



Report of the Vermont State Auditor

November 21, 2014

LIQUOR CONTROL SYSTEM

Fiscal Impact of Privatization
Projected as Neutral, but DLC
Could Take Other Actions that
May Increase Profits

Douglas R. Hoffer
Vermont State Auditor
Rpt. No. 14-06

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Douglas R. Hoffer
STATE AUDITOR



STATE OF VERMONT
OFFICE OF THE STATE AUDITOR

November 21, 2014

The Honorable Shap Smith
Speaker of the House of Representatives

The Honorable John Campbell
President Pro Tempore of the Senate

The Honorable Peter Shumlin
Governor

Stephanie M. O'Brien
Chair
Liquor Control Board

Michael J. Hogan
Commissioner
Department of Liquor Control

Dear Colleagues,

The Department of Liquor Control (DLC) licenses the sale of beer and wine to private businesses but retains control over the sale of liquor (e.g., whiskey, vodka, gin, etc.). As the exclusive seller of liquor, DLC applies a 65 to 85 percent markup to the cost of products to establish retail shelf prices for liquor. In fiscal year 2013, this amounted to almost \$30 million of net liquor revenue (net of product costs) of which DLC paid \$18 million in excise taxes and other required transfers to State government and used the remainder to fund the cost to operate its liquor operation and enforcement function.

Nationally, some control states have embarked on or are considering whole or partial privatization of the sale of liquor. For example, Washington privatized its liquor operations in 2012. Within the last 11 years, the General Assembly has required studies of the cost-effectiveness of liquor operations in Vermont and has directed that DLC consider mechanisms to increase revenues from liquor operations. Because of the discussions occurring in other control states regarding the potential for privatization of liquor operations and the on-going interest in DLC operations shown by the Vermont legislature, the State Auditor's Office (SAO) decided to conduct an audit of DLC. Our audit had two objectives: first, to assess the fiscal impact of changing the State's liquor control system and second, to review the State's current liquor control system and assess whether it could be made more profitable. We also considered non-financial issues related to reduced state control of the sale of liquor, including potential social impacts.

Based on our analysis of the fiscal impact of full or partial privatization, a combination of increased excise taxes and reduced DLC operating costs may yield a neutral impact. Models prepared for full and partial privatization project that sufficient revenues would be generated to cover the cost of DLC's remaining operations and to pay the State the same amount (\$19.7 million) as projected for FY2016, assuming no changes at DLC.

On its own, the estimated fiscal impact from privatization does not appear sufficient justification to change the State's current system but, there are other factors to consider. For example, DLC believes that state control is essential to ensuring responsible consumption and limiting negative social impacts. However, this may not be strongly supported by the evidence. Studies examining the influence of various factors on alcohol consumption and behavior have yielded differing conclusions, and the few studies that have examined the empirical effects of loosening state control on alcohol consumption and related problems have had mixed results.

In contrast, studies of enforcement measures (e.g., enforcement of minimum legal drinking age) show more consistently that these measures reduce both alcohol-related injuries and drinking and driving, regardless of the type of regulatory system in place. Further, although there is state control over the sale of liquor, no such state control exists for beer and wine, which is licensed to the private sector. Therefore, it may be timely for legislators and other policy makers to consider whether liquor sales are a core function of State government or whether the sale of liquor could be licensed to the private sector, as it is for beer and wine.

Regardless of whether the State considers privatization, there are actions that DLC has not taken that may improve its profitability. DLC has not performed some analyses needed to inform strategic decisions that affect profitability, such as whether a new warehouse should be built. Although DLC has enhanced some processes used to manage day-to-day liquor operations, additional mechanisms, such as establishing and monitoring minimum and maximum inventory levels, may lead to greater profitability.

We made various recommendations to the Liquor Control Board, including that DLC conduct analyses for strategic decision-making and put in place or enhance existing processes and policies regarding key business operations.

I would like to thank the Liquor Control Board and management and staff at DLC for their cooperation and professionalism during the course of the audit.

Sincerely,

A handwritten signature in black ink that reads "Doug Hoffer". The signature is written in a cursive, slightly stylized font.

Doug Hoffer
Vermont State Auditor

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Introduction

In Vermont today, the State licenses the sale of malt and vinous beverages to private businesses but retains control over the wholesale and retail operations for all liquors.¹ Vermont is one of 17 control states² where the sale of liquor is controlled through government at the wholesale level or wholesale and retail levels. Specifically, Vermont's Department of Liquor Control (DLC) purchases, warehouses, distributes and sells liquor at retail prices established by DLC through 78 privately-owned contract agent retail stores.³ In addition, DLC is the regulatory agency responsible for enforcing Vermont's alcohol (i.e., liquor, beer and wine) and tobacco statutes and regulations. This includes licensing the sale of alcoholic beverages at bars and restaurants and the sale of beer and wine at retail stores and enforcing compliance with laws and regulations related to service to intoxicated persons or alcohol sales to minors.

The liquor control system provides the State with significant revenues, about \$30 million of net liquor revenue⁴ in fiscal year (FY) 2013. Within the last 11 years, the General Assembly has required studies of the cost-effectiveness of liquor operations in Vermont and has directed that DLC consider mechanisms to increase revenues from liquor operations. Specifically, the General Assembly directed the Secretary of Administration to conduct a study in 2004 of the purchasing, transportation, warehousing, and wholesale distribution functions of DLC to determine whether these functions could be handled more cost-effectively through alternative delivery systems. More recently, the legislature indicated its goal was to increase revenues from DLC liquor operations and required DLC to report on the effect of a variety of measures that would change the administration of alcoholic beverages sales in Vermont.

Nationally, some control states have or are considering whole or partial privatization of the sale of liquor. Iowa privatized the retail portion of its liquor control system in 1987. Recently, Washington privatized its alcohol

¹ Includes all distilled spirits (e.g., vodka, gin, rum) with greater than 1 percent alcohol and malt (e.g., beer) and vinous (e.g., wine) beverages with greater than 16 percent alcohol content.

² According to the Alcohol and Tobacco Tax and Trade Bureau, in control states, government takes ownership of the product at some point in the transaction cycle and becomes the exclusive seller in a particular sector of the business.

³ Agents are privately-owned retail businesses that contract with DLC to sell liquor for the State.

⁴ Net liquor revenue is gross liquor sales less DLC's cost to purchase liquor.

control system. Pennsylvania, Oregon, and Virginia continue to study privatization options.

Because of the on-going interest in DLC operations shown by the Vermont legislature and the discussions occurring in other control states regarding the potential for privatization of liquor operations, the State Auditor's Office (SAO) determined to conduct an audit of DLC. The audit has two objectives: first, to assess the fiscal impact⁵ of changing the State's liquor control system and second, to review the State's current liquor control system and assess whether profitability of the current system could be improved. There are non-financial issues to be explored related to altering the degree to which the state controls the sale of liquor, including potential social impacts. The section Other Matters for Consideration addresses non-financial issues.

Appendix I contains the scope and methodology we used to address our objectives. Appendix II contains a list of abbreviations used in this report.

⁵ For purposes of this report, fiscal impact is an estimate of the effect on state government FY2016 revenues and expenditures associated with liquor distribution and sale if the State's liquor control system was changed to partial privatization or full privatization.

Highlights: Report of the Vermont State Auditor Liquor Control System: Fiscal Impact of Privatization Projected as Neutral, but DLC Could Take Other Actions that May Increase Profits

(November 21, 2014, Rpt. No. 14-06)

Why We Did this Audit	The Vermont legislature is interested in increasing revenues and profitability from DLC liquor operations, and deliberations are occurring in other control states regarding the potential for privatization of liquor operations. Because of the legislature's on-going interest and the debate over privatization occurring in other states, our objectives were to 1) assess the fiscal impact of changing the State's liquor control system, and 2) review the State's current liquor control system and assess whether profitability of the current system could be improved.
Objective 1 Finding	Based on financial models developed for this analysis, a neutral fiscal impact may result from full or partial privatization⁶ of the State's liquor control system. Models prepared for full and partial privatization project that sufficient revenues would be generated to cover the cost of DLC operations and to pay the State the same amount (\$19.7 million) as projected in the model prepared to estimate FY2016 results for DLC's existing system of liquor control. As the exclusive seller of liquor, DLC applies a 65 to 85 percent markup to the cost of products to establish retail shelf prices for liquor. In fiscal year 2013, this amounted to almost \$30 million of net liquor revenue (net of product costs) of which DLC paid \$18 million⁷ in excise taxes⁸ and other required transfers to state government and used the remainder to fund the cost to operate its liquor operation and enforcement function. In a full or partial privatization, DLC would no longer establish the retail shelf price. To replace the revenues lost from no longer establishing retail shelf price, the existing excise tax rate could be increased. The full and partial privatization financial models incorporate an assumed increase to the existing excise tax rate as well as reduced cost of operations for DLC.
Objective 2 Finding	DLC may improve profitability by conducting analyses to inform strategic decisions and enhancing mechanisms it uses to manage day-to-day liquor operations. According to the DLC commissioner, the warehouse space is impeding aspects of current operations and future desired growth and the ideal number and location of contract agent retail stores ("agent stores") is under consideration. However, the department has no plans to perform or obtain a formal analysis of warehouse capacity nor has the department established a systematic process for determining the number and location of agent stores. Over time, DLC has enhanced some processes for managing its liquor operations or

⁶ For purposes of this report, full privatization means the State divests control of wholesale and ceases its contract agent retail store model. Instead, private sector wholesale distributors and retailers would be licensed to sell liquor in Vermont. Partial privatization means DLC would continue its wholesale distribution operations but end the contract agent retail store model, replacing contracted agent stores with licensed retail businesses.

⁷ Per 7 V.S.A. §422 (3), a 25 percent tax is assessed on gross revenue of retail sales by the seller of spirituous liquor, if the gross revenue of the seller is greater than \$250,000.

⁸ In Vermont, excise taxes on liquor are included in the retail price paid by the consumer.

Highlights (continued)

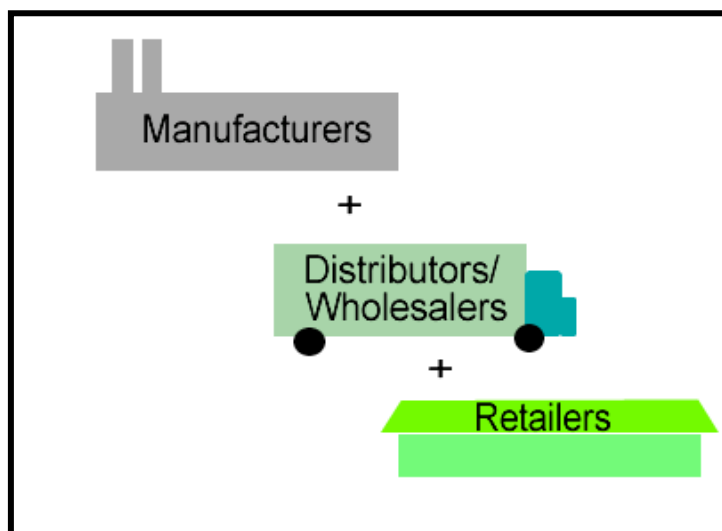
	has plans to make other changes. Specifically, in mid-2014, DLC drafted some new criteria for assessing whether agent stores qualify for the incentive portion of commission payments, including a category to assess sales performance. However, sales targets for agent stores have yet to be developed. Other processes remain limited, are not achieving the intended result, or are contrary to State requirements. For example, the majority of DLC's agent stores have had contractual relationships with the department for at least 10 years without being subject to competitive bidding as required by State procurement rules. Historically, the department has not viewed itself as a business, which may partially explain the lack of strategic analyses and the need to enhance the mechanisms used to manage certain aspects of liquor operations. The department's leadership indicates they want the department to operate like a business. Complicating this adjustment, DLC is responsible for promoting and regulating the use of the same product. These differing priorities suggest there may be an inherent conflict of interest in the department's mission, which may lead to a lower priority given to conducting analyses that are central to strategically planning for future liquor operations.
Other Matters for Consideration	Although our report focuses on the financial aspects of privatization and the State's existing control system, there are other issues to be considered in making a change to the current structure. Proponents of state-controlled liquor systems are concerned that altering control of the distribution and sale of alcohol may lead to a variety of negative social impacts, including increased alcohol consumption and abuse. However, there has been limited research on the effect of loosening state control on negative social impacts and these studies offer conflicting evidence. No such State control exists for other types of alcohol, as Vermont licenses the distribution of beer and wine to the private sector. These differing systems, combined with mixed results from research studies, call into question whether there is a strong public interest served by having the State sell liquor.
What We Recommend	Although we estimate that a neutral fiscal impact may be achieved from privatization, we make no recommendation to alter the current liquor control system. We do make a variety of recommendations related to DLC's current liquor operations, including that DLC conduct analyses for strategic decision-making and put in place or enhance existing processes and policies regarding key business operations.

Background

Control State versus License State

Generally, there is a three-tier distribution system for alcohol (liquor, beer and wine) where producers (e.g., manufacturers), wholesalers, and retailers are separately owned. The Federal Alcohol and Tobacco Tax and Trade Bureau (TTB)⁹ ensures that only qualified persons engage in the alcohol beverage industry, but each state has the authority to regulate the sale and distribution of alcohol within its borders.

Figure 1: 3-tier Distribution System for Alcohol



According to a report of the National Alcohol Beverage Control Association (NABCA),¹⁰ the TTB recognizes two distinct types of alcohol distribution: license (open) and control (monopoly). Per the NABCA report, the feature that distinguishes license from control states is that in the control states, government takes ownership of the product at some point in the transaction

⁹ TTB is responsible for enforcing laws regulating alcohol production, importation, and wholesale businesses; tobacco manufacturing and importing businesses; and alcohol labeling and advertising.

¹⁰ NABCA is the national organization representing control states and serves its members as an information clearinghouse and liaison to federal, state and local governments; research and advocacy groups; and other organizations impacting alcohol policy.

cycle and therefore becomes the exclusive seller in a particular sector of the business.

Vermont is one of seventeen states that control distilled spirits at the wholesale level. Eleven of these states, like Vermont, exert control over retail, either through state operated stores or designated agent stores. Specifically, DLC is the sole wholesaler for liquor and contracts with private retail businesses to sell liquor on behalf of DLC.

DLC Organizational and Financial Overview

Liquor Control Board

The Liquor Control Board consists of five members and has responsibility for supervising and managing the sale of liquor within the State through the Commissioner of the Department of Liquor Control.

Wholesale

The department directly performs the wholesale function, purchasing product from manufacturers and maintaining a warehouse to store liquor inventory. DLC uses a fleet of trucks that it owns and maintains to transport liquor product to contract agent retail stores (“agent stores”).

Most of the department’s inventory¹¹ in the warehouse is held in bailment, meaning that manufacturers ship product to the warehouse but retain ownership of the product until it is delivered to agent stores. At this point, the State takes ownership of the product and retains ownership until it is sold by its agent stores to either bars and restaurants or consumers.

Retail

DLC establishes retail shelf prices for its liquor products by applying a 65 to 85 percent markup to its product costs.

Retail sales are made by 78¹² agent stores (e.g., general stores, supermarkets, and other retail outlets), which sell liquor for the State. The agent stores provide the store location, pay all expenses and costs associated with necessary furnishings and labor to operate the liquor store, and agree to various other conditions. Agent stores are paid a 6.7 percent base

¹¹ DLC owns approximately 2 percent of the inventory in the warehouse that was purchased directly from manufacturers upon delivery to the warehouse.

¹² According to DLC, two agent stores were added in FY2015.

commission on liquor sales and are eligible to earn an additional 1.5 percent through incentive commissions. DLC evaluates agent stores in various performance categories and monitors agent store operations.

Each of Vermont's 14 counties has at least two agent stores, with the most highly populated county, Chittenden, serving as home to more agent stores (13) than any other. Agent stores sell to consumers for off-premises consumption (e.g., not in bars and restaurants) and to businesses licensed for on-premises consumption, such as bars and restaurants.¹³

Licensing and enforcement

DLC is responsible for programs related to licensing on-premises (e.g., bars and restaurants) sales of beer, wine, and liquor and off-premises sales of beer and wine by retail stores. The department also provides educational content and training for employees of these establishments and to the agent stores. Further, DLC enforces liquor regulations and imposes fines for violations.

Financial highlights FY2011 to FY2013

Table 1 highlights revenues from the State's liquor control system, DLC's cost of operations, excise tax payments, and other payments to state government from the period FY2011 to FY2013.

¹³ DLC also sells liquor directly, although this represents a relatively small (less than one percent) amount of total sales.

Table 1: DLC Revenue, Operating Costs, Excise Tax and Other Payments to State Government (FY 2011-2013)^a (Amounts rounded to nearest dollar)

	2011	2012	2013
Revenues			
Liquor revenues ^b	\$63,478,335	\$67,434,315	\$70,245,614
less liquor product cost	37,018,800	38,822,523	40,350,846
Net liquor revenue	26,459,535	28,611,792	29,894,768
Other revenues ^c	1,150,469	1,241,196	1,188,055
Net total revenue	27,610,004	29,852,988	31,082,823
Operating Costs			
Agent Commissions ^d	5,350,639	5,567,686	5,805,677
Administration	2,382,373	2,642,100	2,460,022
Enforcement	1,764,416	2,112,721	2,038,948
Warehouse	1,291,566	1,211,314	1,296,128
Total Operating Costs	\$10,788,994	\$11,533,821	\$11,600,775
Net income (net revenue less costs)	\$16,821,010	\$18,319,167	\$19,482,048
Payments to State government^e			
25 percent excise tax	(\$15,350,160)	(\$16,428,391)	(\$16,986,610)
Other required payments	(\$840,066)	(\$880,066)	(\$1,095,817)
	(\$16,190,226)	(\$17,308,457)	(\$18,082,427)

^a Figures exclude bottle redemption revenue and expenses.

^b Liquor revenues are comprised of liquor sales and payments from manufacturers to DLC for special discount programs. These payments were \$2 million in FY2011 and FY2012 and \$2.3 million in FY2013.

^c Other revenues include license fees for bars and restaurants to sell alcohol and for the retail sale of beer and wine.

^d DLC pays agent stores up to 8.2 percent commission on liquor sales based on full retail shelf price, assuming no sales discounts, rather than actual liquor sales.

^e As the seller of liquor, DLC pays a 25 percent excise tax on gross revenues from retail liquor sales to state government and transfers other funds to state government, as required.

Objective 1: Fiscal Impact of Full or Partial Privatization of the State's Liquor Control System May be Neutral

Based on financial models developed for fiscal year FY2016, a neutral fiscal impact may result from full or partial privatization¹⁴ of the State's liquor control system. Under the current liquor control system, as Vermont's exclusive wholesaler and retailer of liquor,¹⁵ DLC controls the retail shelf price of liquor, generating significant revenue from the markups¹⁶ it applies to its product costs. DLC's average markup of 74 percent in FY2013 generated almost \$30 million of revenue (net of product costs), of which DLC paid \$18 million¹⁷ to the State for excise taxes¹⁸ and other required transfers¹⁹ and used the remainder to fund the cost to operate its liquor operation and enforcement function. If the State lessens its control of liquor sales (i.e., privatizes some or all aspects of its liquor operations), DLC would lose its ability to set retail shelf price. In full privatization DLC would lose all revenue that results from product markups, whereas, in partial privatization DLC would lose some of the revenue from product markups. To replace this revenue, the existing excise tax percentage could be increased and collected from the private sector.

Actual and projected financial data

Net liquor revenue (e.g., DLC's product markup) has been sufficient to fund DLC operations and pay the excise tax and other required transfers to state government. Based on a model prepared for FY2016 (i.e., the baseline), SAO estimates that DLC could realize \$32 million in net liquor revenue from

¹⁴ For purposes of this report, full privatization means the State divests control of wholesale and ceases its contract agent retail store model. Instead, private sector wholesale distributors and retailers would be licensed to sell liquor in Vermont. Partial privatization means DLC would continue its wholesale distribution operations but end the contract agent retail store model, replacing contracted agent stores with licensed retail businesses.

¹⁵ See Background section, pages 6-7, for information on wholesale and retail operations.

¹⁶ A markup is the difference between purchase price and the selling price. DLC's markup is 65 to 85 percent based on liquor segment (e.g., vodka, gin, etc.).

¹⁷ Per 7 V.S.A. §422 (3), a 25 percent tax is assessed on gross revenue of retail sales by the seller of spirituous liquor, if the gross revenue of the seller is greater than \$250,000.

¹⁸ In Vermont, excise taxes paid on liquor are included in the retail price paid by the consumer.

¹⁹ According to DLC's financial records, the excise tax is remitted directly to the state's General Fund and other amounts are transferred out of DLC's accounts to various state government funds. For purposes of this report, we refer to these transactions as payments by DLC to state government.

product markups and approximately \$19.7 million would be available to pay to the State. The baseline model assumes continuation of historic revenue and cost trends²⁰ and no change to the State's liquor control system.²¹ (See Appendix III for additional details of the baseline model.)

Presumably, any change to the State's liquor control system would seek to yield similar or better financial results. To measure the potential fiscal impact of altering the State's liquor control system, SAO compared the FY2016 baseline projection to models projecting DLC revenues and operating costs assuming full and partial privatization for FY2016.

Comparison of FY2016 baseline model to privatization models

Comparing the FY2016 baseline model to full and partial privatization models, demonstrates that the fiscal impact may be neutral since both privatization models project that sufficient revenues would be generated to cover the cost of DLC operations and to pay the State the same amount as projected in the baseline model (\$19.7 million). The models assume that sales of liquor would continue at a rate based on historic sales trends and costs, rather than estimate whether there would be an impact on liquor sales from privatization. As a result, there are two key assumptions that influence the neutral fiscal impact: 1) cost of operations decrease due to elimination of some DLC functions and 2) the existing excise tax rate is increased to offset the loss of the DLC product markup.

Under privatization, aspects of DLC's operations would be eliminated and as a result DLC operational costs are estimated to decline. To replace revenue generated from DLC's markup on products costs, SAO assumed that the 25 percent excise tax rate would be increased to 40 percent in full privatization or 28.5 percent in partial privatization and that excise taxes would apply to wholesale liquor sales,²² rather than gross revenue from retail liquor sales (as in the current control system). In addition, the privatization models include estimates for license fee revenue because licenses fees could be charged to wholesalers and retailers of liquor, similar to the license fees that exist for beer and wine. Additional assumptions and operational differences from the

²⁰ Results from fiscal years 2009 to 2013 were used to develop sales, product and operating cost trends to project results for the 2016 baseline.

²¹ The baseline assumes DLC will retain all current operations, including liquor wholesale and agent retail stores, and will continue to utilize the current markup and excise tax structure.

²² For modeling purposes, the tax was assumed to be imposed at this level because current statute imposes an excise tax at the wholesale level for beer and wine (7 V.S.A. §421 (a)).

current liquor control system underlie the privatization model. (Further detail is contained in Appendix IV.)

See Table 2 for comparison of privatization models to the baseline. Because the table is intended to illustrate the estimated fiscal impact to the State, it does not present an estimate of private sector profit.²³ Further, the State's six percent sales tax is not included in the models since the tax is applied at the point of sale (i.e., six percent of retail price) rather than incorporated in DLC's product markup.

²³ Assumptions related to private sector markups are included in Appendix V.

Table 2: Estimated State Fiscal Impact of Full and Partial Privatization Compared to FY2016 Baseline

	Baseline	Full Privatization	Partial Privatization	Variance Full to Baseline	Variance Partial to Baseline
State Revenues					
DLC Markup	\$13,400,630	a \$0	\$8,918,617	(\$13,400,630)	(\$4,482,013)
License Fees	\$1,362,717	b \$1,362,717	\$1,362,717	\$0	\$0
Wholesale Liquor License Fees	\$0	\$22,800	\$0	\$22,800	\$0
Retail Liquor License Fees	\$0	\$120,000	\$120,000	\$120,000	\$120,000
Subtotal	\$14,763,347	\$1,505,517	\$10,401,334	(\$13,257,830)	(\$4,362,013)
State Taxes					
Excise Tax	\$18,562,120	a \$21,404,680	\$15,250,834	\$2,842,560	(\$3,311,286)
TOTAL REVENUE	\$33,325,467	\$22,910,197	\$25,652,168	(\$10,415,270)	(\$7,673,299)
Cost of Operations					
Agent Store Commissions	\$6,385,369	\$0	\$0	(\$6,385,369)	(\$6,385,369)
Administration	\$2,766,166	\$1,180,783	\$1,528,231	(\$1,585,383)	(\$1,237,935)
Administration- IT	\$1,005,167	c \$0	\$1,005,167	(\$1,005,167)	\$0
Enforcement	\$2,037,002	\$2,037,002	\$2,037,002	\$0	\$0
Warehouse	\$1,417,697	\$0	\$1,417,697	(\$1,417,697)	\$0
Subtotal	\$13,611,401	\$3,217,785	\$5,988,097	(\$10,393,616)	(\$7,623,304)
TOTAL COSTS	\$13,611,401	\$3,217,785	\$5,988,097	(\$10,393,616)	(\$7,623,304)
ESTIMATED STATE FISCAL IMPACT	\$19,714,066	\$19,692,412	\$19,664,071	(\$21,654)	(\$49,995)

^a For ease of comparison to the privatized models, the baseline model net liquor revenue of \$31,962,750 (Appendix III), is split into the markup related to the excise tax (\$18,562,120) and the markup related to funding DLC operations (\$13,400,630).

^b Includes license fee for on-premises (e.g., bars and restaurants) sales of beer, wine, and liquor and off-premises sales of beer and wine by retail stores.

^c DLC is implementing new information technology (IT) systems for portions of its liquor operations. With full privatization the new systems would not be needed and the costs could be eliminated. However, in partial privatization, components of the implementation may still be relevant.

Some potential one-time revenues and possible incremental costs are not included in the models. For example, with the current liquor control system DLC owns some assets, such as liquor inventory at the agent stores (\$5.4 million as of 6/30/2013), which would not be owned by DLC in a privatized model.²⁴ At the point of conversion to a privatized model, DLC could sell its

²⁴ For purposes of modeling both partial and full privatization, DLC ceases its agent store model and private sector retailers would be licensed to sell liquor.

liquor inventory, generating one-time revenue. Both privatization models assume issuance of 120 retail store licenses, an increase of locations from the 78 currently operating. The DLC licensing function currently administers over 2,000 licensees, so the addition of 120 licensees may not represent significant incremental cost. In the partial privatization model, SAO assumed DLC would retain the wholesale operations, including transportation of product to retail stores, which may result in additional costs (providing product to 120 retail stores versus the current 78 agent stores).

In addition to the estimated fiscal impact to the State, altering the current liquor control system may or may not result in an increase to the retail price paid by consumers. According to Washington State's Department of Revenue, the average price per liter, including taxes, has increased 11.8 percent subsequent to full privatization in 2012.²⁵ A review of performance by the State of Iowa Division of Alcoholic Beverages after it privatized its retail system in 1987 determined that prices increased gradually, by approximately 7.4 percent.²⁶ Whether, and to what extent, retail price increases would result from privatization in Vermont would be influenced by the extent of the increase in the excise tax rate and factors that would be controlled by the private sector, including the percentage markup on product costs. Assuming a markup of 20 percent for wholesale and 18 to 25 percent for retail,²⁷ SAO estimates that, on average, retail prices may increase 9.8 to 14.7 percent in a fully privatized system. (See Appendix V for the assumptions and pricing model used to estimate the effect of privatization on retail price.)

Based on the models developed and the assumptions of reduced operating costs and an increased excise tax rate, the fiscal impact of privatization may be neutral. However, the current system of liquor control provides significant revenues for general government operations, and there may be opportunities to increase these revenues within the current model.

²⁵ SAO calculation based on spirit sales data from the Washington Department of Revenue from June 2012 to May 2014.

²⁶ Iowa Alcoholic Beverages Division, "Privatization of Retail Liquor Sales in Iowa," July 16, 1999, unnumbered page 3. http://iowaabd.com/files/client_files/191/1912/privatization_of_retail.pdf

²⁷ SAO used 18 to 25 percent for the retail markup because research indicated a range of markups was possible for retail.

Objective 2: By Implementing Strategic Analyses and Enhancing Mechanisms for Managing Liquor Operations, DLC May Improve Profitability

There may be actions that DLC could take to improve its profitability, but the Department has not performed analyses to determine the costs and benefits of these actions. Specifically, DLC lacks analyses needed to inform key liquor operational decisions that affect profitability, such as whether a new warehouse should be built and the ideal number and location of agent retail stores. Without these types of analyses, it will be difficult for DLC to conclude that a new warehouse is necessary and whether agent stores should be added or relocated. In addition, DLC has processes in place to manage aspects of its liquor operations, such as inventory management and sales promotions, but the mechanisms it uses are somewhat limited. For example, to determine which products to discount during sales promotions, DLC estimates case sales and income that will result from the sales program. However, DLC does not compare actual case sales and income to the estimates, so it does not know whether the products selected for sale performed as expected and whether profitability was improved.

Historically, the department has not viewed itself as a business, which may partially explain the lack of strategic analyses and the limited mechanisms used to manage certain aspects of liquor operations. Although DLC senior officials acknowledge that the department should be run like a business to meet the need for growth, they express concern for public health costs associated with alcohol consumption and suggest that an increase in the availability of alcohol will result in greater retail sales and an increase in the problems associated with alcohol consumption. These two perspectives, operating DLC as a business versus concern about the effect of greater levels of alcohol sales, reflect the divergent priorities at DLC – a department responsible for both promoting alcohol sales and regulating it to reduce potential negative side effects.

Analyses Needed to Inform Key Strategic Decisions

DLC's strategic plan²⁸ includes a goal to reach sales of \$75 million in FY2015, and in written testimony submitted to the House Appropriations Committee on January 29, 2013, the department indicated that it had set a sales target of \$100 million by 2018. However, at a brainstorming session

²⁸ Completed in March 2012, the strategic plan covers operations through FY2015.

conducted with the board in July 2013, the commissioner indicated it would take nine years (until 2022) for the department to reach \$100 million in sales. The commissioner has acknowledged there are no formal plans in place to support achievement of the 2018 goal, but he thought the department could get to this level over a period of time with more agent store locations and by adjusting the markup. Further, the commissioner believes the existing warehouse is a problem, impeding aspects of current operations and future desired growth.

Agent stores

Agent stores account for nearly all of DLC's liquor sales revenue. As a result, the agent stores are a critical facet of DLC's liquor operations, and having a systematic process to determine the location and number of agent stores is fundamental to DLC operations. A 2012 report prepared by the Vermont Certified Public Managers program,²⁹ at the request of DLC, recommended DLC develop a market location strategy and utilize it on a regular basis to assist with long-term planning and to provide a process and objective criteria for determining locations to open new stores. Determining the number and location of agent stores remains at the discretion of the Liquor Control Board, which is considering whether more stores are needed or whether existing stores need to be relocated. However, the department has not established a systematic process, including consistent criteria, to inform these decisions.

According to the chair of the Liquor Control Board and the commissioner, the board looks at many things to make sure adding or relocating a store is the right decision for the community, such as proximity and convenience to customers, traffic counts, petitions from citizens, and political implications. Although the board may consider some of the facts and circumstances relating to adding stores, without a systematic methodology and objective criteria to determine the number and location of agent stores, it is difficult to discern how DLC will have the information it needs to develop a long-term business strategy that will support reaching its goals.

Pricing practices

The department has taken few measures to review its pricing practices and DLC's strategy for determining the amount to markup products has remained

²⁹ Vermont Certified Public Managers program is an internal training program offered to current and emerging leaders in state government.

nearly the same since 1996.³⁰ DLC determines the retail shelf price for its liquor products by applying a markup to its product costs that ranges from 65 to 85 percent and varies by liquor segment (e.g., vodka, whiskey, gin, etc.). According to DLC's commissioner and board chair, the rationale for the markup structure included making it simpler, lining up with the rest of the control states, and making it easier for suppliers to identify price points for new products. However, the department has not provided evidence that the markups were the result of a systematic pricing strategy linked to the department's business goals. In 2005, a consultant hired to evaluate DLC's operations, reported that a structured review of Vermont's liquor pricing could help to develop a more competitive overall price. In addition, in 2011, DLC reported to the legislature that an independent consultant would be hired to perform a pricing study. However, no studies have been done and DLC does not have any plans to evaluate its pricing strategies. Without this evaluation, DLC lacks information to make decisions about whether and to what extent it may increase or decrease shelf prices and whether these changes would affect profitability.

Warehouse space

DLC's strategic plan shows that DLC planned to 1) evaluate a larger warehouse location and 2) assess the efficiency of warehouse operations. However, as of May 2014, the department had not performed an evaluation of whether a larger warehouse is warranted and the department currently did not have plans for an analysis to be performed. In May 2014, the warehouse held 66,000 9-liter cases, although subsequent information from DLC indicated that the number of cases in the warehouse was somewhat higher in October. Regardless, the department does not have a methodology to calculate total warehouse capacity. Without performing such an analysis it is difficult to discern whether a larger warehouse is necessary to support future planned sales growth.

Additional Methods to Manage Aspects of Liquor Operations

In response to a consultant's recommendations³¹ and legislative requirements, and as a result of developing a strategic plan in 2012, DLC has enhanced some processes for managing its liquor operations and has plans to make other changes. For example, in January 2014, DLC implemented an agent

³⁰ At the request of manufacturers, the department simplified how it calculated its retail shelf prices in 2013, but it maintained similar markup percentages. A rounding convention (up to nearest \$0.99) was added in 2011.

³¹ 2005 study by Management Analysis, Incorporated that recommended operational improvements.

store application review process, including establishment of an evaluation committee to review applications. The committee utilizes benchmarks such as floor space and storage space, developed based on comparable agent stores,³² to assess and score applications.

However, in some instances, processes remain limited, are not achieving the intended result, or are contrary to State requirements. In addition, some changes have been discussed for multiple years but have yet to be implemented.

The following subsections describe additional practices that DLC could implement to address the department's acknowledgement that the department should be run like a business and to meet its strategic goal of increasing sales revenues.

Inventory management

Most inventory in the DLC warehouse is held in bailment, meaning that manufacturers ship product to the warehouse and retain ownership of the product until it's delivered to agent stores. DLC's bailment inventory management agreements with manufacturers recognize that managing inventory levels maintained in the DLC warehouse is the responsibility of both DLC and the manufacturer. The agreements allow for establishment of minimum and maximum inventory levels and for fees to be charged in the event of overstocked product (i.e., when levels exceed an agreed to maximum) or understocked product.³³

DLC utilizes some tools for controlling inventory levels in the warehouse, primarily 1) a target of 30 days inventory supply (i.e., days sales of inventory)³⁴ to monitor inventory on hand and 2) out-of-stock reports to reorder product.

1. **Target 30 days inventory.** The department's actual days sales of inventory (57 days) in May 2014 was nearly twice its desired target

³² Comparable stores are defined as those located in communities with population size similar to the location of the applicant.

³³ According to the bailment agreements, the department may assess a fee of \$0.25 per case per day for each case over the maximum. The department may also assess a fee of \$0.50 per case per day for each case under the minimum that is not shippable under normal shipment and supply conditions. A product that goes below the minimum quantity is at that time "chargeable". The department will assess fees at such time that store orders cannot be filled and/or the quantity is at zero. Fees will be retroactive to the date the merchandise became chargeable.

³⁴ Days sales of inventory means the number of days it takes to turn inventory into sales.

(30 days). Several days prior to planned shipment, manufacturers send a shipping notice to the DLC purchasing coordinator, indicating the products and quantities to be shipped. If inventory held in the warehouse plus the inventory to be shipped is less than the 30-day target, the shipment is allowed. Otherwise, the purchasing coordinator attempts to contact the manufacturer to cancel the shipment. According to the purchasing coordinator, it can be challenging to respond to a high volume of daily shipping notices in a short period of time.

2. **Out-of-stock reports.** Weekly, the purchasing coordinator receives a report of all out-of-stock products in the warehouse from which products are reordered. Reordering product at the point it becomes out of stock at the warehouse could result in lost sales if there is no stock in the warehouse to replenish agent store inventory. DLC's inventory management system does not provide information regarding the number of times agent store orders go unfilled as a result of stock-outs at the warehouse, so the department does not know the effect of stock-outs on its sales.

These tools do not seem entirely effective since the department appears to have difficulty meeting its target for inventory supply in the warehouse and may be missing sales opportunities by reordering at the point product is out of stock in the warehouse. Alternatively, the bailment agreements allow for establishment of minimum and maximum inventory levels. Establishing minimum and maximum inventory parameters would provide manufacturers expectations of the inventory levels to be maintained in the warehouse and would allow the department to move from reviewing daily shipping notices to periodically monitoring inventory levels against established criteria. Further, the bailment agreements indicate that fees may be charged in the event of overstocked product (i.e., levels exceed agreed-to maximum) or understocked product. For those manufacturers out of compliance, fees could be assessed, generating additional revenue for the State.

Product assortment

According to NABCA materials, decisions regarding product assortment (e.g., which products to sell) should take into account various product

attributes (product segment,³⁵ sub-segment,³⁶ price tier,³⁷ and bottle size) and financial metrics (sales, gross profit,³⁸ gross margin,³⁹ growth rates, and case volume). The process of determining which liquor products to offer for sale is done through DLC's listing (adds products for sale) and delisting process (removes products). Decisions regarding the products to list and delist impact the department's overall sales and profitability. DLC's listing process includes review by a committee⁴⁰ of various data points such as bottle size, product segment, suggested retail price, competing products and total bottle sales in other control states. However, DLC's delisting process considers limited criteria. See Table 3 for a comparison of DLC's criteria used to determine product assortment to the approach described in NABCA materials.

Table 3: Comparison of DLC and NABCA Approach to Product Assortment

	DLC		NABCA
	Delisting	Listing	Both
Product Attribute:			
Segment	X	X	X
Sub-segment		X	X
Price tier			X
Bottle size	X	X	X
Financial Metric:			
Sales			X
Margins			X
Profits	X		X
Growth rates			X
Case volume			X

DLC's commissioner and board chair indicated that the board has held discussions about limiting the number of products at the low-end price tiers

³⁵ Product segments represent the type of liquor, such as vodka, whiskey, rum, tequila, gin, etc.

³⁶ Product sub-segments include flavored/unflavored or imported/domestic liquor.

³⁷ Price tiers are described by NABCA as value, popular, premium, super premium, and ultra-premium. The tiers represent price ranges from the least expensive to most expensive liquor products.

³⁸ Gross profit represents sales minus the cost of goods sold.

³⁹ Gross margin is sales minus cost of goods sold divided by sales, expressed as a percentage.

⁴⁰ Committee is comprised of DLC staff, two liquor agents and two licensees.

(e.g., value and popular) given that they believe premium products are generating the best margins, but DLC has yet to incorporate these types of considerations into its processes.

Moreover, as of May 2014, there were about 1,000 cases in the warehouse of delisted product that should have been removed by manufacturers. According to the purchasing coordinator, manufacturers have 30 days to remove delisted inventory from the warehouse, but if the product is not removed DLC has little recourse for removing or destroying the product without manufacturer permission. Given that the bailment agreements allow DLC to charge for excess inventory, it may be possible for DLC to charge these fees to manufacturers that fail to remove inventory that has been delisted. Fees may provide an incentive for the manufacturers to remove this unwanted inventory from the warehouse. Allowing delisted product to remain in the warehouse utilizes space that should be reserved for product that DLC is actively selling.

Performance reviews for agent stores

Annually, DLC reviews performance of agent stores to determine whether agent stores qualify for an incentive commission.⁴¹

In 2013, DLC paid about \$1 million in incentive commissions to its 78 agents,⁴² and 72 percent of agents received the maximum incentive award of 8.2 percent of liquor sales. We found that the department had documented its review and assessment of agent commissions and that commission payment amounts matched the incentive recommended by the reviewers. However, DLC's process for evaluating incentive commissions lacked a way to objectively measure 11 of 12 performance categories because goals for these categories had not been established. As a result, the evaluations may be inconsistent if reviewers have different interpretations of what should be measured for each performance category.

For example, one of the performance categories is "shelving." Because no goal has been provided by DLC to the agent stores, it's not clear what will be measured nor the target that will be used to assess performance. It could be cleanliness or maintaining a minimum number of linear feet stocked with DLC liquor. In contrast, for the inventory control category (the only one with

⁴¹ Agents are paid a 6.7 percent base commission on liquor sales and are eligible to earn an additional 1.5 percent through incentive commissions.

⁴² Total agent commission payments in 2013 were \$5.8 million (\$4.8 million of base commission and \$1 million of incentive commission).

performance goals) the department measures inventory turnover⁴³ for each agent store compared to other agent stores with similar sales levels. Establishing clear measures for its other performance categories would allow the department to objectively assess whether the agent stores are meeting the department's desired outcomes and to pay commissions to agent stores commensurate to expected performance.

However, the commission assessment does not consider sales or profitability measures. The department's strategic plan indicates that sales goals will be set for each agent store, and in mid-2014 DLC had drafted some new criteria for assessing whether agent stores qualify for the incentive portion of commission payments, including a category to assess sales performance. However, targets for agent stores have yet to be developed. As of the time of our audit, sales measures were not being used to evaluate agent stores. Including sales measures in its assessment of agent stores provides the department a mechanism to align store performance with its own strategic plan and goal to increase sales revenue.

Perpetual contracts with agent stores

DLC has contract terms that exceed the term allowed by the State, and its practice of continuously contracting with the same agent stores conflicts with the State's competitive bidding requirements.

According to Agency of Administration Bulletin No. 3.5, it is the policy of the State of Vermont to obtain high quality services and materials in a cost effective manner through the use of an open and competitive contract solicitation process. Further, Bulletin No. 3.5 requires that contracts be for terms of two years or less, unless the Secretary of Administration has approved a longer contract term or a contracting plan that allows for terms of greater than two years. Additionally, a broadly publicized competitive bid process⁴⁴ is required for contracts greater than \$100,000 and a simplified bid process⁴⁵ for contracts between \$15,000 and \$100,000.

⁴³ Inventory turnover is calculated by dividing annual sales by average inventory (inventory cost at beginning and end of the year divided by 2).

⁴⁴ State Bulletin 3.5 requires public notice of the bid opportunity and issuance of a request for proposal, which should include information about the purpose and nature of the services or products that are sought and must include a statement of work.

⁴⁵ Per Bulletin 3.5, simplified bid process means that the state agency has developed a specific and detailed statement of work for the service or product desired and has solicited written price quotations from at least three potential bidders for the services or products.

Generally, DLC contracts with agent stores for three year terms.⁴⁶ At the expiration of a contract term, the department evaluates agent stores using a process similar to that used to review incentive commission rates. Upon the approval of the board, DLC enters into a new three-year contract with the same agent store. According to information provided by DLC, 67 percent of DLC liquor agent contracts have been with the same agent store for at least 10 years and 27 percent for more than two decades. Based on DLC FY2013 commission payment data, it appears that about 90 percent of DLC's contracts with agent stores⁴⁷ should be subject to the standard or simplified bidding process, neither of which has occurred. Failure to follow the State's competitive bidding and contracting requirements may negatively impact DLC's ability to establish agent stores that will provide the best quality services.

DLC has not provided evidence that the Secretary of Administration has approved contract terms longer than two years. Further, the department has indicated that it does not have an approved contracting plan. According to the Vermont Attorney General's Office (AG), the AG will work with DLC on a contracting plan that will bring DLC into compliance with Bulletin 3.5. Subsequently, in November 2014, the department submitted a contracting plan to the current administration requesting exemption from certain Bulletin 3.5 requirements.

Sales promotions

The department offers various sales promotions in order to increase the volume of product sold, expecting that the result will be increased revenue and increased total profit. According to DLC, they do not have a formal process to evaluate the impact of sales promotions, but they get a rough sense of the success of sales promotions by comparing current to prior year sales, prices, and cases sold for promotional products.

DLC selects product for sales promotions based on estimates of the number of cases expected to sell and income that will result from putting various products on sale, but it does not compare these estimates to actual results. As a result, DLC does not know whether its product sales promotions have the intended effect on overall sales or whether additional profit was generated.

⁴⁶ According to the board chair and commissioner, DLC is transitioning to one-year renewal terms since the board is planning to reassess how many stores are needed and where they should be located. Once this assessment is complete, DLC plans to resume three-year contract terms

⁴⁷ 20 contract agents received commission payments greater than \$100,000, and 51 received payments between \$15,000 and \$100,000; the other 7 received less than \$15,000.

Moreover, because DLC has not compared estimated case sales to actual cases sold, the department does not know whether the estimated case sales assumptions are reasonable to use in the future.

Underlying Causes

A combination of factors has led to some limited processes for managing liquor operations and to delays in conducting strategic analyses.

Divergent priorities

DLC is responsible for promoting and regulating the use of the same product. On the one hand, the department describes its mission as preventing the misuse of alcohol through controlled distribution. At the same time, the department's leadership indicates it wants to operate like a business, and the board's July 2013 brainstorming session included discussion of increasing sales to \$100 million by 2022. These divergent priorities suggest there may be an inherent conflict of interest in the department's mission. It is difficult to discern how these competing priorities can be effectively managed by a single entity. The chair of the board has described DLC as a profitable business but has also expressed concern that a greater level of retail sales will lead to increased public health and safety problems. The effect of this tension may be illustrated by a lower priority given to conducting studies that are central to strategically planning for future liquor operations. Namely, the department has not followed through on conducting a comprehensive pricing study or an analysis of its warehouse capacity, nor has it developed a methodology to determine the optimal number and location of agent stores.

Deferral of analyses until implementation of new system

DLC indicated that it would perform some strategic analyses and enhance processes used to manage liquor operations after implementation of its new information technology system, estimated for Fall 2015, because they believe it will be easier to obtain the data needed to perform this type of work from the new system. DLC also indicated that the implementation of its new information technology system will change the way DLC conducts liquor operations, and it is waiting to see what impacts there will be. DLC has acknowledged that data is available from its existing system that could be used to perform pricing analyses now, but the department believes it would be arduous to obtain the information. According to the commissioner, demographic information is available to perform an analysis on optimal store locations. The department has had many years to conduct some of these analyses. In 2005, a consultant recommended DLC conduct a pricing study, and in 2012, the Vermont Public Managers program recommended an analysis be performed to develop a market location strategy for its agent

stores. Moreover, if there are delays in the implementation of its new system, putting off these analyses will continue to prevent the department from making key operational decisions.

Staffing

The board chair has indicated that the department needs someone who could do more strategic and business analyses that would assist the commissioner, such as a chief financial officer. DLC's strategic plan cites as one of the strategic challenges facing the department a lack of staff resources, although it does not mention a need for particular skills or experience that would help it to achieve its vision of being "transformed to look like a real business entity of state government."

In addition, based on SAO's review of Department of Human Resources (DHR) ratings⁴⁸ for the three job positions in liquor operations that report direct to the commissioner, DLC does not appear to have the types of positions within the liquor operations that would perform analysis to devise new approaches or to devise new processes for all aspects of liquor operations. None of the positions are rated at a level that would exercise independent judgment within the broad framework of policies and strategies that apply to a major portion of the department. In particular, they are not expected to exercise creative thinking in the sense of devising new concepts or approaches. One of the positions would be expected to devise procedures within the policies and goals for a specific operating unit, but the responsibilities of this position are limited to monitoring agent stores and overseeing the department's accounting function. The other two job positions are expected to have competence in their specialized field, but they are not of the level that would be expected to devise and set procedures for others or conduct analysis to inform strategic decision making.

Other Matters for Consideration

Research indicates that additional alcohol availability increases the incidence of both violent and property crimes.⁴⁹ Excessive alcohol consumption is also linked to significant health complications.⁵⁰

⁴⁸ DHR uses a factor-point job evaluation system to examine the content and measure the value of all job positions. The evaluation method includes consideration of actual requirements, duties and responsibilities assigned to a particular position.

⁴⁹ See Appendix VI, studies numbered 5-9.

NABCA and control states have raised concerns that altering control of the distribution and sale of alcohol may lead to an increase in a variety of negative social impacts, including increased alcohol consumption, alcohol abuse, underage consumption, and impaired driving.

Studies examining the influence of various factors on alcohol consumption and behavior have yielded differing conclusions.⁵¹ Few studies have examined the empirical effects of loosening state control on alcohol consumption and related problems,⁵² and the results of these studies have been mixed.⁵³ Iowa's experience, as the first state to privatize retail sales of wine and liquor since the end of Prohibition, has been the subject of studies with diametrically opposed conclusions.⁵⁴

In 2011, the Task Force on Community Preventive Services⁵⁵ ("Task Force") recommended against the further privatization of alcohol in settings where the government currently controls retail sales. According to the Task Force, privatization of retail operations "results in increased per capita alcohol consumption, a well-established proxy for excessive consumption." Privatization was found to increase the number of off-premise outlets as well as days and hours of sale, all of which have been shown in previous Task Force reviews to lead to increases in excessive alcohol consumption and related physical harms. The Task Force also noted, however, that only two studies in the body of evidence on privatization assessed the effects of privatization on alcohol-related harms.⁵⁶

Two of the studies reviewed by the Task Force discussed the impact of the privatization of wine and liquor sales in Iowa. Researchers expected to find increased consumption rates, and as a result, increased heavy drinker and

⁵⁰ See Appendix VI, studies numbered 1-4.

⁵¹ See Appendix VI, studies numbered 10-26.

⁵² Two studies are underway to assess the effects of Washington State's 2012 liquor privatization on various factors such as consumption and alcohol-related harms. One of the studies has released data for some aspects of research being conducted, but these data show mixed results. For example, data reported indicate declines in youth use of alcohol and binge drinking, decreased DUI's and fatal crashes involving alcohol, but also show an increase in adult drinking and an increase in alcohol-related emergency department visits.

⁵³ See Appendix VI, review and studies numbered 27-31.

⁵⁴ See Appendix VI, review and studies numbered 27-29, 31.

⁵⁵ Established by the United States Department of Health and Human Services in 1996, the Task Force is staffed by a group of volunteer public health and prevention experts, appointed by the Director of the Centers for Disease Control and Prevention (CDC). The Task Force conducts systematic reviews of peer-reviewed studies to provide recommendations to help inform policy makers and researchers. This organization and its recommendations are independent of the CDC.

⁵⁶ See Appendix VI, studies numbered 32-33.

problem drinker rates. They found that privatization had "no significant long-term impact" on wine or liquor consumption.⁵⁷ In addition, they also found no consistent trend in heavy or problem drinking rates in the four years after privatization.⁵⁸ They note that "though several studies have found availability, consumption, heavy drinking and problem drinking to be interrelated, it does seem apparent that factors other than availability influence consumption, and factors other than availability affect heavy and problem drinking rates."⁵⁹

There are a multitude of factors that influence consumption rates and alcohol abuse, and many of these go beyond the method the state uses to retail these products.

Further, state enforcement measures have been shown to reduce both alcohol-related injuries and drinking and driving and these measures can be a useful approach in either a license or control state environment. These include:

- Stricter enforcement of the minimum legal drinking age;⁶⁰
- The use of sobriety checkpoints;⁶¹
- Enactment and enforcement of a .08-percent legal BAC limits for adult drivers;⁶² and,
- Mandating the use of ignition interlocks for people convicted of drinking and driving.⁶³

The National Highway Traffic Administration and National Research Council indicate that the effectiveness of alcohol control policies (e.g., enforcement measures) is directly related to the "intensity of implementation and enforcement and on the degree to which the intended targets are aware of both the policy and its enforcement."⁶⁴

DLC's perspective is the same as other proponents of state-controlled liquor systems - the State's control over the sale of liquor is needed to address the

⁵⁷ See Appendix VI, studies numbered 28-31.

⁵⁸ Ibid.

⁵⁹ Mulford, H.A. & J. L. Fitzgerald (1988) "Consequences of Increasing Off-premise Wine Outlets in Iowa," *British Journal of Addiction*, 83, 1271-1279.

⁶⁰ See Appendix VI, studies numbered 35-39.

⁶¹ See Appendix VI, studies numbered 41-46.

⁶² See Appendix VI, studies numbered 44, 47.

⁶³ See Appendix VI, studies numbered 48-55.

⁶⁴ National Research Council, Institute of Medicine (2003) "Reducing Underage Drinking: A Collective Responsibility," National Academies Press, Washington, p. 164.

public interest in limiting negative social impacts of excessive alcohol consumption. However, no such State control exists for other types of alcohol, as Vermont licenses the distribution and sale of beer and wine to the private sector. DLC's position seems questionable in light of the Centers for Disease Control and Prevention (CDC) assessment that it is the amount of alcohol consumed that affects a person most, not the type of alcoholic drink.⁶⁵

Given the lack of definitive conclusions regarding the effect of loosening state control on alcohol sales, DLC's perspective about the need for a state monopoly does not appear to be strongly supported by the evidence. If this is the case, then the public interest rationale for continued state monopoly may not be as compelling. It may be timely for legislative and other policy leaders to consider whether the State's exclusive distribution and sale of liquor is a function of State government or whether it could be licensed to private distributors and retailers, as it is for beer and wine. At the federal level, legislation and regulation clarify the functions that are inherently governmental. "Inherently governmental function" is defined as a function that is so intimately related to the public interest as to mandate performance by government employees. These functions include those activities that require either the exercise of discretion in applying government authority or the use of value judgments in making decisions for the government.⁶⁶

Conclusion

There is tension between Vermont's historic liquor monopoly mission of promoting responsible consumption and contemporary demands to maximize revenue for the State. As an alternative to developing strategies to increase the sale of liquor products under the current system, Vermont could elect to privatize its liquor control system as Washington did in 2012. Based on our analysis of the fiscal impact of altering the State's liquor control system, a combination of excise taxes on private wholesalers and reduced DLC operating costs, may yield a neutral impact. On its own, the estimated fiscal impact from privatization does not appear to be a reason to change the State's current system. Other factors to consider are social impacts and the current dichotomy of the State controlling the sale of liquor, but not other alcoholic beverages.

⁶⁵ According to the CDC, one 12-ounce beer has the same amount of alcohol as one 5-ounce glass of wine, or 1.5-ounce shot of distilled spirits. It is the amount of alcohol consumed that affects a person most, not the type of alcoholic drink.

⁶⁶ Office of Federal Procurement Policy, Policy Letter 11-01

First, the State's belief that state control is essential to ensuring responsible consumption and limiting negative social impacts may not be strongly supported by the evidence. Studies examining the influence of various factors on alcohol consumption and behavior have yielded differing conclusions, and the few studies that have examined the empirical effects that loosening state control have had on alcohol consumption and related problems have had mixed results. However, studies of enforcement measures (e.g., enforcement of minimum legal drinking age) show more consistently that these measures reduce both alcohol-related injuries and drinking and driving, regardless of the type of regulatory system in place (e.g., control or license state).

Further, although there is state control over the sale of liquor, no such state control exists for beer and wine, which is licensed to the private sector. These differing systems, combined with mixed results from studies, may indicate there is not a strong public interest served by having the State sell liquor. It may be timely for legislators and other policy makers to consider whether liquor sales are a core function of State government or whether the sale of liquor could be licensed to the private sector, as it is for beer and wine.

Regardless of whether the State considers privatization, there are actions that DLC has not taken that may improve its profitability. DLC has not performed some analyses needed to inform strategic decisions that affect profitability, such as whether a new warehouse should be built. Although DLC has enhanced some processes used to manage day-to-day liquor operations, additional mechanisms, such as establishing and monitoring minimum and maximum inventory levels, may lead to greater profitability.

Recommendations

We recommend that the Liquor Control Board direct the Commissioner of the Department of Liquor Control to:

1. Prepare or contract for an analysis to determine the optimum number and location of agent stores.
2. Obtain a review of liquor pricing to establish a methodology for competitive pricing.
3. Perform or contract for an analysis of warehouse capacity.
4. Establish minimum and maximum inventory levels to be maintained in the warehouse and implement a systematic process to monitor manufacturers' compliance with established inventory levels.
5. Establish and implement a policy to assess manufacturers fees for noncompliance with minimum and maximum inventory levels.
6. Enhance the product attributes and financial metrics used for delisting decisions.
7. Establish clear goals and targets for each performance category used to evaluate agent store performance, including sales targets.
8. Work with the AG's Office in an expeditious manner to bring the department into compliance with Bulletin No. 3.5.
9. Develop and implement systematic analysis of results of sales promotions, including comparison of actual results to estimates.
10. Determine what positions are needed to perform strategic and business analysis and recruit and hire for the positions.

Management's Comments

The Commissioner of the Department of Liquor Control and Chair of the Liquor Control Board provided written comments on a draft of this report on November 12, 2014, which is reprinted in Appendix VII. In addition, our evaluation of the comments may be found in Appendix VII.

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In accordance with 32 V.S.A. §163, we are also providing copies of this report to the Commissioner of the Department of Finance and Management and the Department of Libraries. In addition, the report will be made available at no charge on the state auditor's website, <http://auditor.vermont.gov/>.

Appendix I

Scope and Methodology

To address our two objectives we used financial models to analyze the fiscal impact of changing the state's liquor control system, and we reviewed DLC's liquor operations to determine whether profitability may be improved. We hired The PFM Group (PFM) to develop financial models to assist with assessing the fiscal impacts of privatizing the state's liquor control system. PFM also performed research related to liquor control systems in other states, and assisted with some analysis to identify potential changes to the state's current operations that might improve profitability.

To gain an understanding of the framework for the State's liquor control system, we reviewed applicable statutes, DLC regulations, DLC annual reports, and other background information posted on DLC's website. We met with the Liquor Control Board to gain an understanding of its oversight responsibilities. We also met with DLC officials and other personnel to gain an understanding of processes and procedures used to manage liquor operations. To provide context relative to control systems of other states, PFM conducted surveys of several control states. PFM also collected information from DLC annual reports, DLC financial statements, the 2013 Liquor Handbook by NABCA, and other sources to benchmark aspects of DLC's current system of operations to other control states, including licenses per capita, retail pricing, and state tax rates.

We performed various procedures to verify the reliability of certain DLC financial information from FY2009 to FY2013 for purposes of our audit objectives, including obtaining corroborating evidence, and in some instances performing recalculations. In designing our approach to assess whether DLC's financial data was reliable, we considered the General Accountability Office's (GAO) Data Reliability Guide, which outlines a variety of approaches for data reliability assessment. Financial data obtained from DLC's computer systems, such as product prices, cost of goods sold and liquor sales per agent store, were used in financial and other analyses to answer the audit objectives. As a result, SAO reviewed a combination of processes and controls associated with these key data elements.

First, with regard to DLC's overall financial results for the years 2009 to 2013, we verified that DLC's liquor control financial statements were included in the State's audited financial statements and that the audits resulted in unqualified opinions from 2009 to 2013. Further, because some of the data relevant to our audit objectives was not included in DLC's audited operational financial statements and financial data relevant to our audit objectives was at a greater level of detail or presented in a different manner than the audited financial statements, we performed additional procedures to verify reliability for purposes of our audit objectives.

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To verify the reasonableness of detailed sales reports obtained from DLC, we compared the sales and product cost totals to the state's accounting system trial balance and the audited financial statements. We sought explanations from DLC for large fluctuation in agent store sales from year to year to assess the reasonableness of the agent store sales revenue. To verify the accuracy of the department's retail prices we recalculated product prices by applying the department's product markup schedules to product cost per purchase orders and compared our results to the department's table of historic retail prices.

To confirm the accuracy of the excise taxes reported by DLC in its annual report, we recalculated the excise taxes based on liquor sales revenue and statutory tax rates and compared those amounts to the state's accounting system general ledger detail.

We vouched inventory and cost of goods sold detail to corresponding purchase orders to verify amounts were recorded at cost and to assess whether cost of goods sold was calculated in accordance with generally accepted accounting principles.

To verify that the agents' commissions were properly calculated and paid, we confirmed that commission rates agreed to DLC-approved commission award letters, recalculated commission payments, and compared payments to the amounts recorded in the state's accounting system. To assess the completeness and accuracy of DLC salary and benefits we reconciled the total expenses from the DLC payroll position reports to the audited financial statements. Based on the results of these procedures, we concluded the data was sufficiently reliable for purposes of our audit objectives.

For our first objective, PFM developed several models to compare forecast revenue and expenses of the current liquor control system to those projected for a privatized system in FY2016. A baseline model was developed to forecast revenue and expenses of the state's current liquor control system. Models were also developed to forecast revenue and expenses for full and partial privatization. We used various assumptions in our financial models, such as expected product markups, cost growth rates, and number of wholesale and retail liquor licenses and license fees. These assumptions were developed using data gathered from various sources, including DLC's historic financial information from 2009 to 2013, publicly traded company and other third party data, and discussions with industry stakeholders.

For our second objective, we reviewed the department's 2011 to 2015 strategic plan, the commissioner's written presentation during a board brainstorming session in 2013, board chair and commissioner testimony to a

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legislative committee in 2014, budget documents, a legislatively required 2011 DLC report, and DLC consultants' reports.

We also reviewed with department personnel the policies and procedures related to product pricing, sales promotions, inventory management, product assortment, and agent store performance reviews and renewals.

We discussed with DLC personnel their methods for establishing retail pricing practices and reviewed the spreadsheets used to calculate retail prices. To confirm the department's pricing practices, we recalculated product prices using the information from purchase orders and the department's product markup spreadsheets and compared this information to prices listed in detailed sale reports.

We interviewed personnel regarding the department's sale promotion practices and reviewed DLC descriptive materials for its sale programs. We examined the spreadsheets used to determine which sale promotions to offer, which included calculations to estimate product income with and without offering the promotional sale.

We examined how the department monitors inventory levels, including procedures in place to prevent overstocked and understocked product. We reviewed the spreadsheets used to filter the results from the weekly out-of-stock report to determine which products should be reordered. We inspected an advanced shipping notice sent to DLC prior to shipment and the spreadsheets used to calculate inventory target and inventory on hand. We analyzed a warehouse inventory report to determine the number of days sales of inventory and compared it DLC's target. We also reviewed the department's bailment agreements to gain an understanding of the provisions applicable to inventory management.

We reviewed the department's methods for adding and removing products from stock. We reviewed NABCA materials of industry practices for determining product selection. We inspected the department's delisting threshold table. We examined the sales reports and other spreadsheets used to determine the products selected for delisting. We analyzed the results of DLC's delisting process for one quarter including assessing whether the department properly applied its delisting criteria to product sales.

We reviewed the department's process for awarding commissions, including the payment and approval process and methods for evaluating incentive commissions. We assessed whether goals, measures, and targets were used in the evaluation of the department's 12 incentive commission performance categories.

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We inquired about the department's process for renewing agent store contracts and compared the practices to the state's procurement and contracting requirements.

PFM provided our office with a summary of the results of various studies that have been conducted on factors impacting alcohol consumption; the effects of loosening state control of liquor distribution and sales; and the effect of enforcement measures on rates of underage drinking, alcohol-related injuries and drinking and driving. Because PFM's research indicated there were few studies that have examined the empirical effects of loosening state control on alcohol consumption and related problems, and because the results of these studies have been mixed, the summary information provided by PFM was presented in a descriptive manner, capturing the different points of view.

Our audit fieldwork was performed from February to August 2014 and included site visits to the department. We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Appendix II

Abbreviations

AG	Vermont Attorney General's Office
CDC	Centers for Disease Control and Prevention
DHR	Department of Human Resources
DISCUS	Distilled Spirits Council of the United States
DLC	Vermont's Department of Liquor Control
FY	Fiscal Year
IT	Information Technology
GAO	General Accountability Office
NABCA	National Alcohol Beverage Control Association
PFM	The PFM Group
SAO	Office of the Vermont State Auditor
TTB	Federal Alcohol and Tobacco Tax and Trade Bureau

Appendix III

Assumptions and Projected Results for FY2016 Baseline Financial Model

Two primary assumptions regarding the State's liquor control system underlie the FY2016 baseline financial model projections.

1. The current liquor control system continues to operate. DLC is the liquor wholesaler and contracts with agent stores to sell liquor to consumers and bars and restaurants.
2. There is no change in state or federal taxes or fees, no extraordinary changes in states that border Vermont, and no material changes in state law or regulations regarding the sale of liquor for on-premises or off-premises consumption.

DLC financial data from FY2009 to FY2013 was used to develop average rates⁶⁷ for items such as DLC's markup and agent commissions. The data were also used to develop median growth rates⁶⁸ to estimate costs, including product costs and administration.

Growth rates for operating costs and product costs (i.e., cost of goods sold) were applied to FY2013 actual results in order to estimate FY2014, FY2015 and FY2016. The average percentage product markup was applied to estimated cost of goods sold to derive estimated liquor revenue. The average commission rate was applied to estimated liquor revenue to calculate agent commission cost.

For purposes of the baseline financial model projection, the revenue from the State's 6 percent sales tax is not included since the tax is applied at the point of sale (i.e., 6 percent of retail shelf price) rather than incorporated in DLC's product markup.

⁶⁷ Average percentage rates were developed for those items that are a percentage of another number. For example, the markup is a percentage of the product cost and the commission is a percentage of liquor sales.

⁶⁸ Median growth rates were developed for items such as product cost, enforcement cost, and warehouse cost. Median was utilized, rather than average, because some of the change calculated from year to year was negative; using average might understate the potential growth in expenses.

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Assumptions and Projected Results for FY2016 Baseline Financial Model

See Table 4 for median growth and other rates used to project FY2016 results.

Table 4: Median Growth and Other Rates Used for FY2016 Baseline Model

	Rate	Description
Revenues		
Liquor Revenue	67%	Average product markup percentage applied to liquor product cost to project liquor revenue
Supplier Promotions Revenue	0.5%	Median growth rate to project manufacturer promotions revenue
License Revenue	4.7%	Median growth rate to project license revenue
Cost of Goods Sold		
Liquor Product Cost	3.3%	Median growth rate to project liquor product cost
Taxes		
25% Excise Tax	25.0%	Rate per 7 V.S.A. §422(3). Applied to estimated liquor revenue to calculate excise tax
Operating Costs		
Agent Commission	8.6%	Average percentage of total sales applied to estimated liquor revenue to calculate commission cost
Administration	4.0%	Median growth rate to project administration cost
Enforcement	-0.03%	Median growth rate to project enforcement cost
Warehouse	3.0%	Median growth rate to project warehouse cost

Agent commission percentage appears high as a percentage of sales because, DLC calculates commission payments based on the full retail shelf price assuming no sales discounts. For purposes of the model, the 5-year average percentage was calculated as a percentage of the actual liquor sales, which reflects sales discounts.

Appendix III

Assumptions and Projected Results for FY2016 Baseline Financial Model

Table 5 shows the results for the FY2016 baseline model projection.

Table 5: Projected FY2016 Results for Baseline Model

	2016
Revenues	
Liquor revenues ^a	\$76,555,833
less liquor product cost	44,593,083
Net liquor revenue	31,962,750
License revenue	1,362,717
Net total revenue	33,325,467
Operating Costs	
Agent Commissions	6,385,369
Administration	3,771,333
Enforcement	2,037,002
Warehouse	1,417,697
Total Operating Costs	\$13,611,401
Net income (State fiscal impact)	<u>19,714,066</u>
 Payments to State government	
Excise tax	(\$18,562,120)
Other required transfers ^b	<u>(\$1,000,000)</u>
	<u>(\$19,562,120)</u>

^a Includes manufacturers payments to DLC for special discount programs. These payments are estimated at \$2.3 million in FY2016.

^b The required transfer amount is estimated at \$1 million because there were increases and decreases in the transfer amounts from 2009 to 2013.

Appendix IV

Assumptions for FY2016 Privatization Financial Models

The full and partial FY2016 privatization financial model projections incorporate assumptions regarding DLC operating costs, the excise tax rate, and new revenues from issuance of licenses to sell liquor to private sector wholesalers and retailers. However, for simplification purposes, the models do not incorporate an estimate of an effect from privatization on liquor sales. Rather, the same level of sales is assumed as was used in the FY2016 baseline financial model projection.

Full privatization assumes DLC divests wholesale distribution to the private sector and ceases its contract agent retail store model.⁶⁹ Instead, private sector wholesale distributors and retailers would be licensed to sell liquor in Vermont. In a partially privatized system, DLC would continue its wholesale distribution operations but end the contract agent retail store model, replacing contracted agent stores with licensed retail businesses. In full and partial privatization, DLC would no longer establish retail shelf price.

Both privatization models assume on-going savings from reductions in the cost of DLC operations. Full privatization includes elimination of the warehouse while under partial privatization, DLC would continue to operate its warehouse and to transport product to retail stores. The state's enforcement function continues with both models.

New revenues would be generated from issuance of licenses to wholesale and retail businesses to sell liquor. Excise taxes would be levied on wholesale liquor sales to retail stores, bars, and restaurants.

The state sales tax of 6 percent was not included in the privatization financial model projections because it is applied at the point of sale (i.e., 6 percent of retail price) and not incorporated in product markup.

See Table 6 and Table 7 for details on state revenue and operating cost assumptions.

⁶⁹ In the existing liquor control system, agents are privately-owned retail businesses that contract with DLC to sell liquor for the State.

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Assumptions for FY2016 Privatization Financial Models

Table 6: Revenue Assumptions - Full and Partial Privatization

	Full Privatization	Partial Privatization	SAO Comments
Excise tax rate	40 percent	28.5 percent	Tax rate applied to wholesale sales. Current Vermont state statute imposes tax at the wholesale level for beer and wine.
Private sector wholesale markup	20 percent	None	Estimates based on publicly traded company and third party data, DISCUS data, and from discussion with industry stakeholders.
Number of Wholesale Licenses	20	N/A - DLC is wholesaler	According to industry information, the top 10 wholesalers account for approximately 59 percent of the total wholesale market for distilled spirits. For purposes of the models, it is assumed that a Vermont market would coalesce around approximately 10 to 30 wholesalers. Vermont wholesale dealers are currently charged an annual license fee of \$1,140 to sell malt (i.e., beer) and vinous (i.e., wine) beverages.
Wholesale License Fees (annual)	\$1,140		
Number of Retail Licenses	120	120	Estimated 120 retail licenses based on the midpoint of the ratio of 2.5 outlets per 10,000 drinking age population as identified by the Distilled Spirits Council of the United States ^a as the “best fit” number of retail outlets per capita.
Retail License Fees (annual)	\$1,000	\$1,000	Estimate based on research of 4 control states that license off-premises liquor sales.
DLC markup	None	20 percent	Same as private sector wholesaler for simplification purposes.

^a The Distilled Spirits Council of the United States (DISCUS) is the national trade association representing America’s leading distillers and nearly 70% of all distilled spirits brands sold in the United States.

Appendix IV

Assumptions for FY2016 Privatization Financial Models

Table 7: Cost Assumptions - Full and Partial Privatization

	Full Privatization	Partial Privatization	SAO Comments
Agent commissions	\$6.4 million reduction	\$6.4 million reduction	Commissions are eliminated because DLC would no longer use contract agent stores to sell liquor for the State. Instead, private sector retail stores would be licensed to sell liquor.
Administration	\$1.6 M reduction	\$1.1 M reduction	Costs associated with administration and oversight of the agent stores would be eliminated with full and partial privatization. Under full privatization, additional reductions in administrative costs are assumed since all liquor operations would cease.
IT system implementation	\$1 million reduction	No reduction	DLC is implementing new IT systems for portions of its liquor operations. With full privatization the new systems would not be needed and the costs could be eliminated. However, in partial privatization, components of the implementation may still be relevant, so assumed no reduction in cost.
Enforcement	No reduction	No reduction	Function continues, regardless of extent of privatization.
Warehouse	\$1.4 million reduction	No reduction	No warehouse function with full privatization. Warehouse needed for partial privatization since DLC would remain wholesaler, so assumed costs would remain the same as the FY2016 baseline model.

Appendix V

Assumptions and Calculation – Estimated FY2016 Average Retail Prices and Comparison of Baseline to Full Privatization

The estimate of average retail liquor prices in FY2016 for the baseline financial model and full privatization financial model incorporates assumptions regarding the average cost per bottle in FY2016, excise tax rates, and DLC and private sector markups. See Appendix III and IV for information about baseline and privatization financial models.

Estimated average cost for FY2016 was projected from DLC's FY2013 actual average cost per bottle (\$8.71 per bottle) using 3.3 percent median growth rate for liquor product cost (see Appendix III).

Table 8 presents assumptions related to markups and excise taxes.

Table 8: Markups and Excise Tax Assumptions for Baseline and Full Privatization

Markup/ Excise Tax	Baseline	Full Privatization	Description
DLC markup	72.6 percent ^a	None	Average based on DLC data from FY2009 to FY2013.
Private sector wholesale markup	None	20 percent	Estimates based on publicly traded company and other third party data, DISCUS data, and discussion with industry stakeholders.
Private sector retail markup	None	18 to 25 percent	Estimates based on publicly traded company and other third party data, DISCUS data, Internal Revenue Service data, and from discussions with industry stakeholders.
Excise tax	25 percent	40 percent	Baseline is per 7 V.S.A. §422 (3). Full privatization uses same excise tax rate as models used to estimate fiscal impact.

^a The calculation of average markup percentage included liquor sales and manufacturer payments to DLC in order to derive an average markup that could be used to estimate gross average retail price (e.g., full price with no sales discount).

See Table 9 for comparison of estimated average retail prices for the FY2016 baseline to full privatization and the estimated average price increase, assuming 18 percent to 25 percent private sector retail markup.

Assumptions and Calculation – Estimated FY2016 Average Retail Prices and Comparison of Baseline to Full Privatization

	Baseline	Full Privatization Retail Markup 18 %	Full Privatization Retail Markup 25%
Estimated average cost per bottle	\$9.60	\$9.60	\$9.60
Private sector wholesale markup (20%)	-	\$1.92	\$1.92
subtotal	\$9.60	\$11.52	\$11.52
Excise tax on wholesale (40%)	-	\$4.61	\$4.61
Retail product cost	\$9.60	\$11.52	\$11.52
DLC markup (72.6%)	\$6.97		
Private sector retail markup	-	\$2.07	\$2.88
ESTIMATED RETAIL PRICE	\$16.57	\$18.20	\$19.01

^a Estimated average price increase is calculated as $(\$18.20 - \$16.57)/\$16.57$ and $(\$19.01 - \$16.57)/\$16.57$.

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Appendix VI

Research Study Citations

The research study citations, reports, and fact sheet references listed below are from PFM's summarization of the results of studies that have examined 1) effect of alcohol consumption on health, 2) whether various factors impact alcohol consumption and behavior, 3) whether privatization of state-controlled liquor systems result in increased per capita consumption and increased alcohol-related harms, and 4) impact of state enforcement strategies on alcohol-related fatalities and abuse.

Research studies, reports and fact sheets - effect of alcohol consumption on health

1. Centers for Disease Control and Prevention "Fact Sheets – Alcohol Use and Health," updated December 26, 2013.
<http://www.cdc.gov/alcohol/fact-sheets/alcohol-use.htm>.
2. National Cancer Institute "Alcohol and Cancer Risk" June 24, 2013.
<http://www.cancer.gov/cancertopics/factsheet/Risk/alcohol#r2>.
3. David E Nelson, Timothy S Naimi, *et al.* (2013) "Alcohol-Attributable Cancer Deaths and Years of Potential Life Lost in the United States," *American Journal of Public Health*, 103, 4, 641.
4. Jeffrey J. Sacks, Jim Roeber, Ellen E. Bouchery, *et al.* (2013) "State Costs of Excessive Alcohol Consumption," 2006 *American Journal of Preventive Medicine* 45, 4, 474-485.

Research studies of whether various factors impact alcohol consumption and behavior

Studies that indicate additional alcohol availability increases incidence of violent and non-violent (e.g., property) crimes:

5. Daikwaon Han and Dennis M. Gordon (2013) "Evaluating the Effects of the Introduction of Off-Sale Alcohol Outlets on Violent Crime," *Alcohol and Alcoholism*, 48, 3, 370-374.
6. Matthew Chinman, Q. Burkhart, Patricia Ebener, *et al.* (2011) "The Premises Is the Premise: Understanding Off- and On-Premises Alcohol Sales Outlets to Improve Environmental Alcohol Prevention Strategies," *Prevention Science*, 12, 2, 181-191.
7. Claire Wilkinson and Michael Livingston (2013) "Distances to On- and Off-Premise Alcohol Outlets and Experiences of Alcohol-Related Amenity Problems," *Drug and Alcohol Review*, 31, 4, 394-401.

Appendix VI

Research Study Citations

8. Traci L Toomey, Darin J Erickson, Bradley P Carlin, *et al.* (2012) "Is the Density of Alcohol Establishments Related to Nonviolent Crime?" *Journal of Studies on Alcohol and Drugs* 73, 1, 21-25.
9. Christine Piette Durrance, Shelley Golden, Krista Perreira, *et al.* "Taxing Sin and Saving Lives: Can Alcohol Taxation Reduce Female Homicides?" *Social Science and Medicine*, 73, 1, 169-176.

Studies and reviews of studies that indicate family and social environments, mental health, personal stress and genetics may influence alcohol consumption:

10. Howard C. Becker, Marcelo F. Lopez, Tamara L. Doremus-Fitzwater (2011) "Effects of Stress on Alcohol Drinking: a Review of Animal Studies," *Psychopharmacology*, 218, 1 131-156.
11. George R. Breese, Rajita Sinha, and Markus Hellig (2011) "Chronic Alcohol Neuroadaptation and Stress Contribute to Susceptibility for Alcohol Craving and Relapse," *Pharmacology & Therapeutics*, 129, 2, 149-171.
12. C. Kirabo Jackson and Emily Greene Owens (2011) "One for the Road: Public Transportation, Alcohol Consumption, and Intoxicated Driving," *Journal of Public Economics*, 95, 1-2, 106-121.
13. JA Chester, GD Barrenha, A DeMaria, *et al.* (2006) "Different Effects of Stress on Alcohol Drinking Behavior in Male and Female Mice Selectively Bred for High Alcohol Preference," *Alcohol and Alcoholism*, 41, 1, 44-53.
14. Inge Sillaber, Markus SH Henniger (2004) "Stress and Alcohol Drinking," *Journal of Alcohol Abuse*, 36, 8, 596-605.
15. Marcella Rietschel, Jens Treutlein, GR Uhl (2013) "The Genetics of Alcohol Dependence," *Addiction Reviews*, 1282, 39-70.
16. Tatiana Foroud, Howard, Edenberg, and John Crabbe (2010) "Genetic Research: Who Is at Risk for Alcoholism," *Alcohol Research & Health*, 33, 1.
17. Joseph G. Lorenz (2 February 2006) "Genetics and Environmental Influences on Alcohol Consumption," *Medical News*.

Studies and reviews of studies that indicate price, outlet density, and advertising may influence alcohol consumption:

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Research Study Citations

18. James I. Daley, Mandy A. Stahre, Frank J. Chaloupka (2012) "The Impact of a 25-Cent-Per-Drink Alcohol Tax Increase," *American Journal of Preventive Medicine*, 42, 4, 382-389.
19. Philip J. Cook, & Michael J. Moore (2002) "The Economics of Alcohol Abuse and Alcohol-Control Policies," *Drugs, Economics & Policy*, 2, 2, 120-33.
20. Fred Martineau, Elizabeth Tyner, Theo Lorenc, *et al.* (2013) "Population-level Interventions to Reduce Alcohol-Related Harm; An Overview of Systemic Reviews," *Preventive Medicine*, 57, 4, 287-296.
21. Adam E. Barry and Patricia Goodson (2010) "Use (and Misuse) of the Responsible Drinking Message in Public Health and Alcohol Advertising: A Review," *Health Education and Behavior*, 37, 2, 288-303.
22. Gina Agostinelli & Joel W. Grube (2002) "Alcohol Count-Advertising and the Media: A Review of Recent Research," *Preventing Alcohol Related Problems*, 26, 1, 15-21.

Studies that conclude it is difficult to establish a causal link between outlet density and alcohol-related problems:

23. Michael Livingston, Tanya Chikritzhs and Robin Room "Changing the Density of Alcohol Outlets to Reduce Alcohol-related Problems," *Drug and Alcohol Review*, 26, 553-562 (September 2007).
24. Daikwaon Han and Dennis M. Gordon (2013) "Evaluating the Effects of the Introduction of Off-Sale Alcohol Outlets on Violent Crime," *Alcohol and Alcoholism*, 48, 3, 370-374.
25. Robert Young, Laura Macdonald, Anne Ellaway (2013) "Associations Between Proximity and Density of Local Alcohol Outlets and Alcohol Use Among Scottish Adolescents," *Health and Place*, 19, 134-130.
26. H.A. Mulford, J. Ledolter, and J.L. Fitzgerald. "Alcohol Availability and Consumption: Iowa Sales Data Revisited," *Journal of Studies on Alcohol*, September 1992, 487-494.

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Research studies of whether privatization results in increased consumption and increased alcohol-related harms

Reviews of studies that conclude privatization results in increased consumption:

27. The Task Force on Community Preventive Services (April 2012) “Recommendation on Privatization of Alcohol Retail Sales and Prevention of Excessive Alcohol Consumption and Related Harms,” *American Journal of Preventive Medicine*, 42, 4, 428-429.

Studies that conclude privatization does not result in increased consumption:

28. H.A. Mulford, J. Ledolter, and J.L. Fitzgerald. “Alcohol Availability and Consumption: Iowa Sales Data Revisited,” *Journal of Studies on Alcohol*, September 1992, 487-494.
29. J.L. Fitzgerald & H.A. Mulford (1992) "Consequences of Increasing Alcohol Availability; the Iowa Experience Revisited," *British Journal of Addiction*, 87, 267-274.
30. J.L. Fitzgerald and H.A. Mulford (1993) “Privatization, Price and Cross –Border Liquor Purchases,” *Journal of Studies on Alcohol*, 54, 4, 462-464.
31. H.A. Mulford and J.L. Fitzgerald (1996) “What Happened to Wine Consumption in Iowa Following Elimination of its Retail Wine Monopoly?” *Journal of Studies on Alcohol*, 57, 5, 572-575.

Two research studies that show decreases in motor-vehicle crashes subsequent to privatization

32. Trolldal B. An investigation of the effect of privatization of retail sales of alcohol on consumption and traffic accidents in Alberta, Canada. *Addiction* 2005; 100(5):662-71.
33. J.L. Fitzgerald & H.A. Mulford (1992) "Consequences of Increasing Alcohol Availability; the Iowa Experience Revisited," *British Journal of Addiction*, 87, 267-274.

Effectiveness and Impact of state enforcement strategies on underage drinking, alcohol-related injuries, and drinking and driving

34. Matthew Chinman, Q. Burkhart, Patricia Ebener, *et al* (2011) “The Premises is the Premise: Understanding Off- and On-Premises

Appendix VI

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- Alcohol Sales Outlets to Improve Environmental Alcohol Prevention Strategies,” *Prevention Science*, 12, 2, 181-191.
35. Sharon Lipperman-Krenda, Mallie J. Paschall and Joel W. Grube (2009) “Perceived Local Enforcement, Personal Beliefs, and Underage Drinking: An Assessment of Moderating and Main Effects,” *Journal of Studies on Alcohol and Drugs*, 70, 1, 64-69.
36. TR Miller, DT Levy, RS Spicer, and DM Taylor (2006) “Societal Costs of Underage Drinking,” *Journal of Studies on Alcohol and Drugs*, 67, 519-528.
37. National Research Council, Institute of Medicine (2003) “Reducing Underage Drinking: A Collective Responsibility,” *National Academies Press*, Washington, p. 164.
38. TL Toomey and AC Wagenaar (2002) “Environmental Policies to Reduce College Drinking: Options and Research Findings,” *Journal of Studies on Alcohol*, Supplement 14, 193-205.
39. KA Komro and TL Toomey (2002) “Strategies to Prevent Underage Drinking,” *Alcohol Research & Health*, 26, 1, 5-14.
40. Alexander C. Wagenaar, David M. Murray, John P. Geban, *et al.* (2000) “Communities Mobilizing for Change: Outcomes from a Randomized Community Trial,” *Journal of Studies on Alcohol*, 61, 1, 85-94.
41. Vallop Ditsuwon, Jacob Lennert Veerman, Melanie Bertram, *et al.* (2013) “Cost-Effectiveness of Interventions for Reducing Road Traffic Injuries Related to Driving Under the Influence of Alcohol,” *Value in Health*, 16, 1, 23-30.
42. Samuel Nunn and William Newby (2011) “The Geography of Deterrence: Exploring the Small Area Effects of Sobriety Checkpoints on Alcohol-Impaired Collision Rates Within a City,” *Evaluation Review*, 35, 4, 354-378.
43. Alena Erke, Charles Goldenbeld, and Truls Vaa (2009) “The Effects of Drink-Driving Checkpoints on Crashes: A meta-analysis,” *Accident Analysis and Prevention*, 41, 5, 914-923.
44. Ruth A. Shults, Randy W. Elder, David A. Sleet, *et al.* (2001) “Reviews of Evidence Regarding Interventions to Reduce Alcohol-

Appendix VI

Research Study Citations

- Impaired Driving,” *American Journal of Preventative Medicine*, 21, 4, 66-88.
45. John H. Lacey, Ralph K. Jones, and Randall L. Smith (2000) “Evaluation of New Mexico’s Anti-DWI Efforts,” Department of Transportation HS, 809 024, Washington, DC: National Highway Traffic Safety Administration.
46. John H. Lacey, Ralph K. Jones, and Randall G. Smith (1999) “Evaluation of Checkpoint Tennessee: Tennessee’s Statewide Sobriety Checkpoint Program, Department of Transportation HS, 808 841, Washington, DC: National Highway Traffic Safety Administration.
47. James C. Fell and Robert B. Voas (2009) “Reducing illegal blood alcohol limits for driving: effects on traffic safety,” Drugs, Driving and Traffic Safety Ed. JC Verster, SR PandiPerumal, JG Ramaekers, *et al.* 415-437.
48. Robert B. Voas, A. Scott Tippetts, and Eileen Taylor (1997) “Temporary Vehicle Immobilization: Evaluation of a Program in Ohio,” *Accident Analysis and Prevention*, 29, 5, 635-642.
49. Erika Chamberlain and Robert M. Solomon (2012) “The Challenges of Implementing Interlock Best Practices in a Federal State: The Canadian Experience,” *Journal of Injury Prevention*, 18, 5, 347-352.
50. William J Raunch, Eileen M Ahlin, Paul L Zador, *et al.* (2011) “Effects of Administrative Ignition Interlock License Restrictions on Drivers with Multiple Alcohol Offenses,” *Journal of Experimental Criminology*, 7, 2, 127-148.
51. Randy W Elder, Robert Voas, Doug Beirness, *et al.* (2011) “Effectiveness of Ignition Interlocks for Preventing Alcohol-Impaired Driving and Alcohol-Related Crashes: A Community Guide Systemic Review,” *American Journal of Preventive Medicine*, 40, 3, 362-376.
52. Paul R. Marques (2009) “The Alcohol Ignition Interlock and Other Technologies for the Prediction and Control of Impaired Drivers,” Drugs, Driving and Traffic Safety Ed. JC Verster, SR PandiPerumal, JG Ramaekers, *et al* 457-476.
53. DJ DeYoung (2002) “An Evaluation of the Implementation of Ignition Interlock in California,” *Journal of Safety Research*, 33, 4, 473-482.

Appendix VI

Research Study Citations

54. RB Voas, KO Blackman, AS Tippetts, *et al* (2002) "Evaluation of a Program to Motivate Impaired Driving Offenders to Install Ignition Interlocks," *Accident Analysis and Prevention*, 34, 4, 449-455.
55. Kenneth H. Beck, William J. Rauch, and Elizabeth A. Baker & Allan F. Williams (1999) "Effects of the Ignition Interlock License Restrictions on Drivers with Multiple Offenses: A Randomized Trial in Maryland," *American Journal of Public Health*, 89, 11, 1690-1700.

Appendix VII

Comments from the Commissioner of DLC and the Chair of LCB and Our Evaluation



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Michael J. Hogan, Commissioner

Nov 12, 2014

Douglas R. Hoffer
Vermont State Auditor
132 State Street
Montpelier, VT. 05633-5101

Dear Doug:

On behalf of the Liquor Control Board and the Department of Liquor Control I would like to thank you and your staff for putting together this report. Tanya Morehouse and Jeff Kellar were very good to work with and most professional when dealing with my staff.

I think the simplest way to respond to your report is to reference objectives and page numbers.

Highlights:

- **Objective 1 Finding Page 3:** There are opportunities for enhanced revenues through some of the changes the Department is implementing (New Point of Sale System and Back end System for the Office), web site re-design, agency evaluations and location criteria, new store locations, and either further improvements to the existing warehouse or transition to a larger more modern facility that can store more product to accommodate our agency stores and customers all over the state.
- **Objective 2 Finding Page 3: Paragraph #1-** Disagree that we have no plans for an analysis of the warehouse. We have spoken to many large suppliers over the last two years and have been offered by them to do an analysis. We felt it was a conflict as we buy their products and wanted an unbiased analysis. We have also spoken with the New Hampshire Liquor Commission to get information on the folks who did their analysis which resulted in a new warehouse being built in Bow, New Hampshire. We have allocated \$30,000 in the FY 16 Budget to allow for a cost benefits analysis of the Montpelier warehouse.
- **Objective 2 Finding Page 4: Paragraph #1-** We changed our markup process to a more simplified one that is standard throughout the industry. We also removed a very cumbersome conveyor system that slowed down our warehouse processes and created more room for pick by location which is used in most liquor warehouses and other businesses. We have opened up a few more stores and relocated one in Burlington. Sales targets are being considered based on historical sales data as a benchmark. Finally, in reference to contractual relationships with our liquor agents, we asked the previous administration for a waiver from the competitive bidding process mentioned in Bulletin 3.5. We have recently submitted a new letter restating the need for a waiver with the current administration because of the uniqueness of the agency systems and the contract that binds the agent to the state.



Liquor Control Board:
Stephanie M. O'Brien, Chair; John P. Cassarino, Thomas Gallagher, Julian Sbardella, Melissa D. Mazza-Paquette, Members

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- **Page 4: Paragraph #2**-Previous administration's view of the department mission was to: *devise methods and plans for eradicating intemperance and promoting the general good of the state....7 V.S.A. Section 107(8)*. As the years went on and the state depended more and more on the revenues of DLC, the department began to start acting like a business and began pursuing responsible marketing practices with a very balanced approach keeping in mind the regulatory requirements set in statute. It also pursued better retail point of sale systems to replace an aging system that could not meet the needs of the ever growing business climate. In our view, there is no inherent conflict of interest in promotion and regulation. A quote from NABCA's June 24, 2014 booklet entitled "Alcohol Beverage Control Jurisdictions"- Page 4-*The Control State Systems have transitioned from their origins as "dispensaries of the last resort" to their role as efficient, customer-oriented-service agencies. That transition, however, has not changed a fundamental fact: the Control State System continues to provide a regulatory environment that is able to mitigate the ever-present risks and costs of alcohol abuse to the individual and the community. At one level, the uniform enforcement of applicable laws is made far more effective in a control state, where there are ordinarily fewer sales outlets and, more importantly, where the economic incentives to violate the law are greatly reduced. At another level, the Control System itself serves both as a visible symbol of public commitment to moderation and as a vehicle for the promotion of alcohol education and awareness programs to support that commitment.*

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- **Objective 2 Page 4: Other Matters for Consideration**- In the research world there are a variety of opinions on the effect of loosening state control on negative impacts and these studies offer conflicting evidence. I think what is happening in Washington State regarding the effects of Initiative 1183 whereby state control of alcohol (spirits) was given to the private sector is having a negative impact on society. Recent reports show that emergency room admissions have increased as liquor is now available at more locations with longer hours. Prices increased 15-20%. Theft has increased throughout the state with more stores (325 to 1,700) and extended hours. Large national corporations dominate all tiers of the liquor business. A quote from NABCA's June 24, 2014 booklet entitled "Alcohol Beverage Control Jurisdictions"- *Statistical evidence over the years shows a clear and consistent pattern of lower rates of consumption for those products that are controlled. In the control jurisdictions, distilled spirits consumption is 13.8% less per capita than in license states. Additionally, there is significantly less access through the number of off-premise outlets and their hours of operation. Interestingly, control jurisdictions generate 104.7% more revenue per capita on the products controlled than do license states.*

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2nd Paragraph: We believe there is a strong public interest served by the state selling liquor. A control system ensures that no one will have a profit incentive to sell alcohol to people who shouldn't drink, such as youth and intoxicated persons. This is what the Centers for Disease Control and Prevention (CDC) said about Washington State's changes and for others contemplating a similar move: "Based on its charge to identify effective disease and injury prevention measures, the Task Force on Community Preventive Services recommends against further privatization of alcohol sales in settings with current government control of retail sales, based on strong evidence that privatization results in increased per capita alcohol consumption, a well-established proxy for excessive consumption.- 2013 Issue Briefs for States (www.healthyalcoholmarket.com)"

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There is a distinction between licensing beer and wines that have an alcohol by volume limit of 16% to liquor that could be anything beyond up to 100 proof or 50% alcohol by volume. The state evaluates all liquor products that go into the marketplace. Attention is paid to the name of the product, audience, marketing materials, and research from other control jurisdictions as to its success or failure. Products that are sold through state distributors (beer and wines up to 16% alcohol by volume -ABV) have no so evaluation done and are sold for economic gain only. This is pretty obvious when you have products like Four Loko which is 12% ABV, Whipsy-Whipped

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Cream infused with wine at 13.5% ABV and various Flavored Malt Beverages that are obviously marketed towards youth.

Finally, a quote from "Do We Still Need Retail Alcohol Monopolies in the 21st Century? By Catherine Paradis & Hubert Sacy 2005: *However, alcohol is no ordinary commodity (Babor et al., 2003). Hence, the rationale for maintaining a public retail system, as opposed to privatizing it, will ultimately depend on the public system's ability to fulfil its social responsibilities by promoting public health, ie. the "added value" it provides that the private sector would not.*

Page 6: It was mentioned that the Retail Markup was from 65 to 85%. Part of the markup is a 25% gross receipts tax that is part of the overall calculation. If you would remove that tax, Vermont's markup would be comparable to New Hampshire's. The transition from the old markup system to a more standard one gave us the ability to markup categories and keep retail prices revenue neutral and at an acceptable price point that the current market could sustain.

Page 9-13: Objective 1-Fiscal Impact or Partial Privatization of the State's Liquor Control System May be Neutral:

We did notice that there was no mention of a financial impact to the current agents should the system change. They are all under a contract with the state with substantial investments in their locations that are selling spirits. With the expansion of more stores, there would be a financial hardship imposed on them with the loss of revenue from agent commission based on reduced sales and more outlet locations. It was also mentioned that to replace the existing revenue, the excise tax percentage would have to be increased. That in turn would no doubt increase retail prices to the consumer.

The report states that *sufficient revenues would be generated to cover the cost of DLC operations and to pay the State the same amount as projected in the baseline models.* The Department feels that the upcoming improvements to its point of sale system will play a major role in greater revenue enhancements as it allows for new promotional possibilities and further analysis of sales trends and customer buying patterns.

We believe that recent information on the effects of Washington State's 1183 initiative to privatize has had some negative effects on consumer purchasing. The numbers vary based on who you quote, but we understand that in some cases prices have increased as much as 15%. Retail theft is very high as there are more locations and longer hours. There have also been some reports that emergency room admissions have increased since passage. There needs to be more data to analyze the effects of liquor going to the private sector. I am sure that time will tell if this was the right move for the citizens of Washington State.

It is quoted in this report (page 13) that an 18-25% markup for retail would be needed in a fully privatized system. Based on our discussions with retailers in the state, anything but a minimum of 25-35% retail markup is unrealistic. Retailers would have to pay for their products cash on delivery where currently liquor agents do not pay up front costs as the state owns the inventory. In our opinion, retail prices would be higher than the mentioned 9.8 to 14.7%. Retailers could markup up their products as much or as less as they need to.

Another question to be asked is that if prices increase as mentioned above, have you factored in the loss of sales to New Hampshire and other border states (New York, Mass) when developing revenue models? It seems to us that in order to offset the border bleed, prices will have to be raised even further to insure revenue neutrality. We think Washington presents a great example

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of this. If prices stay the same, the state loses how much revenue? We would also disagree with the markups of 20 percent for wholesale and 18 percent for retail. Our tax study (compiled by Bill Kerr for NABCA) works from a 21 percent margin for wholesale (which is the same as a 26.5 percent markup) and a 25 percent markup at retail.

In closing, we do agree with the State Auditor's Office that there are opportunities to increase revenues and many of them are underway or in the planning stages.

Page 14-24: Objective 2-By Implementing Strategic Analyses and Enhancing Mechanisms for Managing Liquor Operations, DLC May Improve Profitability:

We are taking actions to improve profitability. Over the years the cost of doing analysis of various types by outside contractors was a budgetary issue. As our business continued to grow and space was becoming an issue, we began to see that a larger facility was needed if we wanted to serve all our customers. The cost benefits analysis for a new warehouse was further put on hold to review the effects of removing the conveyor system in 2013 and reverting to a straight pick to location function which is a normal process in most warehouses. During that time we were in contact with various liquor companies (Diageo, Pernod Ricard) who offered to do an analysis of their own. We were wary of a conflict of interest where a company might want preferential treatment of their products in return for a cost benefits analysis. We have taken their comments into consideration as we go forward. We also decided to wait after the State Auditor's Office audit in the hope that a recommendation would be made that would carry more weight as we move forward with the planning and design of a new warehouse facility. We also spoke with New Hampshire's Rick Gerrish on vendors who do this type of work as the New Hampshire Liquor Commission recently had a warehouse built in Bow, NH. We disagree that we have no plans for an analysis of the warehouse. We have allocated \$30,000 in the FY 16 Budget to allow for a cost benefits analysis of the Montpelier warehouse.

The current computer system has many limitations that restrict our ability to analyze the effects of our sales programs. The department selected a vendor through the RFP (Request for Proposal) process to replace our existing retail system with a state of the art point of sale system. This new system will give us all the tools we need to analyze sales, forecast inventory needs, and much more. The ability to implement new marketing strategies will be a beneficial to our agents and in the end increase their commissions and generate more monies for the general fund.

Historically, the department had not solely viewed itself as a business because that was the approach taken by previous administrations. We sold a regulated product to those of legal age and enforced all the laws and regulations pertaining to those sales. Times have changed, so that the needs of the state necessitate the need for more revenue into the general fund. Therefore, the department is taking a balanced approach to its business model with responsible marketing, accessible store locations, good products, good customer service, timely licensing and strict enforcement of its regulations and state statutes.

Analyses Needed to Inform Key Strategic Decisions Page 14:

The goal of \$100 million by 2018 is that, a "goal". Our goal was based on the hope we would have increased revenues with our new Point of Sale System, more store locations, and adjustments to the markup. That is still a possibility in our view.

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Agent stores: We have a process in place that uses a point system for evaluating new agents based on multiple criteria. It seems to be working and will be adjusted as we go forward. There are also other considerations to be weighed such as the needs of the community. Finally there are political pressures for new locations. The Department might have to contract for someone to help develop a long-term business strategy in the next year.

Pricing practices: The Department took a significant step in 2013 by simplifying its pricing practices by changing its markup structure that would be easily adjusted and would be fall in line with the rest of the control states. It would also be very easy for suppliers to identify what price points their new products would fall into. The statement that DLC was not able to explain the rationale behind the markups was untrue. I appreciate the State Auditor's Office expertise in financial and accounting matters. They seemed to have a difficult time understanding the markup and how important it was to have a sustainable shelf price in the marketplace. Most states working with suppliers and utilizing the markup get to an agreed retail shelf price that works in their markets. The Department will have a pricing study done after some major projects are in place such as the point of sale and also the licensing and enforcement system. We appreciate the recommendation.

Warehouse space: There is money in the FY16 Budget to do a cost benefits analysis of the warehouse. We have the name of a consultant who did the analysis for New Hampshire and may utilize their services once it goes out for an RFP.

Additional Methods to Manage Aspects of Liquor Operations Page 16:

Inventory Management: Fees for overstock of inventory and understock have been considered by the Liquor Board and no decision has been made as of this date. The thinking is that those costs would be passed onto the state and then in turn onto the customer. The department monitors Advance Ship Notices and tries to not allow for more inventory than needed. The Warehouse Management System (WMS_RIMS) does not interface very well with the current in house system. That needed integration is part of the new point of sale system. Out of stocks are looked at very closely due to the loss of critical sales during our sale promotion periods.

Product Assortment: DLC's listing and delisting criteria were changed multiple times using input from NABCA and industry sources. We expanded our listing committee to include not only staff, but liquor agents and on premise licensees. It works very well as these folks see the new products that are being introduced and have a sense of how they will work in the marketplace. We try to look at best practices and will make the adjustments when necessary. Discussion on limiting lower tier products were discussed when there was talk of maybe going back to a gallonage tax approach. It is worth looking at as our shelves continue to fill up with new products. We are working with the vendors to remove delisted products from the warehouse that is not part of the department's inventory. We should consider a fee as an incentive to move the product and give us more space.

Performance Reviews for Agents: The department is changing the agency contract with more expectations on the agent's part in the body of the contract. The final versions are being reviewed by the Liquor Control Board. The incentive program is being changed and new criteria have been added for performance goals. There are still some criteria that need work as indicated in this report.

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Perpetual contracts with agent stores: The department has worked in the past getting a waiver for Bulletin 3.5 in 2008. It wasn't acted upon at that time. We have recently submitted (Oct 31, 2014) it to the current administration for approval. The proposed Contracting Plan seeks to exempt liquor agency contracts from the standard bidding process, in favor of a more targeted public notice and application process, with standard and explicit criteria for selection. In addition, the Plan would exempt the Department from the contract duration and amendment requirements, thereby acknowledging that there is no contract price cost savings to be achieved by frequent re-bidding, which would serve only to disrupt an existing State revenue source and cause consumer confusion. Indeed, once a reliable liquor agent has established a location in an area targeted by the Department, it is in the State's interest to continue that contractual relationship as long as possible.

Sales Promotion: The current system as mentioned before does not have many tools to analyze the data related to the effectiveness of the sales program. We have limped along for years successfully, but a new point of sales system will give us the ability to analyze promotions, profit, volume needs, and much more. We use history of sales as our benchmark in many of our promotions and they have been pretty accurate as indicated in the growth of our business that went over \$70 million in FY2013.

Divergent Priorities Page 23:

The Control State System has been a successful approach as it was a better alternative to the states after Prohibition was repealed in 1933. As stated in their pamphlet, Alcohol Beverage Control Jurisdictions-NABCA- *By participating in the marketplace, the control jurisdictions believe they are able to serve their citizens with a broader and more flexible range of policy options for promoting moderation in the consumption of alcohol beverages and reducing alcohol abuse. It is a balancing of rights and responsibilities to better serve the community interest.* As I mentioned earlier, there is money in the FY16 budget for a study of the warehouse to look at the feasibility of building a new facility or further modernization. This is an important piece of information as we move forward into the future. The reference to the board chair about public health concerns was in reference to what she was seeing in the state of Washington. The move to privatize Washington State was about revenue. Public health was a very low priority. Very little consideration was given to the effects on the public at large should the private sector open over 1,700 stores to sell liquor. Studies are being done and should be released soon that will show that it was very short sighted to not look at the whole picture with all the potential effects of Initiative 1183.

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Deferral of analysis until implementation of new system Page 23.

Analysis by outside vendors was considered on some projects but was eventually postponed due to budgetary constraints and employee resources. A small department does not have the luxury to conduct multiple projects at the same time and also perform their daily duties. We have tried to prioritize our projects and do those that are critical to our core functions. We agree with the State Auditor's Office that certain analysis should be undertaken. Our new point of sales system will enable us to make better decisions with our inventory and sales once it is operational in the spring of 2015.

Staffing Page 23:

We agree with the State Auditor's Office that additional staffing would be helpful. Additional positions are authorized by the Legislature. There has to be ongoing funding and justification for any new positions. We are asking for 6 new positions in the FY 16 budget: 2 Warehouse Worker I that pick products to be sent to the agency stores, 1 Warehouse Worker I which is an additional driver, 1 administrative position in licensing, 1 marketing specialist who can merchandise the agency stores on a daily basis, and finally 1 more district coordinator that bring the retail division to four people. All of

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these positions if funded can be a great resource in moving the department forward and addressing its need for additional resources.

Other Matters of consideration; Page 24-27:

There are plenty of studies on alcohol availability and their viewpoints can come from both directions. There is plenty of peer-reviewed scientific research that increased consumption increases alcohol abuse problems. While you may have contacted industry stakeholders, how much contact did you have with public health researchers and/or advocates? The research community would say that there are "definitive conclusions" that show that privatization leads to increased abuse. Washington State will be a good "test tube" to gauge the effects of privatizing the whole state. The effects on sales, price, market factors and other will be easily analyzed. What will be difficult will be the effect on the public health of the state. Was it better when the state controlled the sales and distribution of spirits? Did controls on hours and pricing equate to a positive outcome on the health and welfare of the citizens of the state?

I will restate what I said earlier in the report: There is a distinction between licensing beer and wines that have an alcohol by volume limit of 16% to liquor that could be anything beyond up to 100 proof or 50% alcohol by volume. The state evaluates all liquor products that go into the marketplace. Attention is paid to the name of the product, audience, marketing materials, and research from other control jurisdictions as to its success or failure. Products that are sold through state distributors (beer and wines up to 16% alcohol by volume -ABV) have no so evaluation done and are sold for economic gain only. This is pretty obvious when you have products like Four Loko which is 12% ABV, Whipsy-Whipped Cream infused with wine at 13.5% ABV and various Flavored Malt Beverages that are obviously marketed towards youth.

Finally, "Do We Still Need Retail Alcohol Monopolies in the 21st Century? By Catherine Paradis & Hubert Sacy 2005: *However, alcohol is no ordinary commodity (Babor et al., 2003). Hence, the rationale for maintaining a public retail system, as opposed to privatizing it, will ultimately depend on the public system's ability to fulfil its social responsibilities by promoting public health, ie. the "added value" it provides that the private sector would not.*

Conclusion: Page 27:

The states had a choice to make in the way they would regulate alcohol after repeal. Vermont chose the control state approach. We are a state of a few cities and many towns and villages. We don't have the luxury of large metropolitan areas with people stacked up by the thousands. The state would not benefit financially by opening up a system of more stores locations that sell liquor through a private wholesale system whose only motive is economic. The State Auditor's Office and the PFM Group can have their opinion and we respect that approach. There is controverting evidence in many periodicals that take an opposite view (An annotated Bibliography & review-NABCA, Pacific Institute Research Evaluation-PIRE and others). In our opinion, there is a strong public interest in having the State sell liquor.

We believe there is a strong case to continue and refine the way the state sells liquor and appreciate the recommendations of the State Auditor's Office.

Response to Recommendations: Page 29

We agree with the recommendations and will attempt to implement them over a period of time and with additional funding from the Legislature.

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Thank you again for your time and that of your staff on this report. We appreciate your efforts and recommendations.

Sincerely,


Michael J. Hogan

Commissioner of Liquor Control


Stephanie M. O'Brien

Chair, Liquor Control Board

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The following presents our evaluation of comments made by the Commissioner of the Department of Liquor Control and the Chair of the Liquor Control Board.

Comment 1	DLC disagrees with our statement that the department does not have a plan to obtain an analysis of warehouse capacity. According to DLC's comments, \$30,000 has been allocated in its FY2016 budget for a cost-benefit analysis of the warehouse. However, the final version of the department's budget has not been submitted to the Agency of Administration for approval. Further, as acknowledged in the response, the department deferred a cost-benefit analysis of the warehouse in the past and postponed analyses by outside vendors for other projects due to budgetary constraints and employee resources. Given this history, allocating \$30,000 in a budget that has yet to be finalized does not appear to be a definitive plan to conduct an analysis of the warehouse.
Comment 2	SAO confirmed that DLC requested approval of a contracting plan that would exempt the department from the contract duration and standard bidding requirements of Bulletin 3.5. The waiver request is subject to approval of the Secretary of Administration, which has not been granted as of the date of this report. The report was updated to reflect this information. In its response to our draft report and in the commissioner's transmittal letter accompanying the contracting plan, DLC contends that no cost savings would be achieved by frequent re-bidding but provides no support for this claim. In addition, the proposed contracting plan would allow DLC to renew liquor agent contracts for any duration, for as many times as DLC deems appropriate, subject to approval of the Liquor Control Board. However, DLC has given no indication of the criteria that will be utilized to determine whether to renew liquor agent contracts. In particular, there is no mention of measuring liquor agent performance based on sales goals, which could mean that agents will be renewed regardless of their sales performance.
Comment 3	In DLC's view, there is no inherent conflict of interest in promotion and regulation. However, DLC describes its mission as preventing the misuse of alcohol through controlled distribution. At the same time, the department's leadership indicates it wants to operate like a business, and the board's July 2013 brainstorming session included discussion of increasing sales to \$100 million by 2022. Controlling distribution and increasing sales are differing priorities, which

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	suggest there may be an inherent conflict of interest in the department's mission. Further, DLC used a quote from a NABCA⁷⁰ 2014 booklet to support its contention that there is no inherent conflict of interest in promotion and regulation. The quote indicated that uniform enforcement of applicable laws is more effective in control states, but the booklet contains no evidence to support this statement. However, as we noted in our report, studies of enforcement measures (e.g., enforcement of minimum legal drinking age) show that these measures reduce both alcohol-related injuries and drinking and driving and these measures can be a useful approach in either a license or control state environment.
Comment 4	DLC presents a very negative perspective of the effects of privatization of Washington's liquor operations, but fails to address some data that provides a different perspective. Data released by Public Health Law Research (PHLR), which is conducting one of two on-going studies of Washington's privatization, show mixed results relative to the effects of privatization on consumption and alcohol-related harms. For example, data reported indicate declines in youth use of alcohol and binge drinking, decreased DUIs and fatal crashes involving alcohol, but also show an increase in "any drinking" by adults and an increase in alcohol-related emergency department visits. According to a May 2014 report presented by the PHLR researchers to the Washington State Liquor Control Board, the next data release will be in December 2014, but the study will continue through 2015. DLC has not provided information to us relative to the other study being conducted by the Alcohol Research Group, and we found no results reported to date. DLC also indicated that prices increased 15 percent to 20 percent in Washington subsequent to privatization, but provided no evidence to support these percentages. Based on data reported by the Washington State Department of Revenue, prices increased on average 11.8 percent per liter through May 2014.
Comment 5	DLC quotes a NABCA booklet which indicates that control states have 13.8 percent lower rate of per capita consumption of distilled spirits than license states and significantly less access through the

⁷⁰ NABCA is the national organization representing control states and serves its members as an information clearinghouse and liaison to federal, state and local governments; research and advocacy groups; and other organizations impacting alcohol policy.

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	number of off-premise outlets and hours of operation. NABCA did not cite a source for its claim that there is less access to liquor in control states. Even if there is less access in control states, in the event Vermont privatizes liquor operations, this would not preclude the State from establishing limits in state law on the number of off-premise outlets and hours of operation. With regard to consumption, NABCA's data is consistent with 2009 data available from the National Institute on Alcohol Abuse and Alcoholism (NIAAA), which showed that the rate of per capita consumption of distilled spirits is lower in control states. However, the data from NIAAA also showed that if beer and wine were included, control states' overall per capita consumption of alcohol was only 2.9 percent lower than license states (2.40 gallons per capita versus 2.47 gallons per capita, respectively).
Comment 6	DLC incorrectly attributes to the CDC a recommendation that was made by the Task Force on Community Preventive Services and indicates that the recommendation related specifically to Washington State. As we noted in our report, Task Force members are appointed by the CDC, but its recommendations are independent of the CDC. Further, the Task Force study was prior to Washington's privatization. In addition, we referenced the results of the Task Force study in our report. We also reported that 1) studies examining the influence of various factors on alcohol consumption and behavior have yielded differing conclusions, and 2) few studies have examined the empirical effects of loosening state control on alcohol consumption and related problems, and the results of these studies have been mixed.
Comment 7	Although DLC believes there is a distinction between licensing sales of beer and wine versus liquor, according to the CDC, it is the amount of alcohol consumed that affects a person most, not the type of alcoholic drink. DLC cited the evaluative process it utilizes to review all liquor products that go into the marketplace (i.e., DLC's listing process), contrasted it with the lack of an evaluation for products that are sold through distributors, and concluded that some of these products are marketed toward youth. Given that state law establishes the alcohol-by-volume limit for products that may be sold through distributors

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		and retailers and establishes the authority of DLC, state law could also be used to regulate the sale of the types of products that DLC mentioned and believes are marketed toward youth (e.g., Whipsy-Whipped Cream infused with wine). Further, in the event the State privatized liquor operations, state law could require DLC's review and approval of all liquor products offered for sale in Vermont.
Comment 8		DLC assumes that contract agent stores would experience financial hardship and retail prices for the consumer would increase should privatization occur. First, for purposes of our report, we defined fiscal impact as an estimate of the effect on state government FY2016 revenues and expenditures associated with liquor distribution and sale if the State's liquor control system was changed to partial or full privatization. Second, whether or not privately owned contract agent stores would benefit financially from privatization would be influenced by the percentage markup on product costs, which is a factor controlled by the private sector. Finally, we indicated in our report that altering the current liquor control system may or may not result in an increase to the retail price paid by consumers, but that increases of 7.4 percent to 11.8 percent have occurred in states that privatized liquor sales.
Comment 9		Our assumption for retail markup, a range of 18 percent to 25 percent, was based on publicly traded company and other third-party data, DISCUS data, Internal Revenue Service data, and discussions with industry stakeholders. However, DLC disagreed with the range of retail markup percentages we utilized. The department cited "discussions with retailers" in the state and asserted that the retail markup would range from 25 percent to 35 percent. We reviewed the sources DLC provided to support the range they contend is correct and concluded that three of the four sources were not specific to retail markup for liquor products, rather they were for retail markups on consumer goods in general or for wine. The one source that was relevant included a reference that indicated Internal Revenue Service data support a retail markup of 25 percent. DLC also disagreed with our use of a 20 percent markup for wholesale and cited a NABCA publication that used 26.5 percent for wholesale markup to calculate spirits and wine tax rates for control states. Our assumption for the wholesale markup was based on publicly traded company and other third-party data, DISCUS data, and discussions with industry stakeholders. Based on our review of DLC's sources and the variety of sources we utilized to develop the assumptions for the retail markup and

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Comments from the Commissioner of DLC and the Chair of LCB and Our Evaluation

		wholesale markup, we continue to believe that the markups utilized were reasonable for purposes of estimating average retail price increases should the State privatize liquor operations.
Comment 10		DLC questions whether “border bleed” (e.g., loss of sales to border states) was included in the financial models developed to estimate the fiscal impact to the state from privatization. The department indicated that prices would have to be increased to offset border bleed and that Washington presents a great example of this. DLC provided no evidence that border bleed has occurred in Washington. In fact, according to the Washington Department of Revenue (WDOR), tax revenue increased for the state in both fiscal years subsequent to privatization, so if border bleed did occur, it does not seem to have impacted overall tax collections in Washington. Further, this increased tax revenue occurred while retail prices on average increased 11.8 percent per liter, which is in the range of the price increase we estimated in our financial model.
Comment 11		Based on the department’s comments, we modified the language in the report to reflect DLC’s comments regarding its rationale for the markup structure. However, the department’s explanation does not address whether the markup structure was the result of a systematic pricing strategy linked to the department’s business goals. In particular, during the audit we asked DLC whether its markup practices were established to maintain control over consumption or whether profitability was the driver, but we did not receive an explicit response. We also asked for documentation of current and past pricing and markup practices and strategies, but the department indicated that none existed.
Comment 12		The additional positions that DLC indicated have been included in the department’s FY2016 budget request do not address the staffing concern we raised in the report. Based on our review of the three positions that report direct to the commissioner, DLC does not appear to have the types of positions within the liquor operations that would perform analyses to devise new approaches or to devise new processes for all aspects of liquor operations. Further, the board chair indicated that the department needs someone who could do more strategic and business analyses to assist the commissioner, such as a chief financial officer.