As Part of State

	<i>FY14 Budget (Proposed)</i>	<i>FY14 Budget (Official)</i>	<i>FY15 (Standalone)</i>	<i>FY15 (as part of DII)</i>	<i>FY16 (Standalone)</i>	<i>FY16 (as part of DII)</i>
INCOME						
State of VT Appropriation	378,700	378,700	378,700	378,700	378,700	378,700
Project Income	810,000	925,000	375,000	375,000	275,000	275,000
Imagery Income	2,000	2,500	2,500	2,500	2,500	2,500
Interest & Miscellaneous Income	2,000	1,100	-	-	-	-
Other Income	9,000	10,500	10,500	10,500	10,500	10,500
TOTAL INCOME	1,201,700	1,317,800	766,700	766,700	666,700	666,700
DIRECT COSTS						
Direct Labor	235,129	241,436	241,436	243,335	241,436	243,335
Payroll Taxes & Benefits	109,335	104,149	104,149	96,568	104,149	96,568
Project Costs	50,000	33,310	33,310	33,310	33,310	33,310
Imagery Program Costs	21,000	12,500	12,500	12,500	12,500	12,500
General Direct Costs	18,000	17,500	17,500	17,500	17,500	17,500
Outreach Costs	15,500	14,700	14,700	14,700	14,700	14,700
Subcontract Costs	400,000	525,000	100,000	100,000	-	-
TOTAL DIRECT COSTS	848,964	948,595	523,595	517,913	423,595	417,913

OPERATING COSTS						
Indirect Salaries & Wages	144,111	152,322	152,322	149,141	152,322	149,141
Payroll Taxes & Benefits	58,365	56,228	56,228	59,187	56,228	59,187
Rent	31,693	31,404	31,718	22,000	32,035	22,220
Depreciation	10,575	16,000	16,000	16,000	16,000	16,000
Computer Support & Maintenance	18,000	15,748	15,748	15,748	15,748	15,748
Insurance	4,500	4,572	4,618	1,287	4,618	1,300
Professional Fees	52,250	65,900	67,877	18,941	69,913	19,509
Travel & Training	15,000	9,500	10,450	10,450	11,495	11,495
Office Expense	16,500	12,525	13,464	11,232	14,474	12,074
Utility Expense	4,500	4,000	4,200	-	4,410	-
Miscellaneous Expense	500	500	500	500	500	500
Telephone Expense	3,200	3,000	3,000	3,235	3,000	3,081
TOTAL OPERATING COSTS	359,194	371,699	376,125	307,720	380,743	310,255
PROJECTED NET INCOME (LOSS)	(6,458)	(2,494)	(133,020)	(58,933)	(137,638)	(61,468)
Projected Cost (Savings) to VCGI				(74,087)		(76,171)

VCGI's FY 2015 budget shows a projected loss of \$133,020 for the organization if it is to remain outside of state government. For FY 2015 the projected loss for VCGI, if it were to transition inside of state government is \$58,933. Similar numbers are projected for FY 2016.

The projected loss of grant funding for FY 2015 is a substantial financial challenge and it is made more difficult by the organization's position outside of state government. However, pursuing grants and contracts is not the only path to meeting budgetary demands. By reducing business operating costs VCGI should be able to reduce total expenses by approximately \$74,000. This reduction should also slow the yearly increase of business expenses for the organization going forward.

It is equally important to remember while grants and contracts support the sustainability of the organization, they do take resources away from our coordination activities and reduce our effectiveness to the community. It is possible that VCGI would be able to increase revenue through more grants, contracts and awards. However, the constant need to work on more and more revenue producing grants and contracts reduces the time available for employees to do work in direct service to the agencies. Years ago the need for VCGI to have grant revenue to meet budgetary needs was manageable and did not significantly detract from the organization's mission. Now however, as expenses have increased and VCGI's appropriation has remained relatively constant the need for grants is dominating the organization's yearly goals and there is less time for all employees to focus on state and public needs.

Future Revenue Estimations – Fiscal Year 2015

Grants, Contracts and Awards – It is risky to project the availability of grants and awards with any confidence. The health of the economy plays a large part in the availability of grants and awards. Over the years VCGI has maintained a steady stream of grants and awards with the recent NTIA Broadband grant being the largest of them. Following on the Broadband grant is the NTIA FirstNet grant which is in its early stages and will require GIS or mapping support in a similar manner as to what was provided for the Broadband grant.

VCGI must continue to apply for grant and award opportunities that are appropriate for our organization and will serve the information needs of the community. Grant and award opportunities pop up quickly and generally don't offer a lot of lead time in preparation. Current Fiscal Year 2015 estimated revenue from grants may range between \$250,000 and \$300,000 with approximately \$100,000 for subcontractor expenses.

VCGI contracts within state government almost exclusively because of our desire not to compete with the private sector. We provide GIS and mapping services on a task by task basis to state entities as they request our support. Recently, we have had contracts or Memorandums of Understanding with VT Emergency Management, VTrans, VT Sustainable Jobs Fund, E911, Regional Planning Commissions, and the Dept. of Agriculture.

VCGI also offers web based geospatial services at a monthly rate for those agencies and departments that do not have the resources to create and maintain their own. We plan on increasing the number and types of those services in the future depending upon the needs of the community. The following services are being considered;

- Enterprise Geodatabase hosting services (SQL/SDE)
- ArcGIS Server hosting services - web map services, image services, geocoding services, feature edit services, geoprocessing services, OGC compliant services
- Metadata creation and management services
- Open GeoData cataloging, warehousing, and distribution services
- Web app development using Geocortex Essentials
- Mobile app development using Geocortex Essentials

Direct charging to an agency for these services can be counter-productive, however. Because of the need to justify and redirect funding from existing program budgets, agencies can be reluctant to take on the additional expense even when the operational advantages are understood.

7. ORGANIZATIONAL APPROACH

If VCGI personnel move inside state government, the organizational structure and staff responsibilities should remain much the same as they are now. Staffing levels should remain the same. Existing personnel have the qualifications and experience necessary to continue the organization within state government. However, continued training should be a high priority for staff as training is a critical element of maintaining a quality technology staff. Organization management should report directly to upper level management in the agency to ensure continued agency awareness of GIS community needs and protect against the diminution of programmatic priorities.

Over 27 states⁶ have placed responsibility for their designated GIS coordinating organization within that state's Technology Management Office. Additionally, over 27 states⁷ have a Geographic Information Officer (GIO) or equivalent position, with over 70% of them reporting directly to the state CIO.

From the standpoint of programmatic similarities, mission overlap and culture match, the most appropriate candidate state entity to be responsible for taking on VCGI's current mission is the VT Department of Information and Innovation (DII). DII has a technology focused mission and information management responsibilities. Being within DII would enable much smoother integration and support of geospatial technology development for the state. DII also provides shared technology resources to state agencies. The benefits of providing a well-coordinated GIS resource in the state are well documented in Sections 2 through 4 of this document. As GIS needs increase across agencies in the state, a shared, integrated and sustainable GIS coordinating organization becomes more critical to the achievement of these benefits.

⁶ National States Geographic Information Council (NSGIC) Survey, 2010

⁷ NSGIC State Government Geospatial Maturity Assessment, 2013

8. TRANSITION PLAN

The most significant aspect of this potential transition is that it will be unusual. So far, no one has come forward to provide a previous example of transitioning an existing non-profit organization to within state government. There will be unforeseen problems, but a lot of up-front consideration has been given to the transition by VCGI management and the VCGI Board. While unusual, this potential transition is not a rushed effort and it can be successful.

All of the final materials that were created as a result of that strategic planning effort are available on the VCGI website and have been included either in the body of this report or as an addendum. VCGI management testified to the House Appropriations Committee and the House and Senate Government Operations Committees during the FY 2014 legislative session on the need for this change. These Committees raised many good points and questions that were addressed in this report.

Based upon the questions of the Legislative Committees and our own knowledge of what needs to occur if this transfer is to be successful; VCGI management proposes the following transition plan and supporting timeline.

Personnel

Existing VCGI personnel have to be considered in this transition. The intention is to move VCGI personnel into equivalent state positions as full-time state employees with all standard benefits. They should receive salary equal to what they are currently paid, at the closest step and grade. While VCGI employees have not been full state employees or part of the collective bargaining agreement, they have certainly been working in service to the state during their tenure at the organization.

A fair and equitable transition for VCGI employees that appropriately respects their years of state service and respects the rights of current state employees needs to be determined. To that end, VCGI management has provided to VT Department of Human Resources Commissioner Kate Duffy VCGI's current personnel positions, and roles and responsibilities of the staff in order to initiate the process of resolving the employee transition. Draft legislation will be created that designates the state positions by step and grade for VCGI personnel in order to transition all existing employees into state government.

It was suggested by members of the VCGI Board of Directors that while there are many GIS professionals currently working at state agencies in Vermont the inclusion of six additional GIS technology professionals creates an opportunity to establish a GIS career path within Vermont state government. The creation of a GIS career path would not be required for the transition to be a success, but it is a common practice in other states and should be seriously considered.

Personnel Transition Tasks

1. Ongoing discussion with HR to resolve employee transition status. (Jan. 15 – May 15)
2. Final decision relating to existing employee status within state government. (May 6)
3. Notification of current employees as to plan for employee status changes. (May 6)
4. Transitioned employee orientation in state government. (Jul. 1 – Jul. 4)
5. Create GIS career path in state govt. (not required) (Mar. 1 – Sep. 1)

Assets and Facilities

Physical

VCGI's physical equipment is considered state property already, although it is not controlled by BGS. VCGI does not have a lot of physical equipment beyond standard office equipment and computer technology resources. VCGI currently uses the state data center for data storage needs and there should be no change in that approach. After transition of the organization it will be necessary to take VCGI's existing inventory of physical assets to BGS for them to be included in their asset control listing.

VCGI currently leases office space at 58 South Main St. Waterbury from Mayflower Management in Waterbury. There is no reason that lease cannot be maintained. However, a final decision on the location of the offices of the organization will be determined by agency management.

Physical Assets and Facilities Transition Tasks

6. Integrate VCGI's existing asset inventory into BGS asset inventory. (Jul. 1)
7. Final determination on lease agreement. (May 6)
8. Create moving plan and schedule if necessary. (May 6)

Financial

As of this writing VCGI currently has excess funds of approximately \$180,000 in its bank account. These funds have been deliberately accumulated over the years at the recommendation of our auditor to provide a financial buffer for the organization in times when contracts and grants are hard to come by. It is hoped those funds will be transferred to the agency receiving VCGI in order to 1.) Pay for VCGI specific business expenses that will occur after the transition and 2.) Continue to provide a financial buffer to support any revenue shortfalls that occur due to a short term shortage of grants and contracts. It is anticipated that the Vermont Department of Finance and Management will consult with the Legislature on this decision. All decisions relating to the final disposition of any excess funds as of the closure of VCGI as a corporation will be the responsibility of the Vermont Department of Finance and Management.

Business expenses relating to legal requirements of the corporation that will be necessary after the transition include completion of VCGI's required 2013 independent audit and retention of our Business Management contractor in order to provide support to the completion of that audit.

Financial Asset Transition Tasks

9. Decision by State Budget Office as to disposition of excess funds. (Jun. 30)
10. Begin transfer excess funds as directed. (Jul. 1)
11. Prepare for 2013 independent Audit. (Jun. 6 – Aug. 1)
12. Support auditor on-site. (Jun. 6 – Aug. 1)
13. Receive audit, and distribute copies as required. (Aug. 30)

Services and Support

There should be no significant impact to VCGI's ability to provide its existing products and services to our stakeholders. Employee transitioning, if it is done fairly and equitably, should not result in significant employee turnover. If the current lease for space is retained, there will be no need to spend time relocating staff and facilities. Employee orientation into state government should not significantly impact employee availability.

Services and Support Transition Tasks

14. Continual assessment for service impacts resulting from unplanned transition activities. (Apr. 1 – Aug. 1)

Legal and Contractual

VCGI will have certain business responsibilities that must be accomplished before and/or after any transition of the organization. The organization has Federal grants and contracts that will, at minimum, require a change in the designation of the responsible organization. The business management of VCGI as a non-profit corporation will need to be changed to VCGI as a state entity with all contract business responsibilities being integrated into the business office of the Agency receiving VCGI. Because the legal status of the organization will be changing, there must be coordination with each individual grantor and contract management office to ensure the agreement can be retained and any necessary changes are made.

The Agency receiving VCGI will certainly have the necessary resources and experience to meet the business management needs of the incoming organization. However, there will be a need for the transitioned organization to retain the current Business Manager as a contractor to meet the audit preparation and support needs as explained above. The current Business Manager will also be a required resource in transitioning the assets and accounts to the receiving state agency's business office before and, for a short while, after the transition. When all close of business year activities are complete the current Business Manager will be released and all business management functions will be performed by agency personnel.

While this transition may be unusual there is no reason it cannot be accomplished with a little flexibility by all involved. It is critical to the organization the transition be as complete and as smooth as possible in

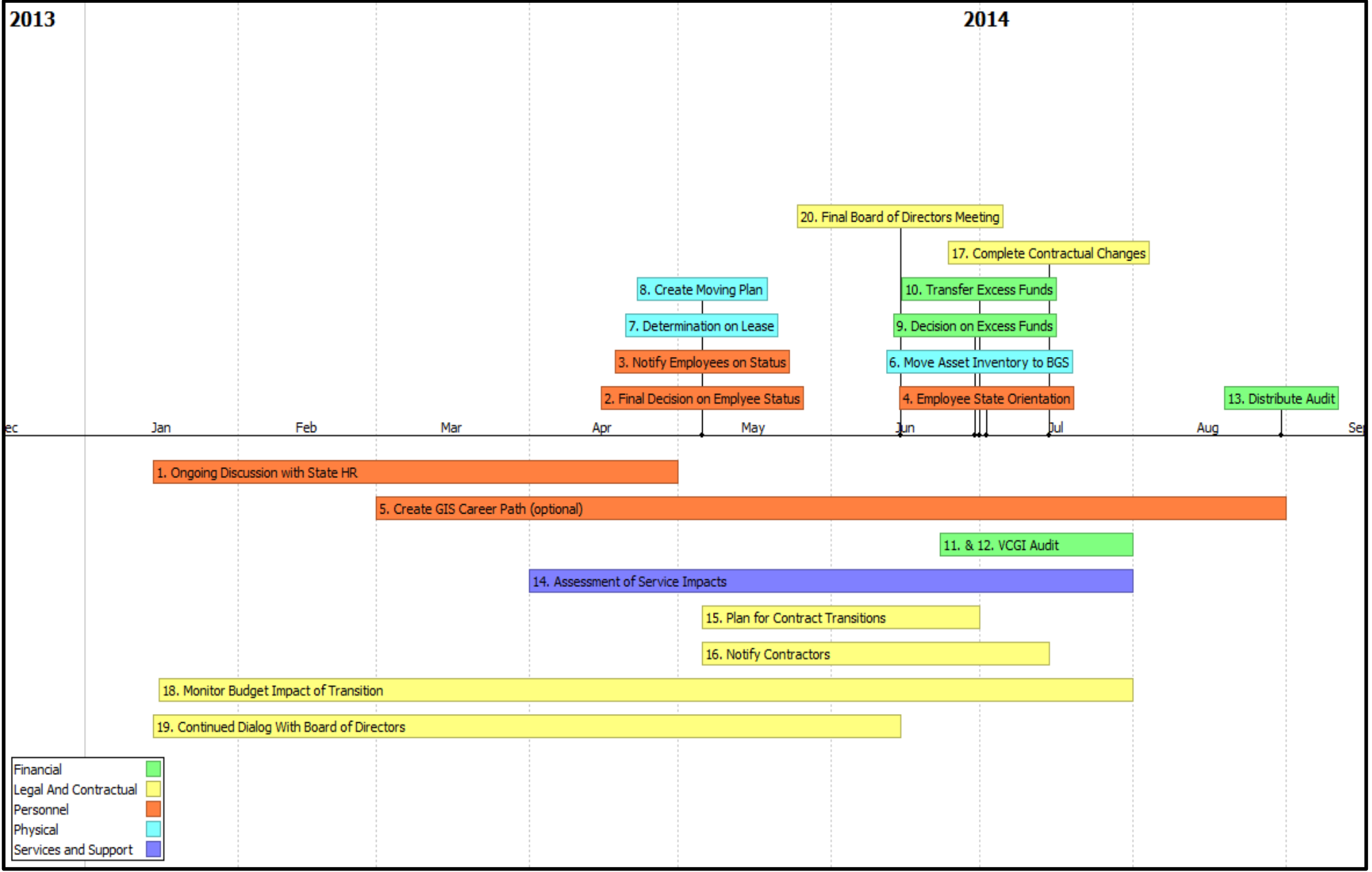
order to prevent disruption of services and continuity of delivery responsibilities for existing grants and contracts.

Legal and Contractual Transition Tasks

15. Identify all grants and contracts and create a plan to complete transitions. (May 6 – Jul. 1)
16. Notification of all existing grantors and contractors of the change. (May 6 – Jul. 1)
17. Complete necessary contractual changes and transfer program and business management responsibilities in-state. (Jul. 15)
18. Assess impact of transition, if any, to proposed budget. (Jan 16 – Aug 1)
19. Continued dialog with Board of Directors (Jan. 15 – Mid June)
20. Final Board of Directors Meeting (Mid June)

9. TRANSITION TIMELINE

The following timeline is created around the expectation that any legislation directing the transition of VCGI to become part of a state agency will be effective July 1, 2014. Any change to that schedule would require a re-evaluation and modification of the timeline. Each paragraph of Section 8 Transition Plan above identified specific transition tasks that will need to be accomplished. The label and number for each task will be used in creating the transition timeline. The assigned number does not designate criticality, i.e. task number 1 is not more critical than task number 4. The number is only used for labeling purposes. There has been no determination made on possible critical path items. All transition tasks are considered relatively equal in achieving the success of the effort.



10. RISK

Assessment of risk is an important aspect of business planning. The following tables provide a realistic overview of the transition and programmatic risk involved in this organizational change as proposed and includes possible mitigation steps. It should be remembered there are significant risks associated with taking no action. Valuable services will be eliminated or reduced. The biggest risk of inaction would be the reduced capacity of the state's critical GIS coordination organization. Making this organizational change as proposed would help ensure the continuity of VCGI's services to the community at current or greater levels.

Transition Risk Identification		
Personnel		
Risk	Description	Mitigation
Employee Morale	The employees at VCGI have undertaken this transition because they believe it is in the best interests of the organization and it will improve the organization's ability to meet its statutory goals.	Keep employees aware of the process and maintain transparency on decision making. Respect the many years of state service provided as employees of VCGI.
Physical Assets and Facilities		
Risk	Description	Mitigation
Delayed final determination on lease retention	Potential for unnecessarily hurried and inefficient move to occur.	Landlord needs to be notified in advance. Determination of lease retention needs to occur well before July 1, 2014.
Financial		
Risk	Description	Mitigation
Difficulty in providing support to auditor for on-site review	When the auditor is on-site in July the Business manager needs to have constant and immediate access to the organization's business records from the previous year by a knowledgeable representative. Moving those records prior to or during the on-site visit is not a reasonable option.	If a move is required, do not move facilities until September 1 to alleviate potential issues with completing the final audit.
Legal and Contractual		
Confusion with contractors as to the status of VCGI.	VCGI needs to be the source of all authoritative information about the potential move and stay in communication with all contractors. Confusion and possible damaged relationships could occur if contractors are left to find out the information from other sources.	VCGI needs to be as transparent as possible with contractors as the legislation moves forward. If the legislation passes, contractors must be contacted immediately and the transition process started according to plan.

Programmatic Risk Identification

Personnel		
Risk	Description	Mitigation
Reduction in Yearly Appropriation	For FY 2014 VCGI received an appropriation through the Property Transfer Tax formula of \$378,000 that was applied to activities that support the full range of VCGI statutory language. If that appropriation is reduced, the organization will have fewer resources to provide support to all stakeholders.	Additional funding opportunities will need to be researched to support the current level of service. Existing financial reserves may be used to supplement any shortfall until they are exhausted.
Insufficient Grants and Contracts to Supplement Yearly Appropriation	For FY 2014 VCGI needed additional grants and to retain staffing and service levels. If the organization is unable to get sufficient grants and contracts to supplement its appropriation the organization will have less resources to provide support to our stakeholders.	Less available funding through grants and contracts will require research for additional funding opportunities. Existing financial reserves may be used to supplement any shortfall until they are exhausted. Staff may have to be reduced.
Physical Assets and Facilities		
Risk	Description	Mitigation
Change in perception of organization by non-state office stakeholders	The public non-profit status of the organization provides the non-state office stakeholders an opportunity for their geospatial technology needs to be addressed with equal energy as are state needs.	Continuation of the VCGI state appropriation and organizational focus on outreach activities.
Change in public profile	Being within a state agency may lower the public profile of the organization due to being completely within a larger organization.	Continuation of the VCGI state appropriation and organizational focus on outreach activities.
Insufficient legislative or state administration support for the transition	The organization's yearly appropriation is small relative to agency budgets and the issue of transitioning the organization to within state government has a low priority during the legislative session.	Employees, the Board of Directors and stakeholders have to provide input to decision makers during the legislative session.
Programmatic		
Risk	Description	Mitigation
Loss of administrative and business flexibility	As a non-profit, all business agreements were the final responsibility of the Executive Director and could be executed quickly.	Process overhead will increase, but there will be better controls and more knowledgeable resource support.
Loss of control of programmatic priorities	If the organization were to move within an existing agency its programmatic priorities would be subject to the needs of a larger, more broadly focused organization.	This transition will provide an opportunity for the organization's programmatic priorities to be both expanded and more closely integrated into state government.
Employee turnover	This transition would be a significant change for current employees and current staff may want to pursue other opportunities as a result.	Provide as much information as possible to employees about any changes and involve them in discussions whenever appropriate
Change in Regional and National Geospatial Program and Policy Involvement	VCGI personnel are encouraged to actively participate in Boards, Committees, on state, regional, and national public program development in order to inform and be informed by these activities. Resources and priorities may change enough to limit these activities at their current levels.	Management, at all levels, needs to continue to place a high value on these activities.

11. SUMMARY

The organization is at a crossroads both financially and programmatically. Financially, the organization will need to make changes to its business model or it will have to significantly decrease staffing in the next few years. This situation could be alleviated with an increase in the appropriation, but that will only defer the financial situation for the short term and it will not eliminate the programmatic issues.

Historically, having VCGI outside of state government has produced confusion among state agencies. Each agency has a different perspective on what is an appropriate business relationship with VCGI. Outside of state government, town, academic, non-profit and private organizations seem to be comfortable with VCGI as a quasi-governmental entity, but they clearly consider VCGI to be influential in guiding government activities. The non-state community sees the value of VCGI to be predominately within both the data services we provide and our willingness to include them in the coordination of state GIS data efforts. The reaction of non-state entities to the discussion about moving VCGI to state government has overwhelmingly been accepting of the potential change, with serious concern that VCGI's public services should remain at levels that are equal or better than they are today.

Additionally, the role of geospatial technologies and the need for GIS program support is changing at the state and national levels. Effective GIS data distribution can be accomplished through the use of many available platforms and the values of governmental transparency are being expressed through the growth of Open Data. Within government, increasingly more data types are being freely distributed than just GIS data. The value of VCGI's experience with the principles of Open Data governance will have greater impact to the state if the organization is accepted as part of state government.

There are meaningful risks as identified in this document; however, these are known and manageable risks. VCGI will still be open to public evaluation as its statutory requirement to perform biennial public surveys is expected to remain intact. Also, as government moves toward greater transparency that risk will be lessened over time. Culturally, government is moving toward broader transparency values, many of which are already expressed in VCGI's existing statutory language. There is no doubt that moving VCGI into State Government will result in some challenges. However, with thoughtful planning and transparency the outcome can be positive.

There is a clear need for a change to VCGI's current status as a non-profit public corporation. As almost all of the 50 states have already realized, state and public interests are better served by having a healthy and experienced geospatial technology organization within state government.

Appreciation

Because of the limited time and resources available for the creation of this document it is important to recognize the contribution of the reports, summaries, plans, models and general documentation related to GIS coordination activities in other states. Concepts from many state and federal GIS analysis and ROI activities are included.

Tables of information and analysis specific to VCGI's mission were provided as created at the VCGI Board of Director's Strategic Planning effort in the Fall of 2012. Thank you to the VCGI Board members for their many hours, careful consideration and dedication to the principles of VCGI's statutory mission during the 2012 strategic planning effort. The Budget Analysis was coordinated with Joe Harris from the Dept. of Finance and Management. Information relating to VCGI's programmatic activities and stakeholder community as well as content recommendations were provided by the staff at VCGI.

12. ADDENDUMS

Business Model Discussion Materials

Business Model Options

Discussed in VCGI Board Meeting on October 9, 2012

OPTION	DISCUSSION	DISPOSITION
<p>Become subsumed within state government</p>	<p>Each agency brings a unique funding issue. The chargeback/allocation model limits us to the AOA. AOT and ANR are not set up for a chargeback/allocation mechanism.</p> <p>Economy of scale could be realized through pooling resources (licensing, infrastructure, etc.). Allocation might fund non-agency resources needs while fees fund common agency resource development.</p> <p>DII is not the only option; The mission of the Department of Libraries is making information available. (No Statewide Service Fees)</p> <p>The VCGI board might evolve into a governance committee.</p>	<p>continue deliberation</p> <p>Support Full Mission or Reduced Mission?</p>
<p>Reduce VCGI footprint and remain independent</p>	<p>Funding would be simple but very limited.</p> <p>This option will not allow us to meet our core mission.</p> <p>Staff would be reduced until it is obvious that more staff is needed.</p>	<p>dismissed</p>

OPTION	DISCUSSION	DISPOSITION
	Considered outside of State Gov't, agencies wouldn't support.	
Reduce VCGI footprint and become part of state government	Titles would change. Function would remain the same. Inadequate services to state Reducing the footprint will not allow us to pursue what the state needs VCGI to be.	dismissed
Disband / Re-Distribute	The VCGI core needs would remain in the state. Agencies would not support broader mission. Some positions could be located within units with transparent supervision (functional reports).	dismissed
Merge into academia	Overhead would be high. Considered outside of State Gov't, agencies wouldn't support.	dismissed
Augmentation with another state	The approach would be similar to the approaches of Massachusetts and Connecticut. A statute allows one state to sell services at cost to other states. Not a proven business model. Issues with not hiring in Vermont would arise.	dismissed
Merge with RPCs	A state service center is a common framework. RPC's do not have a central organization.	dismissed
Merge with another State	Although merging organizations can work well on a local level (school districts), synergy is difficult to achieve on a higher level. This option can't be achieved in two years.	dismissed
Privatization	Can't compete with Private Sector Considered outside of State Gov't, agencies	dismissed

OPTION	DISCUSSION	DISPOSITION
	wouldn't support.	
Become independent state entity w/full state funding (such as E911 or VTA)	Legislature is not showing interest in increasing the property transfer tax.	dismissed
Remain VCGI, Inc. w/full state funding	Legislature is not showing interest in increasing the property transfer tax.	dismissed
Status Quo - State Appropriation 60%, Projects 40% (and increasing)	Sixty percent of funding is from appropriation and forty percent of funding is from projects. Project work decreases the amount of time we can appropriate to core services Costs are increasing.	dismissed

FY 2012 Core Services Analysis

Summary Of Core Services / Time Charged / Percent of Work

Discussed in VCGI Board Meeting on October 30, 2012

Core Services Summaries	Timesheet Category	Hours	Percent of Total	Percent of Core
1. Geospatial data warehouse and catalog (archive of geospatial data and imagery)	Data (develop, maintain, distribute)	5675	5%	11%
2. Ensure data/imagery is in consistent format				
3. Ensure that all data/imagery has consistent metadata/documentation				
4. Distribute data 4.1. Make data available for free download 4.2. Provide method to search for data 4.3. Provide access to metadata/documentation				
5. Develop and update data standards (with participation of VT GIS Community)	Standards Development	7.5	0%	0%
6. Provide technical support for geospatial data development and management	Support to VGIS	1099	10%	23%
7. Design, development, and deployment of geospatial web services and applications				
8. Provide data analysis technical support				
9. Provide data management support (surface waters, sustainable energy, emergency management, imagery)				

Core Services Summaries	Timesheet Category	Hours	Percent of Total	Percent of Core
10. Facilitate and support interagency collaboration, coordination and standardization relating to GIS software, systems, services and policy (e.g.: Enterprise GIS Consortium, VCGI Technical Advisory Committee)	State (Enterprise Support, TAC, EGC)	179.5	2%	4%
11. Coordinate priority statewide data collection/management efforts	No Service			
12. Coordinate and provide professional development and networking opportunities for GIS users at all levels	Outreach	1727.5	15%	34%
13. Coordination/networking at regional and national levels				
14. Promote awareness of GIS in other sectors (education, nonprofits, small business, gov't, see customers listed above)				
15. Respond to direct inquiries for information and resources				
16. Utilize Return On Investment (ROI) analyses to document cost/benefits of GIS	No Service			
17. Leverage external financial resources (eg: grants, contracts) to help support VCGI's core mission and other priorities (eg: broadband mapping, statewide LiDAR)	New Business Development	149.75	1%	3%
	Projects	3567.5	31%	

Core Services Summaries	Timesheet Category	Hours	Percent of Total	Percent of Core
18. Provide GIS consulting services in partnership with private sector	No Service			
19. Help agencies draft RFPs and select contractors	General, Orthophoto Program, and Legislature	859.98	11%	25%
20. Grant, contract, MOU, SLA, and any other inter-organizational agreement management		172.50		
21. Budget, personnel, Orthoimagery Program and business management		205.50		
22. Overhead	Administration (half), Sick, Holidays, Vacation and General	3009	25%	