CALIFORNIA STATE AUDITOR

Intellectual Property

An Effective Policy Would Educate State Agencies and Take Into Account How Their Functions and Property Differ

November 2011 Report 2011-106

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November 29, 2011 2011-106

The Governor of California
President pro Tempore of the Senate
Speaker of the Assembly
State Capitol
Sacramento, California 95814

Dear Governor and Legislative Leaders:

As requested by the Joint Legislative Audit Committee, the California State Auditor (state auditor) presents this audit report about the State's management and protection of intellectual property. Intellectual property typically consists of copyrights, trademarks, patents, and trade secrets. In November 2000 the state auditor issued a report titled *State-Owned Intellectual Property: Opportunities Exist for the State to Improve Administration of its Copyrights, Trademarks, Patents, and Trade Secrets*—report number 2000-110 (2000 audit report). The 2000 audit report recommended the Legislature take steps to help state agencies manage and protect the State's intellectual property.

This report concludes that the State has not enacted a statutory framework, nor has it implemented the recommendations made in the 2000 audit report or otherwise provided guidance to state agencies regarding the management and protection of intellectual property. The four state control agencies we spoke to—the Department of Finance, the Department of General Services, the State Controller's Office, and the California Technology Agency—generally do not provide policies or guidance to other state agencies regarding the management and protection of intellectual property because they do not believe that they are responsible for providing this type of guidance. However, more than half of the state agencies that responded to our survey about intellectual property indicated that the State should establish statewide guidance for managing and protecting intellectual property. Moreover, the four state agencies we visited had only limited written policies and instead generally relied on informal practices to manage and protect their intellectual property.

To move forward, the State will need to clearly articulate the goals of any policy related to intellectual property. We believe that an effective policy would educate state agencies on their intellectual property rights and would be flexible and take into account that state agencies perform different functions and work with different types of intellectual property.

Respectfully submitted,

Elaine M. Howle

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State Auditor

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In November 2000 the Bureau of State Audits issued a report titled *State-Owned Intellectual Property: Opportunities Exist for the State to Improve Administration of Its Copyrights, Trademarks, Patents, and Trade Secrets* (2000 audit report). The report noted that state-level guidance for administering intellectual property such as copyrights, trademarks, patents, and trade secrets was limited and recommended that the Legislature take certain steps to help state agencies manage and protect the State's intellectual property.[1] For example, guidance may help state agencies that produce photographs, maps, or other images to consider seeking formal copyright protection to prevent unauthorized or inappropriate use of these items. Similarly, guidance may help state agencies that conduct research understand how to obtain patents for inventions agency employees develop.

However, since the release of the 2000 audit report, the State has not enacted a statutory framework, nor has it implemented the recommendations made in the 2000 audit report or otherwise provided guidance to state agencies regarding the management and protection of intellectual property. In fact, we identified eight proposed bills related to state management of intellectual property that were not enacted since our 2000 audit report. In general, committee analyses suggest that the Legislature was unable to resolve certain questions and concerns the bills raised. However, 112 of the 211 state agencies responding to our survey, or 53 percent, believe that the State should establish statewide guidance for managing and protecting intellectual property, indicating that there is a need for guidance.

The four state control agencies we spoke to—the Department of Finance, the Department of General Services (General Services), the State Controller's Office, and the California Technology Agency—generally do not provide policies or guidance to other state agencies regarding the management and protection of intellectual property because they do not believe that they are responsible for providing this type of guidance. One exception involves General Services, which provides state agencies with standard contract language regarding intellectual property rights for use in information technology contracts. This language provides the State "government purpose" rights, which include a perpetual, royalty-free license to use and modify the intellectual property the

[1] Throughout this report, we use the term *state agency* to refer to any type of state entity, regardless of its formal name (e.g., agency, department, board, bureau, commission, etc.).

Audit Highlights . . .

Our review of the State's management and protection of intellectual property revealed the following:

- *The State has not enacted a statutory framework nor implemented the recommendations we made in an audit report we issued in 2000.*
- *Fifty-three percent of the state agencies that responded to our survey believe that the State should establish statewide guidance for managing and protecting intellectual property.*
- *Four state control agencies we spoke to do not believe that they are responsible for providing policies or guidance to other state agencies for managing and protecting intellectual property.*
- *The four state agencies we visited had only limited written policies, and the way in which they addressed their rights varied.*
  - *The Department of Health Care Services generally retains the rights to intellectual property created by a contractor.*
  - *Certain contracts the California Energy Commission has with its researchers gives the researchers the rights, but it can and has earned royalties—between fiscal years 2008–09 and 2010–11 it received $2.6 million in royalties.*
  - *The California Department of Transportation sold licenses to its employee-developed intellectual property and generated $51,500 in revenue.*
- *To move forward, the State will need to clearly articulate the goals of any policy related to intellectual property.*

contractor develops. Although the contractor retains ownership of the intellectual property rights, state agencies indicated in our survey that government purpose rights may adequately address their needs.

To determine how state agencies manage their intellectual property in the absence of statewide guidance, we visited four state agencies: the California Department of Transportation (Caltrans), the California Energy Commission (Energy Commission), the Department of Health Care Services (Health Care Services), and the Department of Food and Agriculture (Food and Ag). We found that these agencies had only limited written policies and instead generally relied on informal practices to identify and manage their intellectual property. Although these agencies provided their perspectives on their lack of written policies, we believe that until they appropriately inform and guide their staff regarding intellectual property issues, they cannot be sure that staff have the knowledge necessary to act in the State's best interest.

We found variation among the four state agencies' practices for managing and protecting the intellectual property they developed or funded. Although the four state agencies all had standard contract language related to intellectual property rights, the way in which they addressed their rights differed. For example, Health Care Services generally retains the rights to the intellectual property created by a contractor. In contrast, the Energy Commission oversees the Public Interest Energy Research (PIER) program, and its contracts with its researchers state that the researchers own the rights to any of the resulting intellectual property. We also noted differences in their processes for deciding whether or not to protect their intellectual property. For example, a Caltrans deputy attorney stated that Caltrans typically seeks formal protection of intellectual property with commercial value. Alternatively, a staff counsel at Health Care Services stated the agency makes its publications and data compilations available to the public and therefore it does not believe it is necessary to control the copyrights.

Further, two of the four agencies we visited had generated revenue from intellectual property, but the revenue resulted from different approaches. Caltrans sold licenses to its employee-developed intellectual property, with available records indicating such sales generated $51,500 in revenue. The Energy Commission, on the other hand, received $2.6 million in royalties between fiscal years 2008–09 and 2010–11 from intellectual property funded by its PIER program. PIER contractors retain ownership rights to works funded by the Energy Commission but owe a portion of any sales to the Energy Commission in the form of royalty payments. However, the Energy Commission's process for collecting royalties does not ensure that it receives all royalties due because

the Energy Commission does not follow up with contractors who do not respond to the annual royalty notice. Further, the Energy Commission does not require that contractors submit documents that demonstrate the royalty calculated is correct. During the course of our audit, the Energy Commission began taking some steps to improve its royalty process.

The fact that more than half of the state agencies we surveyed would like guidance regarding intellectual property indicates that there is a need for the State to provide this information. At the same time, establishing a formal policy poses a number of challenges, and in the past, the Legislature has not been successful in passing proposed legislation related to the State's management of intellectual property. To move forward, the State will need to clearly articulate the goals of any policy related to intellectual property. We believe that an effective policy would educate state agencies on their intellectual property rights. It would also be flexible and take into account that state agencies perform different functions and work with different types of intellectual property. If the State does not act, it will be missing an opportunity to help agencies make informed, thoughtful decisions about their intellectual property.

Recommendations

Caltrans, the Energy Commission, Food and Ag, and Health Care Services should put in writing those policies and procedures related to intellectual property that they believe are necessary and appropriate to enable their staff to identify, manage, and protect their intellectual property.

The Energy Commission should strengthen its royalty process to ensure that it receives the proper amounts from contractors involved in the PIER program.

The Legislature and the governor should consider developing a statewide intellectual property policy that educates state agencies on their intellectual property rights without creating an administrative burden. Specifically, this policy should do the following:

- Provide guidance to agencies that will give them the understanding necessary to identify when potential intellectual property may exist and that will provide them with specific information on intellectual property protections.

- Recognize that not all state agencies have the same needs and that a one-size-fits-all approach may not be feasible. An effective policy should provide agencies with flexibility regarding ownership of intellectual property rights.

Agency Comments

The four agencies we visited responded to the audit indicating that they agreed with the recommendations directed to each of them. Caltrans, Food and Ag, and the Energy Commission each outlined steps it has taken or will take to implement the recommendations. Health Care Services stated that intellectual property law is complex, and it believed statewide guidance would be helpful.

Introduction

Background

The term *intellectual property* describes products of the mind, such as inventions and other creations, that can be protected under intellectual property law. There are four primary types of intellectual property: copyrights, trademarks, patents, and trade secrets. Taken as a whole, federal, state, and common law provide intellectual property owners with an extensive legal tool bag to protect their property interests in the work they create. Table 1 shows examples of the four major types of intellectual property and the legal bases under which property owners can protect them.

Table 1
Types of Intellectual Property

TYPE	EXAMPLES OF WHAT INTELLECTUAL PROPERTY LAWS PROTECT	LEGAL BASIS
Copyrights	Pictures, audio and video recordings, maps, publications, Web page content	Federal Copyright Act
Trademarks	Names, logos, symbols, identifying marks	Federal Trademark Act, California's Trademark Law, common law
Patents	Inventions, processes	Federal Patent Act
Trade secrets	Methods, techniques, processes	California's Uniform Trade Secrets Act, common law, Federal Economic Espionage Act

Sources: United States Code, Annotated California Codes, and secondary legal sources.

Copyrights

A copyright protects works of authorship, such as literary and musical creations, and grants an exclusive legal right to reproduce, publish, sell, and prepare material based on the copyrighted work. To be protected by a copyright, the material in question must be an original creation and must be set in a "tangible medium of expression": a vehicle from which it can be perceived, reproduced, or otherwise communicated. For example, a story cannot be copyrighted until its words are transcribed on paper or put in another form that allows people to read, hear, or otherwise perceive it. Likewise, a song cannot be copyrighted until its notes and lyrics are recorded or set in some tangible form. A state agency may produce a publication such as a map and choose to copyright it.

Federal law recognizes that a copyright may be unregistered or registered. As soon as an author puts a work into a tangible form, federal law provides a right to protect the work under a copyright whether the author formally registers the copyright or not. For a work created after 1978 by hire, which includes work a state employee or a consultant performs for an agency, either a registered or unregistered copyright expires 95 years from the publication date or 120 years after the creation date, whichever occurs first. Federal copyright law extends certain rights solely to the owner, including the right to reproduce and distribute the work. Although formal copyright registration is optional, there are advantages to it because copyright owners secure additional protections by formally registering their copyrights with the federal Copyright Office. One advantage is that registration creates a public record of the copyright claim, which puts the public on notice of the copyright and makes it more difficult for violators to claim they unknowingly infringed on it. A second advantage is that owners of registered copyrights can file suit against any persons or entities attempting infringement. Although owners of unregistered copyrights are afforded the rights mentioned previously, they generally cannot file a lawsuit to enforce these rights.

Trademarks

A trademark is any name (McDonald's), word (Big Mac), symbol (the golden arches), device (Ronald McDonald), or any combination of these features used in commerce that identifies and distinguishes the source of goods produced by one entity from those goods produced by others. A service mark is used to distinguish the source of a service rather than a good.[2] Trademark rights give an owner the right to exclude others from using a specific mark or one confusingly similar to the owner's mark. To qualify as a trademark, a name, word, symbol, or device must be both distinctive and actually used by the owner. A state agency might use a trademark to identify a particular program or service the agency sponsors.

Like copyrights, trademarks can be either unregistered or registered. Registration is not required to protect trademark rights because they also arise under common law from the owner's actual use of the mark. Here again, registration offers the owner benefits that include public notification, evidence of ownership, and the right to claim litigation costs and certain damages. Trademarks can be registered with the federal Patent and Trademark Office and the California Secretary of State's Office. Federal registration

[2] Throughout this report, we include service marks when using the term "trademark."

of trademarks lasts 10 years. State registrations issued after January 1, 2008, last five years, while state registrations prior to that date lasted 10 years. Owners can renew both federal and state trademarks repeatedly as long as the mark is in use.

Patents

A patent is a property right that the federal government grants to an owner to exclude others from making, using, selling, or importing a patented invention, or using, selling, or importing a patented process into the United States. Owners can patent only processes or inventions that are new, nonobvious, and useful. Unlike a copyright or trademark, which offers the owner some protection even when it is not registered, a patent only protects an owner who files an application with the federal Patent and Trademark Office and meets the legal requirements of that office. Generally, a patent lasts 20 years from the date on which the owner files an application. A state agency may want to apply for a patent if it develops a unique process or device to assist it in accomplishing its mission.

Trade Secrets

A trade secret is information an owner uses in its operations and from which the owner derives economic value because the information is not generally known. Because there are no provisions for the registration of a trade secret, protection begins once the owner identifies the trade secret as such, as long as it is a secret at the time. Trade secret protections last as long as the owner makes reasonable efforts to maintain the information's secrecy.

State agencies responsible for regulating private entities may obtain those entities' trade secrets. For example, the Department of Pesticide Regulation may obtain a pesticide manufacturer's trade secrets regarding how it develops its products. In this case, the manufacturer, not the Department of Pesticide Regulation, would still own the trade secret. State agencies' confidential processes or information are not subject to trade secret protections unless the process or information meets the legal definition of a trade secret.

Bureau of State Audits' Previous Report on Intellectual Property

In November 2000 the Bureau of State Audits (bureau) issued a report titled *State-Owned Intellectual Property: Opportunities Exist for the State to Improve Administration of Its Copyrights, Trademarks, Patents, and Trade Secrets* (2000 audit report).

The report concluded that many state agencies were not sufficiently knowledgeable about their intellectual property rights. The report explained that because state agencies lacked adequate knowledge of their intellectual property ownership and rights, they might fail to act against those who used the State's intellectual property inappropriately. The report further noted that state-level direction for administering intellectual property was limited and that state agencies at the time had either no or incomplete written policies for managing their intellectual property. In the survey and related analysis we conducted for the 2000 audit report, we identified more than 113,000 items of state-owned intellectual property but noted that the State likely had more intellectual property rights than we had identified.

Scope and Methodology

The Joint Legislative Audit Committee (audit committee) directed the bureau to perform an audit of the State's management and protection of intellectual property. The audit analysis the audit committee approved contained nine separate objectives. We list the objectives and the methods we used to address them in Table 2.

Table 2
Methods of Addressing Audit Objectives

AUDIT OBJECTIVE	METHOD
1. Understand criteria related to the State's intellectual property.	Reviewed relevant laws, regulations, and other background materials.
2. Understand changes in the legal environment regarding intellectual property since our report in November 2000. Review relevant state legislation that was introduced, but not enacted, since that time.	• Researched changes in federal and state law and regulations between 2000 and 2011.* Also reviewed relevant case law from this time period. • Analyzed both enacted and not enacted bills related to the State's management of intellectual property.
3. Review policies and guidance issued by the State's control agencies related to the management or protection of intellectual property or compliance with relevant accounting standards. Determine the extent to which control agencies coordinate with one another regarding this subject area and their involvement, if any, in implementing the recommendations in the 2000 audit report. Review studies or reports regarding intellectual property.	• Inquired with the Department of Finance, Department of General Services (General Services), State Controller's Office, and California Technology Agency. • Reviewed control agency guidance on reporting intangible assets.† • Performed Internet research for studies or reports published by other entities. • Identified one key study, described in the Audit Results.
4. Understand the actions undertaken by the Office of the Attorney General to protect the State's intellectual property interests in a court of law.	Inquired with the Office of the Attorney General.
5. Determine if the State's standard contract language protects the State's interest in intellectual property. Review the process for including this language.	• Reviewed the standard contract terms and conditions General Services issued. • Reviewed General Services' relevant procedures and interviewed key officials.‡
6. Review selected state agencies' intellectual property policies and procedures, efforts to maximize economic benefits, and contract language.	Interviewed key officials and reviewed relevant agency policies and practices and contract language at the California Energy Commission, Department of Food and Agriculture, Department of Health Care Services, and Department of Transportation.§ ‖

AUDIT OBJECTIVE	METHOD
7. Identify research universities' best practices for the management and protection of intellectual property.	• Interviewed key officials from the University of California (UC) Berkeley, UC San Diego, and UC's Office of the President. • Reviewed relevant UC policies and other related documents.
8. Provide a summary of state-owned intellectual property.	Surveyed 228 state agencies regarding the types and amount of intellectual property they own. Performed related analyses including determining the number of records the agencies registered with applicable federal and state entities.#
9. Review and assess any other issues significant to the State's management of intellectual property.	No other issues came to our attention.

Sources: Bureau of State Audits' (bureau) analysis of audit request number 2011-106, planning documents, and analysis of information and documentation identified in the table column titled Method.

* We did not note any changes in federal or state laws or regulations enacted in this time frame that affected the State's management and protection of intellectual property.

† Intangible assets include intellectual property.

‡ We did not note any issues with General Services' process.

§ Although the regulations of the California Institute for Regenerative Medicine (CIRM) require its grantees to pay royalties on certain revenue received from state-funded research, its general counsel explained that it has not received any royalties to date. As a result, we did not include CIRM in the agencies we audited.

‖ We describe in detail the four agencies' intellectual property activities in Appendix A.

We present the results of our survey and related analysis in Appendix B.

As noted in Table 2, we conducted a survey of state agencies to provide a summary of state-owned intellectual property. We primarily surveyed entities at the state agency level because they have the autonomy to develop their own policies and procedures for administering intellectual property. For example, we sent surveys to the California Department of Corrections and Rehabilitation and the Department of Mental Health rather than to each state prison and each state hospital. However, because the Office of the Chancellor for the California State University delegates responsibility for developing policies related to intellectual property to each of its campuses, we sent surveys to each campus. We did not send surveys to the University of California; however, as noted in Table 2, we did review its policies to address a different audit objective. We received responses from 211 of the 228 state agencies to whom we sent surveys. Those agencies that did not respond to our survey request are listed in Appendix B.

In our survey, we asked state agencies to tell us about the types and quantities of formally protected and not formally protected intellectual property they own, the nature of the intellectual property they own (such as publications, formulas, inventions, designs, computer programs, etc.), the reasons they formally protect their intellectual property, and the nature of any enforcement actions they have taken to stop infringement. We also asked whether they attempt to own intellectual property rights in work developed by their contractors, and whether they believe the State should establish guidelines for managing and protecting intellectual property.

To verify the accuracy of the survey responses provided by the four state agencies we visited, we reviewed their processes for determining the intellectual property they reported. We also confirmed all pertinent agency responses by searching databases maintained by the federal Copyright Office for registered copyrights and the federal Patent and Trademark Office for patents and registered trademarks. In addition, we searched records at the California Secretary of State's Office for registered trademarks.

We further reviewed survey responses for inconsistencies and made corrections to the extent possible. For example, we asked agencies to provide the total number of formally protected copyrights they own. We also asked them to identify the number of these copyrights by type. If an agency's listing of all the specific types of copyrights added up to a number greater than the overall total the agency provided, we corrected the agency's total copyrights to equal the sum of the specific types of copyrights.

Audit Results

The Legislature Has Rarely Passed Proposals Related to State Management of Intellectual Property

In November 2000 the Bureau of State Audits (bureau) issued a report titled *State-Owned Intellectual Property: Opportunities Exist for the State to Improve Administration of Its Copyrights, Trademarks, Patents, and Trade Secrets*—report number 2000-110 (2000 audit report). This report summarized our review of the State's administration of its intellectual property and included recommendations to the Legislature regarding the management and protection of intellectual property. The recommendations addressed the need for statewide guidance. However, the recommendations made in the 2000 audit report have not been implemented. In fact, since the issuance of that report, eight legislative proposals related to state management of intellectual property have not been enacted.[3] The Legislature did not pass seven of the eight bills, and a former governor vetoed one bill.

The fact that the eight bills were not enacted suggests that questions and concerns raised during the legislative process remained unresolved. However, by not providing guidance to state agencies, the State cannot be certain that each agency is identifying, managing, protecting, and maximizing any benefits from its state-owned intellectual property as necessary and appropriate. More than half of the state agencies responding to our survey expressed the need for this sort of guidance, as we discuss in more detail later.

Bills Introduced but Not Enacted Presented by Bill Topic

State Administration of Intellectual Property

- Assembly Bill 744 (2011–12)*
- Assembly Bill 1456 (2007–08)
- Assembly Bill 2721 (2005–06)
- Assembly Bill 1616 (2003–04)

Studies

- Assembly Bill 479 (2007–08)
- Assembly Bill 2319 (2003–04)
- Senate Bill 875 (1999–2000)

Standard Contract Language

- Assembly Bill 3033 (2007–08)

Source: Bureau of State Audits' analysis of legislation identified at www.leginfo.ca.gov.

* All legislative sessions noted are regular sessions.

The text box lists the eight bills we found, grouped by topic and the legislative session in which they originated. Three bills proposed to create a new office in state government to perform various duties related to the management of state-developed intellectual property. In 2006 Assembly Bill 2721 (AB 2721) proposed the addition of an Office of Intellectual Property within the Business, Transportation and Housing Agency. According to AB 2721, this office would be responsible for, among other duties, establishing statewide guidance for agencies and developing a database to track intellectual property generated by state employees and state-funded research. The legislative committee analysis related to AB 2721 reflected that industry expressed opposition to the

[3] Although we identified additional legislative proposals related to intellectual property, we did not include them here because they applied to specific agencies and programs rather than to state agencies in general.

bill, based on the view that the Office of Intellectual Property would have insufficient authority to develop a streamlined and comprehensive process to get inventions into the marketplace for commercialization and that certain revenue-sharing provisions in the bill might reduce the public benefits of state-funded research. In 2007 Assembly Bill 1456 (AB 1456) proposed to establish the Office of Intellectual Property; however, the Legislature subsequently removed all of the provisions related to intellectual property from the bill. More recently, in 2011, the Legislature introduced Assembly Bill 744 (AB 744), which would create an Office of Intellectual Property. When the Legislature recessed in 2011, AB 744 had not passed out of the Assembly, but the Legislature may act on this bill in 2012 as long as it passes out of the Assembly by January 30, 2012. Therefore, at this point, it remains to be seen whether the Legislature will enact AB 744.

The remaining five bills addressed guidance about intellectual property differently. Assembly Bill 1616 (AB 1616), introduced in 2003, proposed that no state agency would have the right to protect or assert state-owned trade secrets or patentable inventions, and that the State would dedicate all of its copyrights to the public domain. The legislative committee analysis related to AB 1616 indicated that the bill raised significant policy questions as to whether dedicating the State's intellectual property to the public domain would have unforeseen consequences and recommended that the bill be studied further. Three bills—introduced in 1999, 2004, and 2007—proposed various studies of intellectual property: Senate Bill 875, Assembly Bill 2319, and Assembly Bill 479. For various reasons, none of these bills were enacted. Finally, Assembly Bill 3033, introduced in 2008, would have urged the Regents of the University of California (UC) and required the Department of General Services (General Services) to use standard contract language related to the ownership of intellectual property when the State contracted with UC. The former governor vetoed this bill in September 2008.

Three bills—introduced in 1999, 2004, and 2007—proposed various studies of intellectual property, yet for various reasons, none of these bills were enacted. The former governor vetoed another bill in September 2008.

Although we were asked to focus on legislation related to intellectual property that was not enacted, we identified two bills that were enacted that are worth noting. The Legislature adopted the first, Assembly Concurrent Resolution 252 (ACR 252), in September 2004 as Resolution Chapter 190. Similar to AB 2319, this resolution requests the California Council on Science and Technology (Science Council) to study and make recommendations to the governor and Legislature for intellectual property created under state contracts, grants, and agreements. A nonpartisan, not-for-profit organization focused on public policy issues involving science and technology, the Science Council published its report, *Policy Framework for Intellectual Property Derived from State-Funded Research*, in January 2006. The Science Council focused its study on intellectual property from state-funded

research and made recommendations to the governor and Legislature for administering intellectual property developed with state funds. However, we are not aware of any legislation that has been enacted as a result of the Science Council's recommendations.

The second, Assembly Bill 20 (AB 20), enacted as Chapter 402, Statutes of 2009, essentially reintroduced the provisions of AB 3033 but extended the requirement for standard contract language to the California State University (CSU). It adds a provision to the California Government Code that requires General Services to negotiate and establish standard contract language for various items, including intellectual property, for state agencies to use when contracting with UC or CSU. We discuss the implementation of AB 20 later in the report.

Control Agencies Have Provided State Agencies Limited Guidance Related to Intellectual Property

In the absence of statutory requirements, the State has chosen not to adopt a statewide policy or provide guidance to state agencies regarding the management and protection of intellectual property. In response to our inquiries, four state control agencies—the Department of Finance (Finance), General Services, the State Controller's Office (Controller's Office), and the California Technology Agency (Technology Agency)—indicated that they had not provided policies or guidance to other state agencies regarding the management and protection of intellectual property.[4] However, 112 of the 211 state agencies that responded to our survey, or 53 percent, indicated they believe the State should establish guidelines for managing and protecting intellectual property. In our 2000 audit report, the response was comparable, with 55 percent of respondents stating that they wanted additional guidance from the State. The consistent survey responses indicate that a significant number of state agencies believe that guidance from the State would be helpful.

Four state control agencies indicated that they had not provided guidance to other state agencies regarding the management and protection of intellectual property because they believed such guidance was not their responsibility.

All four control agencies indicated that they had not provided statewide guidance regarding intellectual property because they believed such guidance was not their responsibility. Finance's director explained that Finance had not provided guidance because it viewed the management and protection of property as

[4] We also inquired with these agencies as to the extent to which coordination exists among control agencies regarding intellectual property. The four control agencies did not identify any coordination related to the overall management and protection of intellectual property. The Controller's Office and Finance provided guidance for the state agencies' implementation of Governmental Accounting Standards Board Statement 51 (GASB 51). This guidance is limited to prescribing accounting requirements for financial reporting of assets that include intellectual property. We discuss GASB 51 further in Appendix B.

the responsibility of each agency. She also stated that it would be burdensome to administer and verify a statewide policy, and that formal protection of the State's intellectual property should be unnecessary except in very rare circumstances, such as when the public's health and safety are jeopardized, because the property should otherwise be freely available to the public. The State Controller explained that his office is responsible for ensuring accurate accounting and reporting, including reporting of intellectual property in its *Comprehensive Annual Financial Report*, but that state law places with Finance the responsibility for all matters concerning financial and business policies, which the State Controller believes includes the management and protection of intellectual property. The Technology Agency's general counsel stated that the Technology Agency does not have the authority to dictate how state agencies handle all types of intellectual property. He noted that the Technology Agency was established in January 2011, and that its enabling statutes focus on the efficient and effective use of information technology in state government. The general counsel explained that the use of technology as part of an invention—a type of intellectual property—does not inherently fit with the Technology Agency's responsibilities or expertise.

Finally, General Services' director noted that the statewide oversight of intellectual property has not been a responsibility assigned to General Services. He noted that General Services has traditionally addressed intellectual property issues through the use of standardized terms and conditions in its contracts and has left the policies and procedures for the management of intellectual property to the discretion of state agencies. General Services' director did note that ensuring that the State's interests in intellectual property are properly identified and protected is an important issue. He stated that General Services would consequently initiate discussions within the governor's administration related to the merit of developing statewide policies and guidance for state agencies on the management and protection of intellectual property. General Services' chief counsel noted that the agency would reach out to the administration after it had reviewed this report.

General Services provides agencies with standard language related to intellectual property for information technology contracts.

Although no control agency has established statewide policy regarding the management and protection of intellectual property, General Services does provide agencies with standard language related to intellectual property for information technology contracts. State law mandated that beginning in 1994, General Services negotiate repetitively used contract terms and conditions with vendors interested in bidding on the State's information technology contracts and that it maintain this language for future procurements, unless it determines further negotiations are needed. In 2003, based on additional meetings with industry

representatives and state and private counsel, General Services modified this rights-in-work product provision, then called the rights-in-data provision, to provide the State with "government purpose" rights to intellectual property developed under an information technology contract. According to this provision, the contractor owns the intellectual property but the State has a perpetual, royalty-free license to it, enabling the State to modify it and share it with the public and other governmental entities.

Government purpose rights offer agencies a compromise between owning the intellectual property developed under state contracts and relinquishing all rights to the property. One benefit of owning intellectual property is the ability to commercialize it—or put it into use—to generate additional revenue, which government purpose rights do not permit state agencies to do. However, state agencies indicated in our survey that benefits of ownership may not be necessary to meet their needs. Only 12 of the 52 state agencies that contracted to secure the rights to intellectual property within the last five years indicated that they did so to generate additional potential revenue.[5] On the other hand, 30 indicated they contracted to secure rights to intellectual property to facilitate future modifications to the property, which government purpose rights permit.[6] Moreover, the deputy director for General Services' Procurement Division (procurement deputy) explained that most state information technology projects involve the contractor modifying existing commercial software to suit the State's needs, and that the only intellectual property that the State could claim ownership of is that code which was modified or developed specifically for the State. He noted that this limited amount of code is of little commercial value on its own.

Although General Services made the rights-in-work product provision standard contract language, state agencies may, after consultation with General Services, modify the effects of the provision. If desired, state agencies may include additional language regarding intellectual property ownership in a contract's scope of work section. For example, an agency could assign the intellectual property rights to itself instead of the contractor. However, according to its chief counsel, General Services does not keep a record of how often state agencies include intellectual property language in their contracts' scope of work, so we cannot report how frequently agencies have deviated from the standard language. General Services' procurement deputy stated that without the rights-in-work product provision, competition for state information technology contracts would decrease, ultimately

According to General Services, without the rights-in-work product provision, competition for state information technology contracts would decrease, ultimately increasing the cost of information technology projects.

[5] Our question was not specific to information technology contracts.

[6] As permitted by our survey, some agencies provided both reasons.

increasing the cost of information technology projects. However, General Services was unable to provide analysis or other support for this statement, other than the expectations expressed in the report summarizing the 2003 negotiations.

General Services' standard language for contracts that are not related to information technology does not address ownership of intellectual property. General Services' chief counsel explained that state agencies can include provisions assigning ownership of intellectual property developed under their contracts, but that each agency is solely responsible for developing these provisions based on the type of contract and guidance from the agency's legal counsel. However, because the standard language does not address intellectual property ownership, agencies may not include appropriate provisions regarding ownership, which could lead to the loss of state control over valuable intellectual property, such as a patentable discovery or invention.

The standard language for contracts not related to information technology does not address intellectual property ownership and thus, agencies may not include appropriate provisions regarding ownership, which could lead to the loss of state control over valuable intellectual property.

General Services' ongoing negotiations with UC and CSU will result in further consideration of intellectual property rights. As previously discussed, AB 20, enacted in October 2009, directs General Services to negotiate and establish standard contract provisions with UC and CSU, including provisions that address intellectual property. When passing this legislation, the Legislature stated that in fiscal year 2006–07, state agencies entered into more than 2,500 contracts or contract amendments with UC and CSU, and that many of those contracts took six months to a year to draft. The Legislature determined that establishing standard contract provisions that would apply to all contracts between state agencies and UC and CSU would be more cost-effective and efficient.

AB 20 required that the contract language be established by July 2010; however, as of October 2011, General Services' chief counsel estimated that the discussions with UC and CSU would not be completed until November 2011. The chief counsel stated General Services believed that the deadline established by AB 20 was unrealistic, given the scope and complexities of the expected negotiations and meetings. He stated that the parties involved with the negotiations have been meeting on a regular basis, usually monthly, since February 2010. In regard to copyrights and patents, he noted that the parties involved in the negotiations have agreed on two alternative standard provisions, one of which assigns intellectual property rights to state agencies and the other to UC and CSU, but that discussions continue as to which should be the default provision.

The Office of the Attorney General Has Infrequently Handled Intellectual Property Matters

The Joint Legislative Audit Committee (audit committee) requested that we determine what, if any, actions the Office of the Attorney General (Attorney General's Office) has undertaken to protect the State's intellectual property interests in a court of law. The attorney general is the State's chief legal officer and is in charge of legal matters of state interest; through the Attorney General's Office, legal representation and advice is provided to most state agencies. According to the former chief deputy attorney general for legal affairs, the Attorney General's Office has done little intellectual property work over the last 10 years. In fact, the former chief deputy attorney general identified just two cases handled by the Attorney General's Office in which the primary legal issues were related to state-owned intellectual property. The former chief deputy attorney general noted that because the Attorney General's Office has not received a large number of requests to assist with intellectual property matters, it has not yet developed expertise in this area of the law. He stated that consequently it has given consent to agencies to hire outside counsel to address the most complicated intellectual property matters. Documents that the former chief deputy attorney general provided to us indicated that the Attorney General's Office has given such consent 20 times since May 2000. It should be noted that some state agencies that develop intellectual property, such as CSU and the California Department of Transportation (Caltrans), are exempt from using the services the Attorney General's Office provides, and so the office may not be aware of all legal matters concerning state-owned intellectual property.

Policies and Practices Related to Intellectual Property Differed Among the State Agencies We Reviewed

To determine the sorts of policies and practices related to intellectual property that exist within the State, we reviewed four state agencies: Caltrans, the California Energy Commission (Energy Commission), the Department of Food and Agriculture (Food and Ag), and the Department of Health Care Services (Health Care Services). Table 3 on the following page summarizes the type and amount of intellectual property each of the four agencies own. We found that the four agencies differed in the amount of intellectual property they owned; however, as Table 3 shows, the most common type of intellectual property three of the four agencies owned was copyrighted materials. As discussed in the Introduction, this might include pictures, audio visual works, publications, and maps.

Table 3
Type and Amount of Intellectual Property Reported by Four Agencies

AGENCY	COPYRIGHTS	TRADEMARKS	PATENTS	TRADE SECRETS
California Department of Transportation	72	3	5	0
California Energy Commission	90	5	8	0
Department of Food and Agriculture	10	11	0	0
Department of Health Care Services	2,135	18	0	42

Source: Bureau of State Audits' analysis of the four state agencies' responses to our survey about intellectual property.

Table 4 summarizes each agency's existing policies and practices surrounding intellectual property. For example, as shown, each of the four state agencies we reviewed had contract language addressing intellectual property rights. In this section of the report, we describe some of these policies and practices. In Appendix A, we provide a more detailed analysis of what we found at each of the agencies.

Table 4
Summary of Four Agencies' Existing Policies and Practices Related to Intellectual Property

	POLICIES AND PRACTICES RELATED TO INTELLECTUAL PROPERTY				
AGENCY	WRITTEN POLICY*	INFORMAL PRACTICE†	CONTRACT LANGUAGE‡	REVENUE DERIVED FROM INTELLECTUAL PROPERTY§	ACTIONS TAKEN TO STOP INTELLECTUAL PROPERTY INFRINGEMENT‖
California Department of Transportation	Trademarks	Copyrights, patents	Yes	Yes	Yes
California Energy Commission	None	Copyrights, patents, trademarks	Yes	Yes	No
Department of Food and Agriculture	None	Copyrights, trademarks	Yes	No	No
Department of Health Care Services	Trademarks, trade secrets	Trademarks	Yes	No	Yes

Source: Bureau of State Audits' analysis of information provided by each state agency listed.

We defined an agency as responsive in the category if it met the following criteria:

* The agency had developed written policies about its intellectual property specific to copyrights, patents, trademarks, or trade secrets.

The California Department of Transportation shared with us patent guidelines that it indicated had been prepared and distributed five years ago, but it was unable to demonstrate that the guidelines were in use. We discuss this further in Appendix A.

Although the Department of Health Care Services has a written policy that affects its trademarks, it also identified an additional informal practice. Further, its written policy related to trade secrets is limited to a general prohibition against divulging confidential information. We discuss this further in Appendix A.

† The agency described to us practices it engaged in to identify intellectual property and, when necessary, register it.

‡ Either the agency had developed templates reflecting contract terms and conditions related to intellectual property for agency-specific uses or the agency relied on the Department of General Services' standard contract language regarding intellectual property.

§ The agency had derived revenue from licensing intellectual property or collecting royalties.

‖ The agency determined it was necessary to take steps to stop infringement of its intellectual property such as making telephone calls, writing and sending letters, and/or taking legal action in the five-year period ending December 31, 2010.

The State Agencies We Reviewed Had Limited Written Policies

Without written policies and procedures on identifying and protecting intellectual property, agencies cannot ensure that their staff are prepared to make decisions that reflect the State's best interest. However, the four state agencies we reviewed had only limited written policies. Instead, they generally had informal practices to identify and manage their intellectual property.

As Table 4 shows, only Caltrans and Health Care Services had written policies about intellectual property in place at the time of our review, but these policies were limited to trademarks, and in the case of Health Care Services, some information relevant to trade secrets. A Caltrans deputy attorney stated that Caltrans' practice is to handle its internally developed intellectual property on a case-by-case basis and that it generally seeks formal protection of intellectual property with commercial value. However, the former chief of the Division of Research and Innovation at Caltrans stated that our audit brought attention to intellectual property issues within the agency, and that in response Caltrans decided in July 2011 to develop a formal intellectual property policy. In October 2011, he updated us on Caltrans' progress, stating that it had formed a committee that had reviewed the policies of other states and was in the process of researching the financial impact and legal aspects of an intellectual property policy. The former chief commented that it would be several months before the committee finalized its recommendations to Caltrans' upper management.

Health Care Services also had in place a written policy related to intellectual property. Specifically, its administrative manual prohibits employees from using its symbols for personal gain or advantage and does not allow employees to lend a symbol to outside entities unless authorized by law. Moreover, according to staff counsel, Health Care Services has an informal practice of prohibiting external entities from using the agency's name or logo. Health Care Services reports that most of its intellectual property is in the form of unregistered copyrights. However, a staff counsel stated that the agency makes its publications and data compilations available publicly and therefore it believes control of the copyrights is unnecessary. The staff counsel also stated that Health Care Services does not need a written policy for these items because it does not believe it creates commercially valuable intellectual property.

The Energy Commission and Food and Ag each lacked written policies and procedures related to intellectual property. According to an assistant chief counsel, when Energy Commission staff believe they have something that should be formally protected, they bring it to the legal office's attention. However, the assistant chief counsel

Food and Ag was counting on guidance from a statewide policy to develop written procedures for using and protecting its intellectual property.

acknowledged that a formal policy regarding intellectual property might be useful to teach staff about intellectual property and assist them in identifying when the Energy Commission should pursue formal protection. The director of the Administrative Services Division at Food and Ag noted it had a similar practice of bringing items to the legal office's attention. She stated that Food and Ag was counting on guidance from a statewide policy to develop written procedures for using and protecting its intellectual property.

We noted certain existing state laws that may be useful to state agencies when protecting their intellectual property. Specifically, it is generally a violation of state law for private entities to conduct certain activities such as fundraising using terms or symbols that could imply a state or local government connection, approval, or endorsement. Therefore, existing law provides state agencies with a statutory basis to take action against those who use their trademarks without authorization. Similarly, state law prohibits state employees from using the State's confidential information for private gain or advantage and from providing confidential information to individuals who have not been authorized to have access to it. Knowledge of this law could be useful to agencies that need to protect confidential information, which may include trade secrets.

Although the four state agencies we reviewed all had contract language related to intellectual property rights, they addressed these rights in different ways.

Although the four state agencies we reviewed all had contract language related to intellectual property rights, they addressed these rights in different ways. For example, the Energy Commission oversees a research program, and its contracts with researchers state that the researchers own the rights to any of the resulting intellectual property but specify that the agency has a perpetual, royalty-free license to use it. On the other hand, Caltrans' contracts with consultants generally and with UC for work related to information technology state that the agency retains the rights to any work produced. However, Caltrans' contract with UC for work not related to information technology states that UC will retain ownership of all work produced but provides Caltrans with a perpetual, royalty-free license to it. Health Care Services' contracts with private entities, as well as with UC and CSU, state that all items developed under contract are Health Care Services' property. A staff counsel explained that in general Health Care Services retains ownership of contract deliverables, such as reports and data, to ensure the public has access to the information.

Food and Ag's contracts manager stated that the intellectual property terms and conditions Food and Ag currently has are not generally applicable to the types of agreements the contracts office enters into, and it therefore rarely uses them. She stated that her office would work with Food and Ag's legal office to develop intellectual property terms and conditions appropriate for the types

of agreements the contracts office enters into. We also looked at a research program that Food and Ag oversees and found it to have intellectual property terms and conditions for its agreements that were appropriate for the purposes of the program.

The State Can Derive Economic and Other Benefits From Its Intellectual Property

As Table 4 on page 18 shows, two of the four agencies we visited, Caltrans and the Energy Commission, have generated revenue for the State from intellectual property. However, the revenue results from two very different approaches to capitalizing on the commercial value of intellectual property. Specifically, Caltrans has earned revenue by licensing intellectual property it owns directly to the public. Caltrans' assistant chief counsel for contracts identified two items of intellectual property, developed by Caltrans' employees, that the agency has licensed for revenue: the CT Bridge software and the mobile work zone protection device, also known as the Balsi Beam. The amount of revenue Caltrans generated from these two items is modest, $51,500 in total based on available records. We discuss these revenue-generating efforts in more detail in Appendix A.

The Energy Commission has taken a different approach to capitalizing on the value of its intellectual property. The Energy Commission's revenue is the result of royalties paid by contractors who develop intellectual property using state funding they receive through the Public Interest Energy Research (PIER) program, which we describe in the text box. State law gives the Energy Commission legal authority to collect royalties, and PIER contracts generally state that the contractors will pay 1.5 percent in royalties on the sale of all project-related products. In fiscal years 2008–09 through 2010–11, the Energy Commission received $2.6 million in PIER royalties. Over the same time period, the Energy Commission reported entering into 143 contracts awarding $133 million in state funds.

Public Interest Energy Research (PIER) Program

Assembly Bill 1890 (Chapter 854, Statutes of 1996) created PIER when it shifted the administration of public interest, energy-related research from California's investor-owned utilities to the State. PIER funds energy research and development. It intends the projects it funds to improve the quality of life in California by bringing environmentally safe, affordable, and reliable energy services and products to the marketplace. PIER awards most funds to energy researchers through competitive solicitations and interagency agreements.

Sources: Chapter 854, Statutes of 1996, text; California Energy Commission's Web site; and a desk manual used by PIER staff.

However, the Energy Commission's process for collecting royalties does not ensure that it receives all royalties it is due. Specifically, the Energy Commission does not follow up if contractors do not respond to its annual notice to submit royalty payments. Moreover, the Energy Commission does not require contractors to provide proof that they pay the proper amount of royalties. The former manager of the Contracts, Grants, and Loans Office (contracts office) stated that

the contract terms place responsibility on the contractor to pay royalties when they are due. Further, the former manager stated that the contracts office relies on the contractor to determine the payment amount. He described the role of the contracts office as performing a mathematical review of worksheets the contractors complete that calculate the royalty amount due, but that the amount of royalties paid is not otherwise verified. However, without performing the two key steps of contacting contractors that do not respond to the royalty notice and requiring contractors to provide proof that they are paying the proper amount of royalties, the Energy Commission lacks assurance that it is receiving all the royalties it is due.

During the course of our audit, the Energy Commission began taking some steps to follow up with PIER contractors regarding royalties. Specifically, the deputy director for the Energy Research and Development Division (research deputy) told us that in December 2010 the division began asking certain contractors to respond to a questionnaire intended to identify any benefits from their research projects that might have materialized after the close of their contracts. The research deputy stated that the division targeted contractors with research projects that it considered promising and that the questionnaire asked open-ended questions designed to gather information without leading the contractor to predetermined responses. Although she noted that the division added two questions related to royalties in August 2011, which was during our review, we believe that the additional questions are unlikely to reveal whether or not contractors owe royalties because the questions do not directly ask if royalties are due. One of the questions merely asks, "Do you feel like telling me about any patents granted or filed?" The second asks about the contractors' experiences with PIER related to royalty payments and processes.

In addition, the Energy Commission has taken other actions to address the possibility that it is not collecting all PIER royalty payments. The research deputy explained that her division conducted training in July 2011 for all contract managers to reiterate their responsibility to go over contractors' obligations regarding royalties at contract close-out meetings. She also stated the division is initiating a request for proposal for a contract to survey the marketplace to identify companies that should be paying royalties but have not contacted the division on their own initiative. Further, the deputy director for the Administrative Services Division told us in late September 2011 that an Energy Commission internal auditor will review royalty payments for accuracy. He also noted that the Energy Commission has an existing contract with the Controller's Office to conduct expenditure audits of PIER agreements and is working to expand the audits to include royalty payments. However,

both of these efforts were still in the planning stage during our fieldwork, and the Energy Commission had yet to verify the accuracy of any royalty payments.

Owning intellectual property can result in benefits in addition to revenue from licensing it. For example, a Caltrans deputy attorney explained that owning its intellectual property enables Caltrans to reduce its contract costs because it can allow its contractors to use the intellectual property at little or no cost, eliminating third-party fees contractors must otherwise pay. The deputy attorney also explained that retaining its intellectual property allows Caltrans to easily modify or improve it.

Owning intellectual property can result in benefits in addition to revenue from licensing it—Caltrans believes it reduces contract costs by allowing its contractors to use its intellectual property, which eliminates third-party fees contractors must otherwise pay.

The Energy Commission and Health Care Services also identified ways in which their intellectual property benefits the public. The research deputy at the Energy Commission directed us to the 2010 PIER annual report, which states that PIER research has created new jobs in a variety of ways. Because PIER contractors own the intellectual property funded by PIER, they can commercialize it, which the annual report noted has led to the creation of new companies or new lines of business in existing companies. Health Care Services' staff counsel stated that the agency makes much of its intellectual property, including various reports and data, available to the public. For example, these items could be used for research purposes.

Two of the State Agencies Reviewed Took Actions to Stop Infringement of Their Intellectual Property

Of the four state agencies we reviewed, Caltrans and Health Care Services reported taking actions against intellectual property rights infringement in the last five years, as previously shown in Table 4. Infringement occurs when a party's intellectual property rights are violated through the unauthorized use of a patented, copyrighted, or trademarked item. For example, a company may commit trademark infringement by displaying a state agency's logo in its advertising without that agency's permission. Caltrans and Health Care Services told us that in response to intellectual property infringement, they had each made phone calls and sent letters. A Caltrans deputy attorney estimated that in the last five years Caltrans had made 60 phone calls and sent 30 cease and desist letters in attempts to stop infringement against the agency's intellectual property rights.

Neither the Energy Commission nor Food and Ag reported they had faced instances in which they had to protect against infringement on their intellectual property in the last five years. The Energy Commission did take steps to prevent a company from

registering a trademark for the term *Home Energy Rating System*. A staff counsel stated that state law requires the Energy Commission to implement a Home Energy Rating System program, and that if an outside entity had exclusive rights to the term, the Energy Commission would not be able to carry out its statutory mandate. We describe the four agencies' activities related to guarding against infringement in more detail in Appendix A.

UC's Patent Policy May Have Only Limited Applicability to State Agencies

The audit committee requested that we identify best practices that California's research universities use to manage and protect their intellectual property. To meet this request, we focused on UC. One significant aspect of UC's mission is to ensure that the results of its research are made available for public use and benefit.

University of California Patent Licensing and Invention Activity Fiscal Year 2009–10

The University of California (UC) disclosed the following for its 10 campuses:

• Patents issued	297
• Licensing income	$125.3 million
• Inventions	1,565

Overall, UC reports that it has received more United States patents than any other university in the world.

Source: UC, 2010 Technology Transfer Annual Report.

It accomplishes this through its patent policy and related processes, which it designed to comply with amendments to the Patent and Trademark Act, commonly known as the Bayh-Dole Act. The Bayh-Dole Act permits universities, nonprofit organizations, and small businesses to retain ownership of the inventions they create using federal funds. If a university, such as UC, elects to retain ownership of a federally funded invention, the Bayh-Dole Act requires, among other things, that it seek a patent and report to the federal government any efforts to utilize the invention. In this context, to *utilize* means to commercialize by bringing the invention to the marketplace so it can benefit the public. The text box highlights UC's recent patent activity.

The UC patent policy applies not only to federally funded UC inventions but also to inventions UC develops using state or private funds. The UC patent policy requires employees to report potentially patentable inventions, and if patents are pursued, to assign all rights to such inventions and patents to UC, with certain limited exceptions. Through its technology transfer program, UC enters into licensing agreements with third parties who develop and commercialize the patented inventions, thus providing a mechanism for transferring research results to the public for its benefit. The UC receives payment in the form of royalties, which it uses to further additional research and to administer the patent program.

The specific provisions of UC's policy may have only limited applicability to state agencies because not all state agencies engage in research that might result in patentable inventions. In fact, our summary in Appendix B indicates that there are currently only 31 state-owned patents. Nonetheless, state agencies that do conduct research through contract can adopt a Bayh-Dole model, whether or not they receive federal funds. For example, as discussed earlier, the PIER program funds energy research with the goal of bringing reliable energy services and products to the marketplace. PIER reflects a Bayh-Dole approach in the way it creates a mechanism for putting an invention to use. Specifically, if applicable, the contractor is required to prepare a technology transfer plan that explains how it will make the knowledge gained in the project available to the public, as well as a Production Readiness Plan to determine the steps that will lead to the manufacture or commercialization of the project's results. If the contractor fails to apply for a patent within six months or to take effective steps to achieve practical application of an invention, it forfeits to the Energy Commission all rights to an invention. We discuss PIER program contracts further in Appendix A.

Although the specific provisions of UC's policy may have limited applicability, the decision-making model reflected in UC's intellectual property policies is a best practice that the State could adopt. UC's intellectual property policies provide systemwide guidance but leave certain decisions to the respective campuses. The patent policy gives the UC Office of the President ultimate responsibility for all matters related to patents with which UC is concerned, but at the same time allows individual campuses to decide issues such as whether or not to file a patent application and how to approach licensing. Similarly, with respect to trademarks, the UC Office of the President provides systemwide guidance on the use of UC's name and yet leaves the decision as to whether to protect any particular campus-related mark or slogan to the respective campuses. For example, campuses may establish local policies on the use of their names and seals. Finally, UC's copyright policy specifies when copyright ownership resides with UC and when it resides with faculty. Overall, UC's intellectual property policy model provides consistent guidance across the system yet gives individual campuses the ability to make certain specific decisions at their respective campuses. This delegated decision-making model is one that the State could adapt to meet its specific needs.

Overall, UC's intellectual property policy model provides consistent guidance across the system yet gives individual campuses the ability to make certain specific decisions at their respective campuses.

Developing an Effective Policy for Managing Intellectual Property Requires Many Considerations

As discussed, the fact that more than half of the state agencies we surveyed would like more guidance regarding intellectual property indicates that there is a need for the State to provide this information. These agencies often responded that they desired

the State to provide general administration policy for managing and protecting intellectual property and guidance for deciding whether to protect products as intellectual property. At the same time, establishing a formal policy poses a number of challenges, and in the past, the Legislature has not been successful in passing legislation related to the State's management of intellectual property. To move forward, the State will need to clearly articulate the goals of any policies related to intellectual property and ensure that any guidelines it puts into place fully reflect the varying needs of the many agencies in the State. Further, for this effort to be successful, we believe that the governor, to whom most state agencies report, also needs to be involved.

First and foremost, an effective policy would educate state agencies on their intellectual property rights. An effective policy should provide guidance to state agencies that would enable them to identify when potential intellectual property may exist and give them specific information on intellectual property protections. Although useful to all agencies, this information may be especially useful to those that reported they had no intellectual property. Of the 89 agencies we surveyed that indicated owning no intellectual property, 30 percent indicated they wanted guidance specifically on identifying employee or contractor products that could be potential intellectual property and 29 percent wanted guidance for deciding whether to protect those products.[7]

An effective policy for managing intellectual property would need to be flexible and take into account the fact that state agencies perform different functions and work with different types of intellectual property.

Moreover, an effective policy for managing intellectual property would need to be flexible and take into account the fact that state agencies perform different functions and work with different types of intellectual property. A state entity that conducts research and development may need policies and procedures for identifying potentially patentable work and for deciding whether to seek a patent. Similarly, an agency that uses a special mark or slogan to represent a program or service may wish to have policies and procedures to protect that mark or slogan as a trademark. A state agency or department that produces published written works, such as maps, books, or reports, may wish to have policies in place regarding copyright protection. We saw this same pattern—where the nature of the work an agency performs can have an important impact on its approach to the management of intellectual property—in our 2000 audit report.

Public policy considerations suggest that an effective policy would put intellectual property created or funded by the State to use in ways that provide the broadest possible public benefit. When inventions are commercialized, the public benefits because

[7] As permitted by our survey, some agencies provided both reasons.

the inventions are put into use. However, commercialization is not the only way to achieve public benefit. For example, another way the State can ensure that the public benefits from state-owned intellectual property is by placing it into the public domain free of cost. Although the State would not earn revenue, the public would benefit because anyone could put the work into use without first having to acquire a license or other rights to the work. Although revenue generation can be one benefit of a statewide intellectual property policy, it is not the only benefit, nor should it be the driving force behind developing a policy.

When commercialization is an appropriate approach, state agencies could benefit from additional guidance for identifying potentially valuable property and on effectively commercializing it. At the same time, it is important that policymakers have realistic expectations about the potential revenue the State's intellectual property can generate. For example, Caltrans' CT Bridge software is used in bridge design, meaning the potential market for the software is likely limited to other state and local transportation departments and their contractors. As we discuss further in Appendix A, Caltrans sold only 13 licenses for the CT Bridge software, for total revenue of $32,500 in the two years for which records are available. Private entities may have little need for intellectual property like the CT Bridge software, where the application of the property is closely related to the specific activities of the agency. The State's potential sales and licensing revenue from intellectual property may be insignificant when demand for its property is limited.

An effective policy must balance the State's interest in protecting government publications through the use of a copyright with the public's right of access to government records.

An effective intellectual property policy would also take into account the need to balance the State's interest in protecting government publications through the use of a copyright with the public's right of access to government records. Copyrights account for the vast majority of state-owned intellectual property. However, copyrighting government publications can be controversial; given that taxpayers already paid once to support the creation of the written work, one can argue that they should not have to pay royalties to use or reproduce the written work. Moreover, the California Public Records Act and the California Constitution promote transparency in government and generally require that the State make public records readily available to the public upon request. Any state policy related to the copyrighting of state written works would need to take these factors into consideration.

Further, an effective policy would need to address the degree to which the State should retain an interest in any intellectual property its contractors develop. As previously discussed, General Services established standard language for information technology contracts that provides the State with government purpose rights, which ensure that the State always has the ability to use

any intellectual property developed under contract. However, the information technology contract language also allows state agencies the flexibility to seek ownership of intellectual property if they wish to do so. The language General Services developed for contracts that are not related to information technology does not address intellectual property rights at all. Thus, for both types of agreements, state agencies must make decisions about what intellectual property rights, if any, the State should secure. The four agencies we visited addressed intellectual property rights in a variety of ways in their contracts, which we discuss further in Appendix A. An effective policy would help state agencies identify which types of contracts are likely to result in intellectual property and establish the minimum rights the State should retain in property it funds.

Finally, policymakers may find it valuable to understand on an ongoing basis the amount and types of intellectual property the State owns. The State does not track the amount of intellectual property it owns. In fact, to provide a summary of state-owned intellectual property, we had to conduct a survey of state agencies and consider other sources of information, as discussed in Appendix B. The Legislature and governor should consider whether establishing a mechanism to track the State's intellectual property would be beneficial.

By providing guidance to state agencies, the State can enable them to use their intellectual property in ways that best serve the public. We believe that statewide policy related to this issue should not be burdensome or inflexible. Rather, it should be informative and reflect the characteristics we identify in this section. It may be that the State would be best served if its role is primarily to educate the agencies, allowing them to establish individual policies that fit within a broad framework of statewide guidelines. If the State does not act, it will be missing an opportunity to help agencies make informed, thoughtful decisions about their intellectual property.

Recommendations

Caltrans, the Energy Commission, Food and Ag, and Health Care Services should put in writing those policies and procedures related to intellectual property that they believe are necessary and appropriate to enable their staff to identify, manage, and protect their intellectual property.

Food and Ag should ensure that it has developed intellectual property terms and conditions that are appropriate for the types of agreements into which its contracts office enters.

The Energy Commission should take the necessary steps to strengthen its royalty process to ensure that it receives the proper amounts from all contractors that owe it royalties.

The Legislature and the governor should consider developing a statewide intellectual property policy that educates state agencies on their intellectual property rights without creating an administrative burden. Specifically, this policy should account for the following:

- Provide guidance to agencies that will give them the understanding necessary to identify when potential intellectual property may exist, including when contractors' work may result in intellectual property, and that will provide them with specific information on intellectual property protections.

- Recognize that not all agencies have the same needs and that a one-size-fits-all approach may not be feasible. An effective policy should provide agencies with flexibility regarding ownership of intellectual property rights.

- Have as one of its primary goals the promotion of the greatest possible public benefit from intellectual property the State creates or funds.

- Recognize that although additional revenue may be a potential benefit of the State's intellectual property, it is not the only benefit, nor should it be the driving force behind a state policy. However, the policy should provide guidance for identifying valuable intellectual property and how to commercialize it, if appropriate.

- Establish the minimum rights agencies should obtain for intellectual property developed by its contractors.

If the Legislature and governor believe it would be valuable to understand the amount of intellectual property the State holds on an ongoing basis, they should consider establishing a mechanism to track the State's intellectual property.

We conducted this audit under the authority vested in the California State Auditor by Section 8543 et seq. of the California Government Code and according to 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 specified in the scope section of the report. We believe that the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

Respectfully submitted,

Elaine M. Howle

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Appendix A

THE STATE AGENCIES WE REVIEWED EMPLOY A VARIETY OF POLICIES AND PRACTICES FOR MANAGING AND PROTECTING THEIR INTELLECTUAL PROPERTY

To understand how agencies manage their intellectual property in the absence of statewide guidance, we selected four state agencies that vary widely in their missions and the type of intellectual property they produce. In this appendix, we describe each agency's intellectual property policies and practices, the benefits the agencies associate with their intellectual property, and their efforts, if any, to prevent infringement.

The California Department of Transportation Asserts Its Intellectual Property Rights and Has Attempted to Commercialize Its Intellectual Property

The mission of the California Department of Transportation (Caltrans) is to improve mobility across the State. Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides intercity rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. In addition, to fulfill its mission Caltrans engages in research and development activities, which can result in works that can be protected as intellectual property. For example, if a Caltrans division performs research that yields products or process improvements, and if these products or improvements meet the legal requirements for patent protection, Caltrans may obtain patents. The text box shows the intellectual property Caltrans owns.

California Department of Transportation's Intellectual Property

- Copyrights 72
- Trademarks 3
- Patents 5
- Trade secrets 0

Source: Bureau of State Audits' analysis of the California Department of Transportation's survey response.

Although It Is Developing Written Policies and Procedures, Caltrans' Current Intellectual Property Practices Are Mostly Informal

Caltrans' written intellectual property policies and procedures are limited to its trademarks. Specifically, in February 2008, Caltrans issued a policy that states that the agency's logos are registered trademarks and that only official agency use or authorized endorsement of the trademarks is appropriate. A deputy attorney explained that formal protection limits the ability of third parties to use Caltrans' trademarks. She explained that this protects Caltrans' integrity when, for example, someone uses the Caltrans logo inappropriately or in a manner that reflects inappropriately on Caltrans. By protecting its trademarks, Caltrans can prevent the appearance of a connection between it and other entities, which can help protect Caltrans' image and reputation.

Caltrans does not currently have a written policy regarding copyrights, patents, or trade secrets.[8] However, according to the former chief of Caltrans' Division of Research and Innovation, Caltrans' management decided in July 2011 that Caltrans would develop a formal policy for its intellectual property because our audit brought attention to intellectual property issues within the agency. In October 2011 the former chief provided an update on its progress, stating that Caltrans had formed a committee that had reviewed the policies of other states and that it was in the process of researching the financial impact and legal aspects of an intellectual property policy. He also stated that the final policy will include all aspects of intellectual property, including copyrights, trademarks, patents, and trade secrets. The former chief commented that it would be several months before the committee finalized its recommendations to Caltrans' upper management.

Although Caltrans has yet to develop its formal intellectual property policy, the deputy attorney stated that Caltrans' practice is to retain ownership of the intellectual property its employees develop. For example, Caltrans owns the patent to a device developed by two Caltrans engineers that reduces the amount of sound and other energy produced by underwater construction projects. The deputy attorney stated that Caltrans' practice is for employees or their supervisors to identify potential intellectual property interests while developing a product and to determine whether formal protection such as a patent is needed. She explained that when determining whether to formally protect intellectual property, Caltrans considers the likelihood that the agency will itself face infringement litigation, which is more likely if similar intellectual property already exists. Caltrans must demonstrate that its product or process is unique, or it may not be able to receive patent protection, and it may even risk litigation if the patent holder for a similar product or process sues Caltrans for infringement.

Caltrans' Standard Contract Language Varies in How It Assigns Intellectual Property Rights

Caltrans' standard contract language has different intellectual property provisions based on the type of contract. For example, Caltrans retains all intellectual property produced according to the provisions of its contracts with consultants and other state agencies. The deputy attorney explained that the language is intended to lower contract costs. She stated that when Caltrans keeps ownership of its intellectual property, it can pass that property onto its contractors at little to no cost, eliminating third-party fees contractors otherwise might pay and thus reducing contract costs. When Caltrans owns the intellectual property a contractor

[8] The deputy attorney shared with us patent guidelines she stated she prepared five years ago and distributed to Caltrans' division chiefs. The guidelines require each Caltrans employee to sign an acknowledgement that they have received and understood the guidelines. However, Caltrans could not provide evidence that the guidelines were in use.

needs, the contractor may not have to pay Caltrans for the use of it, thereby reducing or eliminating contract costs. However, Caltrans was unable to provide any analysis or other evidence that its approach reduces contract costs. The deputy attorney identified other benefits to Caltrans owning and protecting its intellectual property; she stated that owning and protecting intellectual property rights allows Caltrans to easily modify or improve on its work, that it prevents private entities from profiting from taxpayer-funded research, and that it protects Caltrans' integrity.

On the other hand, Caltrans' current master contract with the University of California (UC) for work not related to information technology assigns this intellectual property to UC, although Caltrans retains a perpetual, royalty-free license to use the property. Caltrans' assistant chief counsel for contracts (assistant chief counsel) explained that Caltrans negotiated to give UC intellectual property ownership rights in exchange for a lower overhead rate. The overhead rate refers to costs, such as building use or administrative support, that are not directly assignable to any one project. Caltrans' agreement with UC establishes an overhead rate of 17.5 percent, which is generally lower than the overhead rates the individual campuses publish. In contracts with UC for work related to information technology, Caltrans retains the intellectual property produced.

Caltrans Has Generated Modest Revenue From Its Intellectual Property

The assistant chief counsel identified two items of intellectual property that Caltrans owns and has licensed for revenue: the Balsi Beam and the CT Bridge software. The Balsi Beam is a mobile work zone protection device—a safety device that provides a physical barrier between road maintenance crews and moving traffic. Caltrans owns two patents to the Balsi Beam: one registered in October 2006 and the other, a continuation patent, in August 2008. In 2000 Caltrans copyrighted the CT Bridge software, which is used in bridge design.

Caltrans has generated modest revenue from its intellectual property. Available records indicate the combined licensing revenue from the Balsi Beam and the CT Bridge software is $51,500. Caltrans attempted to commercialize the Balsi Beam to increase its availability but was not successful. Through a request for proposal, Caltrans offered private companies an opportunity to manufacture and market the Balsi Beam. However, it abandoned this effort when the interested companies requested changes to the license agreement that Caltrans found unacceptable. For example, Caltrans concluded it could not change the indemnity clause in the license agreement because of state contracting requirements. The indemnity clause indicated that Caltrans does not take responsibility for the performance of the Balsi Beam, which meant

that the private companies could be found liable if the device failed. Because Caltrans has not mass-produced the Balsi Beam or successfully licensed its mass production, the device has not been widely distributed. In fact, as of June 2011, Caltrans had sold just one license, to the North Texas Tollway Authority, for $19,000. The license allows the North Texas Tollway Authority to manufacture one Balsi Beam.

Caltrans' records for the CT Bridge software indicate that Caltrans derived limited revenue from licensing the software. Caltrans' Publications Unit does not track the sales of individual items, such as manuals and software, but the available invoices as of June 2011 indicate Caltrans sold 13 CT Bridge software licenses between August 2009 and May 2011, for total revenue of $32,500. Caltrans sells licenses to the CT Bridge software for $2,500 per user.

Caltrans Has Made Efforts to Stop Infringement on Its Intellectual Property

A deputy attorney at Caltrans estimated that in the last five years Caltrans had made 60 phone calls and sent 30 cease and desist letters in attempts to stop infringement on the agency's intellectual property. For example, Caltrans sent a cease and desist letter to a company that produced a training video showing a Caltrans employee and vehicle. According to communications between Caltrans and the company, Caltrans' logo was visible on both. In the letter, Caltrans explained to the company that this was an inappropriate use of Caltrans' registered trademarks. In response, the company agreed to blur the Caltrans logo appearing on the vehicle and on the shirt of the employee. The deputy attorney explained that Caltrans has been successful in all instances in which it has made attempts to stop infringement.

The California Energy Commission Manages Its Intellectual Property Through Informal Practices and Receives Royalties From Intellectual Property Resulting From Research It Funds

California Energy Commission's Intellectual Property

- Copyrights 90
- Trademarks 5
- Patents 8
- Trade secrets 0

Source: Bureau of State Audits' analysis of the California Energy Commission's survey response.

The California Energy Commission (Energy Commission) is the State's primary energy policy and planning agency. The Energy Commission's responsibilities include planning for and directing the State's response to energy emergencies, forecasting future energy needs, keeping historical energy data, and promoting energy efficiency by setting the State's appliance and building efficiency standards and working with local government to enforce those standards. In the past, the Energy Commission has copyrighted written energy education materials. In addition, it patented one staff member's inventions. The text box shows the intellectual property the Energy Commission owns.

The Energy Commission funds the development of intellectual property through the energy research projects its contractors undertake. Specifically, the Energy Commission operates the Public Interest Energy Research (PIER) program, which was created when an amendment to the Public Utilities Code in 1996 shifted the administration of public interest energy-related research from California's investor-owned utilities to state government. PIER funds energy research and development that it believes will improve the quality of life in California by bringing environmentally safe, affordable, and reliable energy services and products to the marketplace. PIER awards most funds to energy researchers through competitive solicitations and interagency agreements. For example, PIER funded a research project that developed a Web-based energy analysis service to help architects and designers optimize energy efficiency in buildings. Between fiscal years 2008–09 and 2010–11, the Energy Commission reported that it entered into 143 PIER contracts and awarded $133 million in research funds.

Other Than Its Contract Language, the Energy Commission Relies on Informal Intellectual Property Practices

The Energy Commission has not established written intellectual property policies for managing and protecting the copyrights, patents, and trademarks it develops internally. Its Web site does address intellectual property to a limited extent in that it includes a statement that the Energy Commission's logo may not be used without permission. But on the whole, the Energy Commission manages its intellectual property through informal practices. According to an assistant chief counsel, if the Energy Commission staff and management deem any materials to be worthy of copyright or trademark protection, they work with the legal office to take the necessary steps to protect the materials. In addition, he explained that if staff believe they have developed potentially patentable items, they inform the legal office.

The assistant chief counsel explained that the Energy Commission does not have written policies for its intellectual property because it has not developed enough patents to warrant a written policy. Further, he explained that the Energy Commission makes the majority of the copyrighted work it develops internally available to the public, which he believed might be the reason it has yet to develop a written copyright policy. However, without written policies and procedures, the Energy Commission risks not identifying and protecting its intellectual property because staff lack knowledge of its practices. The assistant chief counsel acknowledged that a written policy regarding copyrights and trademarks might be useful to teach staff and assist in identifying intellectual property for which the Energy Commission should pursue formal

protection. Further, he stated that if staff start developing patents again, the Energy Commission should look into developing an appropriate written policy.

The Energy Commission addresses intellectual property developed by contractors in its contract language, which assigns intellectual property rights. Its standard contract language grants ownership to the contractor but states that the Energy Commission will retain a license to use the intellectual property and that it can publish, create derivative works, and distribute the intellectual property to any party. A senior staff counsel explained that its standard contract language is written this way because the Energy Commission usually does not need to own the intellectual property but rather needs to protect the right to use it.

We also reviewed the contract language the Energy Commission uses in its PIER contracts. Since PIER is intended to promote commercialization of inventions, the contract language states that the contractor retains property rights for any intellectual property it develops. PIER contractors are generally universities, private corporations, and energy companies that are understood to have the capacity and knowledge to commercialize, or put into use, inventions or other intellectual property. These entities are likely to be better equipped than the State to commercialize inventions. Moreover, the contract language makes them responsible for preparing Production Readiness Plans to determine the steps leading to the manufacture or commercialization of projects' results.

However, state law requires the Energy Commission to retain for the State an equitable share of rights in intellectual property and in any resulting benefits. The law further allows the Energy Commission to determine the State's share. As a result, PIER contract language gives the State a perpetual, royalty-free license to use intellectual property resulting from its research projects. It also generally requires the contractor to pay 1.5 percent in royalties to the Energy Commission on the sale of all project-related products. We note in the Audit Results our concerns with the Energy Commission's process for ensuring it collects all royalties it is owed.

In addition to economic benefits, the Energy Commission identified ways it believes PIER's intellectual property has benefited the public. For example, the deputy director for the Energy Research and Development Division directed us to the 2010 PIER annual report, which states that PIER research has created new jobs in a variety of ways. Because PIER contractors own the intellectual property funded by PIER, they can then commercialize it, which the annual report noted leads to the creation of new companies or new lines of business in existing companies.

The Energy Commission Reported No Infringement Issues

Senior staff counsel identified no instances during the past five years in which the Energy Commission had to protect against infringement of its intellectual property. However, it did file letters of protest with the federal Patent and Trademark Office related to two separate trademark applications filed by one entity. According to senior staff counsel, the Energy Commission's primary goal in these letters was to prevent the entity from gaining exclusive rights to use the term *Home Energy Rating System*. She explained that the Energy Commission's statutes and regulations require the Energy Commission to implement a Home Energy Rating System program. She stated that if an outside entity had an exclusive right to use this term, the Energy Commission would not be able to carry out its statutory mandate. She stated that after the Energy Commission filed its letters of protest, its intellectual property counsel made phone calls to the entity's counsel regarding the letters. She explained that the letters of protest were finally successful, and the entity abandoned the trademark applications.

Because of the Nature of the Work It Produces, the Department of Health Care Services Generally Does Not Believe It Needs Written Intellectual Property Policies

The mission of the Department of Health Care Services (Health Care Services) is to preserve and improve the health status of all Californians. Health Care Services finances and administers a number of individual health care service delivery programs, including the California Medical Assistance Program, also known as Medi-Cal. To achieve its mission, Health Care Services produces a number of copyrightable items, including brochures, other publications, and data compilations. The text box shows the intellectual property Health Care Services owns.

Department of Health Care Services' Intellectual Property

- Copyrights 2,135
- Trademarks 18
- Patents 0
- Trade secrets 42

Source: Bureau of State Audits' analysis of the Department of Health Care Services' survey response.

Health Care Services has some written policies and informal practices that pertain to its trademarks and trade secrets. Health Care Services' administrative manual prohibits employees from using the agency's symbols, including its trademarks, for personal gain or advantage and from lending symbols to outside entities unless authorized by law. According to a staff counsel, Health Care Services also has an informal practice of prohibiting third parties from using its name or logo. The staff counsel stated that Medi-Cal providers often want to use the agency's name or logo to promote their services, and the informal practice helps ensure that Health Care Services does not appear to endorse any particular entity.

Further, Health Care Services' administrative manual prohibits employees from divulging confidential departmental information or records unless authorized to do so. Confidential information includes the agency's trade secrets. Although Health Care Services does not have a written policy that addresses what it considers trade secrets, it did identify its various audit processes as trade secrets when preparing its response to our survey.[9] For example, the staff counsel stated that Health Care Services' methodology for selecting Medi-Cal providers to audit was reported on the survey as a trade secret. She explained that if this information were available publicly, providers would know in advance when they were going to be audited and might take steps to avoid being selected.

However, Health Care Services lacks a policy for internally developed items that it could copyright or patent. As shown previously in the text box, Health Care Services indicated it owns more than 2,100 copyrights and no patents. Nearly all of its copyrights are unregistered. According to a staff counsel, Health Care Services makes nearly all of its publications and data compilations available to the public and therefore it believes control of the copyrights is not necessary. She also stated that Health Care Services does not need a copyright or patent policy because it does not believe it creates commercially valuable intellectual property. The chief deputy director noted that Health Care Services would not be able to license or sell its intellectual property.

Health Care Services has adopted standard contract language related to the intellectual property its contractors develop. Specifically, Health Care Services' agreements with private entities, UC, and the California State University state that all items the contractors develop are Health Care Services' property. For example, any reports, data, or other deliverables that the contractors produce become Health Care Services' property.[10] The staff counsel explained that Health Care Services generally retains ownership of contract deliverables to ensure the public has access to the information. One reason sometimes offered for allowing contractors to own the intellectual property is that doing so may secure lower contract costs. However, the staff counsel stated that she did not believe Health Care Services' decision to retain the rights to its intellectual property had increased its contract costs. She explained that contractors had not offered to lower their bid prices in exchange for ownership of the intellectual property.

[9] In a subsequent discussion, Health Care Services indicated that the materials it identified are confidential and protected by the official information privilege, but they may not meet the legal definition of trade secrets.

[10] Health Care Services' contracts with private entities provide an option for the agency to accept licenses for items developed under the contract instead of owning them. However, Health Care Services indicated that it had no record of contracts in which licenses were accepted in lieu of ownership.

An example of Health Care Services' stance on owning intellectual property produced through a contract involves a $1.7 billion agreement it entered into in March 2010 with ACS State Healthcare for the operation and replacement of the California Medicaid Management Information System (CA-MMIS). In addition to Health Care Services' standard language, this contract included specific language regarding software development. The contract states that Health Care Services owns any software related to CA-MMIS developed by the contractor. According to the staff counsel, Health Care Services owns the software code developed in information technology contracts to ensure it can protect confidential medical information.

We inquired about Health Care Services' efforts to stop infringement. Health Care Services indicated that in the last five years it had made three telephone calls and sent one cease and desist letter to stop infringement on its intellectual property. Specifically, the cease and desist letter demanded that a company stop using the term *Medi-Cal* on envelopes for its billing notices to prevent the appearance of an affiliation between the State and the company. The letter also demanded that the company stop disseminating copies of pages from the Medi-Cal Web site. In all four cases of infringement, Health Care Services indicated that its efforts successfully resolved the problems.

The Department of Food and Agriculture Has No Written Intellectual Property Policies

The Department of Food and Agriculture (Food and Ag) protects and promotes California's multibillion-dollar agriculture industry. The goals of Food and Ag include ensuring that only safe and quality food reaches the consumer, protecting against the invasion of exotic pests and diseases, and promoting California agriculture and food products. Food and Ag creates intellectual property, often in the form of logos and slogans, to promote California agriculture and public awareness. The text box shows the intellectual property Food and Ag owns. Food and Ag also oversees the Pierce's Disease Control Program (Pierce's program), which is designed to minimize the statewide impact of Pierce's disease, caused by a bacterium that kills grapevines. The Legislature created the Pierce's program in 2000 to fund research and other activities related to Pierce's disease. The research that the Pierce's program funds has the potential to result in patentable inventions that may minimize or eliminate Pierce's disease.

Department of Food and Agriculture's Intellectual Property

- Copyrights 10
- Trademarks 11
- Patents 0
- Trade secrets 0

Source: Bureau of State Audits' analysis of the Department of Food and Agriculture's survey response.

Food and Ag has only informal practices related to its intellectual property. The director of the Administrative Services Division stated that Food and Ag does not have staff with the expertise needed to develop formal intellectual property policies and procedures. Further, she noted that Food and Ag has been counting on guidance from a statewide policy to develop procedures for using and protecting its intellectual policy. When we inquired with Food and Ag as to any informal practices it has in place, the director of the Administrative Services Division identified two. If staff create work that has the potential to be trademarked or copyrighted, they must contact the legal office for guidance on how to treat the intellectual property. In addition, Food and Ag has established an expenditure object code that identifies purchases of intellectual property; the accounting department uses this code to ensure that it capitalizes all intellectual property worth $5,000 or more. We also asked whether Food and Ag has intellectual property terms and conditions for its contracts, and we discuss our concerns with Food and Ag's contract language in the Audit Results.

In contrast, Food and Ag's Pierce's program has taken steps to include intellectual property terms and conditions in its research contracts. The Pierce's program contracts for research that could result in intellectual property, such as patentable inventions that may minimize or eliminate Pierce's disease. The contract language states that the contractor will own any intellectual property it develops, that it is responsible for making its research available to the public, and that it will commercialize any inventions. To establish this contract language, the Pierce's program reached out to a nonprofit initiative, the Public Intellectual Property Resource for Agriculture (PIPRA). Centered at UC Davis, PIPRA offers intellectual property rights and commercialization strategy services to the public sector. Food and Ag began using these contract intellectual property terms and conditions in the Pierce's program in 2009.

Neither Food and Ag in general nor the Pierce's program specifically derives revenue from intellectual property. However, Food and Ag has identified benefits other than revenue that have resulted from its intellectual property. One benefit that the director of the Administrative Services Division identified is public awareness of Food and Ag's programs, such as the Don't Pack a Pest campaign that Food and Ag developed to encourage people not to bring fruits and vegetables from other states into California. Further, a special assistant explained that the research conducted through the Pierce's program is furthering scientific knowledge. He stated that the new information researchers are obtaining can potentially be used in other crop and plant systems to better manage and solve future problems.

Food and Ag told us that in the past five years it had faced no instances in which it had to protect against intellectual property infringement. Food and Ag's general counsel stated that the legal office would determine on a case-by-case basis any action that it might take to protect against infringement of Food and Ag's intellectual property. The legal office would look at the available options and begin with the least aggressive, which would typically be a phone call or a cease and desist letter. Should those options fail to work, the legal office would take more drastic steps, including litigating the infringement.

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Appendix B

SUMMARY OF THE TYPES AND QUANTITIES OF INTELLECTUAL PROPERTY OWNED BY 211 STATE AGENCIES

The Joint Legislative Audit Committee (audit committee) requested that we provide a summary of state-owned intellectual property as part of this audit. In November 2000 the Bureau of State Audits issued a report titled *State-Owned Intellectual Property: Opportunities Exist for the State to Improve Administration of Its Copyrights, Trademarks, Patents, and Trade Secrets* (2000 audit report), we provided a similar summary, which we compiled primarily through the use of a survey. However, subsequent to that report, a new accounting requirement for financial statement reporting came into effect: Governmental Accounting Standards Board Statement 51 (GASB 51) requires the recording and reporting of intangible assets—which include intellectual property—for financial statement purposes. We considered whether we could use the information the State gathers for its financial statements in accordance with GASB 51 to meet the audit committee's request. We found that although the information the State records and reports under GASB 51 has value for financial statement purposes, it does not provide a means for summarizing state-owned intellectual property, a purpose for which it was not intended. GASB 51 took effect for periods beginning after June 15, 2009, and it does not require retroactive reporting of internally generated intellectual property. Consequently, not all state-owned intellectual property is required to be reported. In addition, the State gathers information in a category that combines copyrights, patents, and trademarks, so this information is not sufficiently detailed to determine the amount of each type of intellectual property.

Because we could not use GASB 51 information to summarize state-owned intellectual property, we again conducted a survey of state agencies. We contacted 228 state agencies, and 211 responded. The state agencies surveyed reported a dramatic overall increase in the quantities of state-owned intellectual property since our 2000 audit report. Our 2000 audit report showed that state agencies owned more than 113,000 items of intellectual property; in our latest survey, agencies reported owning more than nine million items. In both 2000 and 2011, copyrights accounted for at least 99 percent of the State's total intellectual property.

Two agencies, the California State Parks (State Parks) and the Department of Public Health (Public Health), reported owning 97 percent of the total intellectual property reported in our latest survey, most of which was unregistered copyrights. In 2000 State Parks reported owning at least 100,000 unregistered

copyrights; in the current survey, it reported 3.2 million. According to the State Parks senior staff counsel, several factors were responsible for the significant increase in the numbers of copyrights State Parks owns. She stated that the Internet allows the agency to publish and track copyrights more easily now than in the past, and she also explained that agency personnel are now more educated regarding intellectual property. Public Health was unable to determine the reason for the increase in its state-owned intellectual property from 2000 to the present. According to an auditor at Public Health, the agency does not have the necessary records to determine the reason for the increase because Public Health was previously part of the Department of Health Services, which was split into two agencies in 2007. In 2000 the Department of Health Services reported owning 725 unregistered copyrights; in the current survey, Public Health reported 5.5 million.

State agencies cited the same two primary reasons for formally protecting state-owned intellectual property as in the 2000 audit report. In 2011, 85 percent of the state agencies that reported that they protect their intellectual property stated they do so to prevent unauthorized use, and 77 percent stated they do so to ensure control over the contents. The survey allowed agencies to select more than one reason for protecting their intellectual property.

Table B.1 presents the quantities of intellectual property owned by state agencies. We compiled the data from survey responses as well as databases at the federal Patent and Trademark Office and the federal Copyright Office. We also gathered data from registration records at the California Secretary of State's Office.[11] We found some differences between the quantities of state-owned intellectual property state agencies reported and the quantities recorded in other sources. For example, the California Department of Education reported owning no intellectual property; however, we found it had registered nearly 800 copyrights with the federal Copyright Office. When our search resulted in a higher quantity of intellectual property registered than reported by the agency, we generally used our search results in Table B.1. Conversely, when our search results yielded a lower quantity than reported, we used the agency's reported amounts because of the limitations inherent in the search process. We used footnotes to identify those agencies with survey responses that varied from the information we found through other sources.

When following up to resolve certain survey discrepancies, we learned that some state agencies reported estimates of their intellectual property. According to the State Parks senior staff counsel and the auditor at Public Health, the agencies collected and compiled data

[11] We performed a federal database search for those agencies that reported owning patents, registered copyrights, or registered trademarks in their 2011 survey. We also performed a search for agencies that had quantities of patents, registered copyrights, or registered trademarks in 2000 but did not report any in 2011.

from their divisions or programs, which consisted both of actual counts from inventory lists and of estimates. In addition, an assistant chief counsel from one of the four agencies we visited, the California Department of Transportation, explained that the agency's survey response for the quantity of unregistered copyrights owned was based on estimates. However, we do not know how many agencies statewide reported estimates. Consequently, Table B.1 provides a representation of state-owned intellectual property but cannot be viewed as a precise summary.

Table B.1
Summary of State-Owned Intellectual Property

	COPYRIGHTS		TRADEMARKS				
AGENCY	REGISTERED	UNREGISTERED	REGISTERED	UNREGISTERED	TRADE SECRETS	PATENTS	TOTALS
Accountancy, California Board of	0	6	0	4	0	0	**10**
Acupuncture, California Board of	0	0	0	0	0	0	**0**
Administrative Law, Office of	11*	2	0	0	0	0	**13**
Administrative Office of the Courts	0	0	0	0	0	0	**0**
African-American Museum, California	0	0	0	0	0	0	**0**
Aging, California Department of	0	0	1*	0	0	0	**1**
Agricultural Labor Relations Board	0	6	0	3	0	0	**9**
Air Resources Board	0	200,064	0	0	0	0	**200,064**
Alcohol and Drug Programs, Department of	0	50	4*	0	0	0	**54**
Alcoholic Beverage Control Appeals Board	0	2	0	0	0	0	**2**
Alcoholic Beverage Control, Department of	0	0	0	0	0	0	**0**
Alternative Energy and Advanced Transportation Authority, California	0	0	0	0	0	0	**0**
Appeals, Court of:							
First District	0	2	0	2	0	0	**4**
Second District	0	0	0	0	0	0	**0**
Third District	0	7	0	0	0	0	**7**
Fourth District, Division One	5	7	4	5	5	3	**29**
Fourth District, Division Two	0	0	0	0	0	0	**0**
Fourth District, Division Three	0	6	0	0	0	0	**6**
Fifth District	0	1	0	0	0	0	**1**
Sixth District	0	0	0	0	0	0	**0**
Architects Board, California	1	66	0	3	1	0	**71**
Athletic Commission, State	0	0	0	0	0	0	**0**
Audits, Bureau of State	0	0	0	2	0	0	**2**
Automotive Repair, Bureau of	0	47	0	4	0	0	**51**
Bar of California, State	207	145	20	0	0	0	**372**
Behavioral Sciences, Board of	2*	24	0	1	0	0	**27**
Boating and Waterways Commission	0	0	0	0	0	0	**0**

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AGENCY	COPYRIGHTS		TRADEMARKS		TRADE SECRETS	PATENTS	TOTALS
	REGISTERED	UNREGISTERED	REGISTERED	UNREGISTERED			
Boating and Waterways, Department of	28*	0	1*	1	0	0	**30**
Building Standards Commission, California	1*	11	0	0	0	0	**12**
Business, Transportation and Housing Agency	12	1	11	11	0	0	**35**
Child Support Services, Department of	0	1	0	0	0	0	**1**
Children and Families Commission	0	0	3	0	0	0	**3**
Chiropractic Examiners, Board of	0	0	0	0	0	0	**0**
Coachella Valley Mountains Conservancy	0	0	0	0	0	0	**0**
Coastal Commission, California	11	150	2	5	0	0	**168**
Coastal Conservancy, State	100	50	2	0	0	0	**152**
Colorado River Board of California	0	0	0	0	0	0	**0**
Commission on Aging, California	0	0	0	0	0	0	**0**
Commission on Uniform State Laws, California	0	0	0	0	0	0	**0**
Community Colleges, California	15*	100	1	100	0	0	**216**
Community Services and Development, Department of	1	50	0	0	0	0	**51**
Conservation Corps, California	0	0	0	0	0	0	**0**
Conservation, Department of	3*	3,150	3*	0	0	0	**3,156**
Consumer Affairs, Department of	10*	5,931	0	55	0	0	**5,996**
Contractors State License Board	3*	175	2	3	46	0	**229**
Corporations, Department of	0	0	3*	0	0	0	**3**
Corrections and Rehabilitation, California Department of	2*	2	0	2	0	0	**6**
Corrections Standards Authority	0	0	0	0	0	0	**0**
Court Reporters Board of California	0	0	0	0	0	0	**0**
Cultural and Historical Endowment, California	1	0	0	0	0	0	**1**
Debt and Investment Advisory Commission, California	0	0	0	0	0	0	**0**
Delta Stewardship Council	0	1	0	1	0	0	**2**
Dental Board of California	0	24	0	25	0	0	**49**
Dental Hygiene Committee of California	0	4	0	2	0	0	**6**
Developmental Disabilities, State Council on	0	5	0	5	0	0	**10**
Developmental Services, Department of	15	0	0	0	0	0	**15**
Economic Strategy Panel, California	0	129	0	5	0	0	**134**
Education, California Department of	783*	0	0	0	0	0	**783**
Educational Facilities Authority, California	0	0	0	0	0	0	**0**
Electronic and Appliance Repair, Home Furnishings, and Thermal Insulation, Bureau of	0	0	0	0	0	0	**0**
Emergency Management Agency, California	3*	0	0	2	0	0	**5**
Emergency Medical Services Authority	0	4	0	0	0	0	**4**
Employment Development Department	1*	0	5*	4	0	0	**10**
Employment Training Panel	0	12	0	10	0	0	**22**
Energy Commission, California	12	78	1*	4	0	8	**103**

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	REGISTERED	UNREGISTERED	REGISTERED	UNREGISTERED			
Environmental Health Hazard Assessment, Office of	0	15,000	0	1	0	0	**15,001**
Environmental Protection Agency, California	85	8,815	1*	12	0	0	**8,913**
Equalization, Board of	0	0	0	0	0	0	**0**
Exposition and State Fair, California	0	0	3	4	0	0	**7**
Fair Employment and Housing Commission	1*	0	0	0	0	0	**1**
Fair Employment and Housing, Department of	0	5	0	5	0	0	**10**
Financial Institutions, Department of	0	0	0	0	0	0	**0**
Fire Marshal, California State	0	125	0	5	0	0	**130**
Fish and Game Commission	0	0	0	0	0	0	**0**
Fish and Game, Department of	2*	0	0	0	0	0	**2**
Food and Agriculture, California Department of†	1*	9*	1*	10	0	0	**21**
Food and Agriculture, State Board of	0	0	0	0	0	0	**0**
Forestry and Fire Protection, California Department of	2*	125	1	5	0	0	**133**
Forestry and Fire Protection, State Board of	0	0	0	0	0	0	**0**
Franchise Tax Board	0	0	0	0	0	0	**0**
Gambling Control Commission, California	0	0	0	0	0	0	**0**
General Services, Department of	1	1	2*	4	0	0	**8**
Governor, Office of the	0	0	0	0	0	0	**0**
Guide Dogs for the Blind, State Board of	0	0	0	0	0	0	**0**
Habeas Corpus Resource Center	0	0	0	0	0	0	**0**
Health and Human Services Agency	0	8	1	2	0	0	**11**
Health Care Services, Department of	9*	2,126	1	17	42	0	**2,195**
Health Facilities Financing Authority, California	0	0	0	0	0	0	**0**
Highway Patrol, California	9	0	9	0	0	0	**18**
High-Speed Rail Authority, California	0	0	0	0	0	0	**0**
Horse Racing Board, California	0	0	0	0	0	0	**0**
Housing and Community Development, Department of	0	1	0	2	0	0	**3**
Housing Finance Agency, California	3*	0	8	2	0	0	**13**
Industrial Development Financing Advisory Commission, California	0	0	0	0	0	0	**0**
Industrial Relations, Department of	0	265	1*	38	0	0	**304**
Inspector General, Office of the	0	0	0	0	0	0	**0**
Insurance Advisor, Office of the	0	0	0	0	0	0	**0**
Insurance, California Department of	0	0	0	0	0	0	**0**
Judicial Council of California	36*	8,840	0	10	0	0	**8,886**
Judicial Performance, Commission on	0	0	0	0	0	0	**0**
Justice, Department of	8	2,215	0	36	0	0	**2,259**
Labor and Workforce Development Agency	0	0	0	0	0	0	**0**
Lands Commission, California State	0	0	0	0	0	0	**0**

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Landscape Architects Technical Committee	1	37	0	3	1	0	**42**
Law Revision Commission, California	0	40	0	0	0	0	**40**
Library, California State	3*	0	3*	0	0	0	**6**
Lieutenant Governor, Office of the	0	0	0	0	0	0	**0**
Little Hoover Commission	0	0	0	0	0	0	**0**
Lottery Commission, California	5	3	39*	3	0	0	**50**
Managed Health Care, Department of	0	78	0	2	0	0	**80**
Managed Risk Medical Insurance Board	0	0	0	0	0	0	**0**
Mandates, Commission on State	0	0	0	0	0	0	**0**
Medical Assistance Commission, California	0	1	0	1	0	0	**2**
Medical Board of California	0	261	0	2	0	0	**263**
Mental Health, Department of	20*	10	0	0	0	0	**30**
Motor Vehicles, Department of	2*	25	2	0	21	0	**50**
Native American Heritage Commission	0	1	0	1	0	0	**2**
Natural Resources Agency	0	0	0	0	0	0	**0**
New Motor Vehicle Board	0	0	0	0	0	0	**0**
Occupational Safety and Health Appeals Board	0	0	0	0	0	0	**0**
Occupational Safety and Health Standards Board	0	0	0	0	0	0	**0**
Optometry, California State Board of	0	375	0	1	0	0	**376**
Orange County Fair and Event Center	0	0	5	0	0	0	**5**
Osteopathic Medical Board of California	0	0	0	0	0	0	**0**
Parks, California State	7*	3,195,805	57	520	0	0	**3,196,389**
Parole Hearings, California Board of	0	0	0	0	0	0	**0**
Patient Advocate, Office of the	0	19	0	1	0	0	**20**
Peace Officer Standards and Training, Commission on	884*	100	1	2	0	0	**987**
Personnel Administration, Department of	0	4,684	0	0	0	0	**4,684**
Personnel Board, California State	0	32	0	0	0	0	**32**
Pesticide Regulation, Department of	0	0	0	0	0	0	**0**
Pharmacy, California State Board of	1	0	0	0	0	0	**1**
Physical Therapy Board of California	0	5	0	2	2	0	**9**
Physician Assistant Committee	0	6	0	1	0	0	**7**
Pilot Commissioners, Board of	0	0	0	0	0	0	**0**
Planning and Research, Office of	0	60	0	3	0	0	**63**
Podiatric Medicine, Board of	0	1	0	1	0	0	**2**
Pollution Control Financing Authority, California	0	0	0	0	0	0	**0**
Pooled Money Investment Board, California	0	0	0	0	0	0	**0**
Postsecondary Education Commission, California	0	0	0	0	0	0	**0**
Prison Health Care Services, California	0	100	0	0	0	0	**100**
Prison Industry Authority	0	0	0	37	37	4*	**78**

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	REGISTERED	UNREGISTERED	REGISTERED	UNREGISTERED			
Professional Engineers and Land Surveyors, and Geologists, Board for	0	168	0	5	11	0	**184**
Psychology, Board of	0	14	0	1	2	0	**17**
Public Employment Relations Board	0	2	1	1	0	0	**4**
Public Health, California Department of	5	5,526,427	1	46	3	1	**5,526,483**
Public Works Board, State	0	0	0	0	0	0	**0**
Real Estate Appraisers, Office of	0	0	0	0	0	0	**0**
Real Estate, Department of	15*	0	0	0	0	0	**15**
Registered Nursing, Board of	0	0	0	4	0	0	**4**
Rehabilitation, State Department of	0	1	0	3	0	0	**4**
Resources, Recycling and Recovery, California Department of	8,200	0	5	0	0	0	**8,205**
Respiratory Care Board of California	0	245	0	2	1	0	**248**
San Francisco Bay Conservation and Development Commission	0	0	0	0	0	0	**0**
San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy	0	0	0	0	0	0	**0**
San Joaquin River Conservancy	0	0	0	0	0	0	**0**
Santa Monica Mountains Conservancy	0	0	0	0	0	0	**0**
Scholarshare Investment Board	0	0	0	0	0	0	**0**
School for the Deaf - Riverside, California	0	0	0	0	0	0	**0**
Science Center, California	0	0	0	0	0	0	**0**
Secretary of State, Office of the	0	228	1*	8	0	0	**237**
Seismic Safety Commission	2*	0	0	0	0	0	**2**
Social Services, Department of	1	11	3	4	0	0	**19**
State and Consumer Services Agency	0	0	0	0	0	0	**0**
Statewide Health Planning and Development, Office of	0	171	0	19	0	0	**190**
Status of Women, California Commission on the	0	0	0	0	0	0	**0**
Structural Pest Control Board	0	0	0	0	0	0	**0**
Student Aid Commission	1	0	1	0	0	0	**2**
Summer School for the Arts, California State	0	0	0	0	0	0	**0**
Supreme Court of California	2*	1	0	0	0	0	**3**
Tahoe Conservancy, California	0	0	0	0	0	0	**0**
Teacher Credentialing, Commission on	7	2	7	2	0	0	**18**
Technology Agency, California	0	3	0	3	0	0	**6**
Toxic Substances Control, Department of	2	30,674	1*	1	0	0	**30,678**
Traffic Safety, Office of	0	0	0	0	0	0	**0**
Transportation Commission, California	0	0	0	1	0	0	**1**
Transportation, California Department of	32*	40	3	0	0	5	**80**
Treasurer, Office of the	0	0	0	0	0	0	**0**

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	REGISTERED	UNREGISTERED	REGISTERED	UNREGISTERED			
University, California State:							
Office of the Chancellor	50*	30	2	0	0	0	**82**
Bakersfield	1*	0	0	0	0	0	**1**
Channel Islands	1	24	10	22	0	0	**57**
Chico	0	0	19	0	0	0	**19**
Dominguez Hills	3*	0	3*	0	0	0	**6**
East Bay	0	100	2*	25	0	0	**127**
Fresno	34	34	4*	0	0	0	**72**
Fullerton	25*	8	1*	18	0	1*	**53**
Humboldt	5*	0	0	0	0	4	**9**
Long Beach	33*	0	4	0	0	0	**37**
Los Angeles	15*	0	0	12	0	2	**29**
Maritime Academy	0	0	0	0	0	0	**0**
Monterey Bay	3	0	3	0	0	0	**6**
Northridge	9	1	3*	13	0	0	**26**
Pomona	6*	0	1*	0	0	0	**7**
Sacramento	12*	11	22*	0	0	0	**45**
San Bernardino	3	0	2	0	0	0	**5**
San Diego	46*	0	0	0	0	0	**46**
San Francisco	18*	1	2*	1	0	0	**22**
San Jose	8*	4	3	0	0	3	**18**
San Luis Obispo	0	1	6	0	0	0	**7**
San Marcos	1	1	12*	6	0	0	**20**
Sonoma	0	9	16	6	0	0	**31**
Stanislaus	1*	0	1	0	0	0	**2**
Urban Waterfront Area Restoration Financing Authority, California	0	0	0	0	0	0	**0**
Veterans Affairs, California Department of	0	0	0	1	0	0	**1**
Victim Compensation and Government Claims Board	0	0	1	1	0	0	**2**
Vocational Nursing and Psychiatric Technicians, Board of	0	70	0	0	0	0	**70**
Water Resources Control Board, State	1	10,514	0	66	0	0	**10,581**
Water Resources, Department of	11*	0	1	0	0	0	**12**
Wildlife Conservation Board	0	0	0	0	0	0	**0**
Workers' Compensation Appeals Board	0	0	0	0	0	0	**0**
Workforce Investment Board, California	0	0	0	0	0	0	**0**
Totals	**10,860**	**9,018,286**	**339**	**1,263**	**172**	**31**	**9,030,951**

* The quantity of intellectual property reported in this table is different from the quantity the agency reported in its survey response. We describe in the text the reasons we used alternative amounts.

† The Department of Food and Agriculture (Food and Ag) included intellectual property related to some of its marketing programs in its survey response. However, we excluded these amounts from the table because, at Food and Ag's direction, the marketing programs reported their items to Food and Ag by category, which was inconsistent with the way in which Food and Ag summarized its property.

The response rate to our survey was 93 percent. Seventeen state agencies that we contacted for information about their intellectual property did not respond. Table B.2 lists those 17 state agencies.

Table B.2
State Agencies That Did Not Respond to the Intellectual Property Survey

California Arts Council
California Film Commission*
California School Finance Authority
Central Valley Flood Protection Board†
Department of Finance‡
Debt Limit Allocation Committee
Fair Political Practices Commission
Military Department
Office of the Public Defender
Public Utilities Commission
School for the Deaf - Fremont, California
Speech-Language Pathology and Audiology Board
State Controller's Office§
State Independent Living Council
Tax Credit Allocation Committee
Unemployment Insurance Appeals Board
Veterinary Medical Board

Source: Bureau of State Audits' survey analysis.

* The California Film Commission submitted an incomplete survey we could not use.

† The Central Valley Flood Protection Board (Flood Protection Board) provided information on its intellectual property subsequent to the close of the survey. The Flood Protection Board told us that it owned one unregistered trademark, which is its logo.

‡ The Department of Finance (Finance) provided the following perspective subsequent to the close of the survey: According to a staff counsel at Finance, the agency has no formally protected intellectual property because it has not identified any benefits to be gained by formally protecting the property. However, Finance stated that some of its staff believed that state agencies could not register copyrights or trademarks and expressed that it would be helpful if the State provided general guidance to assist agencies with identifying potential intellectual property and with deciding when they should pursue formal protection.

§ The State Controller's Office (Controller's Office) provided information on its intellectual property subsequent to the close of the survey. According to its accounting officer, the intellectual property of the Controller's Office is limited to two unregistered trademarks, one of which is the Controller's Office seal.

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(Agency comments provided as text only.)

Business, Transportation and Housing Agency
California Department of Transportation
980 9th Street, Suite 2450
Sacramento, CA 95814-2719

November 3, 2011

Elaine M. Howle, State Auditor
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Dear Ms. Howle:

Attached please find a response from the California Department of Transportation (Department) to your draft audit report regarding the State's management of intellectual property (#2011-106). Thank you for allowing the Department and the Business, Transportation and Housing Agency (Agency) the opportunity to respond to the report.

As noted in its response, the Department concurs with the finding noted in the report, and is in the process of implementing the associated recommendation by continuing its efforts to develop additional written policies and procedures related to all aspects of intellectual property. Caltrans anticipates completing its corrective action by June 30, 2012.

We appreciate your identification of opportunities for improvement and your recommendation to enhance the Department's identification, management and protection of its intellectual property.

If you need additional information regarding the Department's response, please do not hesitate to contact Michael Tritz, Agency Deputy Secretary for Audits and Performance Improvement, at (916) 324-7517.

Sincerely,

(Signed by: Traci Stevens)

TRACI STEVENS
Acting Secretary

Department of Transportation
Office of the Director
P.O. Box 942873, MS-49
Sacramento, CA 94273-0001

November 2, 2011

Ms. Traci Stevens
Acting Secretary
Business, Transportation and Housing Agency
980 9th Street, Suite 2450
Sacramento, CA 95814

Dear Ms. Stevens:

Below is the California Department of Transportation's (Caltrans) five-day response to excerpts from the Bureau of State Audits' (BSA) draft report on its audit of the State's management and protection of intellectual property. BSA performed this audit at the request of the Joint Legislative Audit Committee.

The BSA auditors noted the following:

- Caltrans asserts its intellectual property rights and has attempted to commercialize its intellectual property.
- Although Caltrans is developing written policies and procedures, Caltrans' current intellectual property practices are mostly informal.
- Caltrans' standard contract language varies in how it assigns intellectual property rights.
- Caltrans has generated modest revenue from its intellectual property.
- Caltrans has made efforts to stop infringement on its intellectual property.

BSA recommended that Caltrans should put in writing those policies and procedures related to intellectual property that it believes are necessary and appropriate to enable its staff to identify, manage, and protect its intellectual property.

Caltrans' Response:
Caltrans concurs with the recommendation suggested by BSA. To further enhance Caltrans' management and protection of its intellectual property, Caltrans will continue its efforts to develop additional written policies and procedures related to all aspects of intellectual property, including copyrights, patents, trademarks and trade secrets. Caltrans commits to finalizing these additional written policies and procedures by June 30, 2012.

If you have questions or require further information, please contact Ronald Beals, Chief Counsel, Caltrans Division of Legal, at (916) 654-2630, or Susan Bransen, Assistant Director, Caltrans Audits and Investigations, at (916) 323-7122.

Sincerely,

(Signed by: Malcolm Dougherty)

Malcolm Dougherty
Acting Director

(Agency comments provided as text only.)

California Department of Food and Agriculture
1220 N Street, Suite 400
Sacramento, California 95814

November 3, 2011

Elaine M. Howle, CPA
State Auditor
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Dear Ms. Howle:

This letter is in response to your correspondence dated October 31, 2011 regarding the audit report of the State's management and protection of intellectual property. The California Department of Food and Agriculture (CDFA) appreciates the time and effort it took to conduct this audit and agrees with the Bureau of State Audits' recommendations:

1) CDFA should put in writing those policies and procedures related to intellectual property that it believes are necessary and appropriate to enable its staff to identify, manage, and protect its intellectual property; and

2) CDFA should ensure that it has developed intellectual property terms and conditions that are appropriate for the types of agreements into which its Contracts Office enters.

The CDFA will work with appropriate staff to have policies and procedures in writing and have appropriate terms and conditions in contract agreements by December 31, 2011.

If you have any questions, please contact Janet Glaholt, Director of Administrative Services at (916) 654-1020.

Yours truly,

(Signed by: Karen Ross)

Karen Ross
Secretary

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(Agency comments provided as text only.)

Health and Human Services Agency
Department of Health Care Services
1501 Capitol Avenue, Suite 71.6001, MS 0000
P.O. Box 997413
Sacramento, CA 95899-7413

Ms. Elaine M. Howle, CPA
State Auditor
California Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Dear Ms. Howle:

The California Department of Health Care Services has prepared its response to the draft report entitled *Department of Health Care Services: Intellectual Property Audit*. DHCS appreciates the work performed by Bureau of State Audits and the opportunity to respond to the draft report.

Please contact Ms. Raj Khela, Audit Coordinator, at (916) 650-0298 if you have any questions.

Sincerely,

(Signed by: Karen Johnson for)

Toby Douglas
Director

Department of Health Care Services
Response to the Bureau of State Audits' Draft Report Entitled

Department of Health Care Services: Intellectual Property Audit

Recommendation: Health Care Services should put in writing those policies and procedures related to intellectual property that it believes are necessary and appropriate to enable its staff to identify, manage, and protect its intellectual property.

Response: Health Care Services agrees with the recommendation.

Intellectual Property law is a complex area of the law. Health Care Services has policies that could be reduced to writing. In particular, policies for following up on reporting of potential intellectual property infringement and enforcement procedures. However, a great deal of the Department's intellectual property, particularly the informal copyrights, is not commercially valuable. Therefore, identification and management of intellectual property at Health Care Services may not be the best use of its limited resources. With such a complex area of law, the Department believes statewide guidance would be helpful.

(Agency comments provided as text only.)

Natural Resources Agency
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

November 4, 2011

Ms. Elaine Howle, State Auditor
Bureau of State Audits
555 Capitol Mall, Suite 300
Sacramento, CA 95814

Dear Ms. Howle:

Thank you for the Bureau of State Audits (BSA) review and recommendations on the oversight of the California Energy Commission (Energy Commission)'s policies and procedures related to intellectual property. The Energy Commission agrees with the recommendation and is taking steps to address them. Specific steps are detailed below.

Recommendation
The Energy Commission should put in writing those policies and procedures related to intellectual property that it believes are necessary and appropriate to enable its staff to identify, manage, and protect its intellectual property.

Response
The Energy Commission started working on policies and procedures to educate staff about intellectual property and how to protect it. The Legal Office is taking the lead on this effort, which includes researching best practices from other agencies, drafting proposed policies and procedures, and internally working with management and staff to ensure the resulting product is effective at both educating staff about the issues and providing guidance on what steps to take.

Policy and procedures will be completed by January 1, 2012.

Recommendation
The Energy Commission should take the necessary steps to strengthen its royalty process to ensure that it receives the proper amounts from all contractors that owe it royalties.

Response
The Energy Commission has strengthened the language in its annual Public Interest Energy Research (PIER) royalty letters to require a response. In conjunction with this, language has been added to PIER solicitations indicating that bidders who have not responded to the royalty repayment letter may be screened out from participating in future PIER funding opportunities.

In addition, the Energy Commission is amending an existing contract with the State Controller's Office (SCO). The SCO currently reviews PIER contract and grant recipients to ensure proper documentation exists to support expenditure of funds. The amendment will now include reviews of PIER royalty payments. The Energy Commission has also deployed an internal auditor to conduct royalty payment reviews. To date, the auditor has completed two reviews and additional reviews are planned.

The Energy Commission has also drafted new PIER terms and conditions which require, upon payment of royalties, a certification that the amount paid is correct.

Lastly, the Commission is in the process of hiring a contractor to follow-up with PIER researchers who might have commercialized a product and not paid royalties. The contractor will perform activities such as follow-up calls and independent market assessments.

In summary, we agree with BSA's recommendations, and are implementing new intellectual property policies and procedures and to improve our royalty review process.

Sincerely,

(Signed by: Robert P. Oglesby)

Robert P. Oglesby
Executive Director

cc: Members of the Legislature
Office of the Lieutenant Governor
Milton Marks Commission on California State Government Organization and Economy
Department of Finance
Attorney General
State Controller
State Treasurer
Legislative Analyst
Senate Office of Research
California Research Bureau
Capitol Press