CASE STUDY

Spend Analysis Pilot Project California's State Spend for Fiscal Years 2012-15

CA Department of General Services
& VitalMetrics

SUSTAINABLE PURCHASING LEADERSHIP COUNCIL CASE STUDY LIBRARY

Abstract

The state of California purchases billions of dollars of goods and services every year, and funds a wide variety of activities throughout the state. As the world's sixth largest economy and with strong environmental leadership, it has a significant opportunity to advance sustainable purchasing. The Department of General Services (DGS) participated in a two-year spend analysis pilot project using a life cycle assessment (LCA) approach to estimate the environmental impacts of over $97 billion of state spending from 2012 to 2015, which included over 300,000 individual line items and over 12,000 different commodities. This case study describes the project, steps and key results achieved.

Goals	*Strategies*	*Results*
1. Identify environmental, social and economic (ESE) hotspots in the state of California's purchasing (prioritized by purchasing commodity, sector, purchasing department and supplier).	Conducted a spend analysis using Economic Input Output Life Cycle Assessment (EIO LCA).	Identified hotspots for overall state spend for three fiscal years, and for each of the five priority impact categories identified by DGS in Phase I. Phase II further identified expenditures within DGS' operational control to focus improvement efforts on information technology (IT) goods and consultation services, public health administration services, highway and road construction, vehicles and fuels, etc.

Goals	*Strategies*	*Results*
2. Identify opportunities for reduction of environmental impact associated with state spending.	Analyzed the results of the detailed spend analysis using contribution analysis to further identify direct impacts and supply-chain impacts. Improvement opportunities were also researched based on the analysis.	Existing sustainable procurement strategies were assessed and recommendations to conduct analysis for additional strategies were made. For example, health care is by far the largest contributor to the overall environmental impacts of state spending for the three fiscal years considered in this analysis. Recommendations to improve the procurement for hospitals and health care with sustainability criteria were suggested to be passed on to those agencies controlling purchases of products and services.
3. Identify opportunities for reduction of social impact associated with state spending.	Analyzed the results of the detailed spend analysis to further identify supply-chain impacts on social issues.	Recommendations were offered using third-party certifications.
4. Identify opportunities to measure leadership in sustainable purchasing across diverse government organizations.	Analyze state spend using same spend analysis methodology as U.S. General Services Administration (GSA) when conducting a federal spend analysis.	In comparison to federal spending, results showed similar spend categories across a small margin of industry sectors but significant variance in the number of industry sectors and degree of spend was found. In addition, the ratio of greenhouse gas (GHG) impacts to dollars spent was less for California than for federal agencies.
5. Support the overall advancement of sustainable purchasing and measure leadership.	Communicate results and outcomes of spend analysis in conjunction with holding workshops to train stakeholders on how to prepare new strategies.	Presented to DGS and state of California executive management to gain their support to fund a spend analysis pilot project for the advancement of sustainable purchasing and held two outreach events comprised of internal and external stakeholders.

Goals

The goal of this project was to advance sustainable purchasing, gain insight into establishing metrics to measure leadership, and begin a new strategy cycle for running a sustainable purchasing program at DGS. The project helps inform the strategy, prioritize action and take meaningful steps to mitigate the environmental, social and economic impacts associated with the state of California's purchases.

DGS also sought to use similar methodology applied by the federal government, so that results could be compared. In addition, communicating the spend analysis results with key stakeholders in a collaborative outreach event created an opportunity to form a shared understanding where the

departments could take action to lessen impacts, identify opportunities to leverage buying power and strengthen existing sustainability programs.

Strategies (Activities)

Commitment to the strategy

The project builds on several years of effort to expand sustainable procurement by DGS. With implementation of the Environmental Purchasing Program (EPP) and the Buying Green Guide, DGS has already taken steps to encourage procurement of products and services that have a reduced impact on human health and the environment. A new strategy cycle to address impacts associated with the outcome of the spend analysis requires collaboration and stakeholder feedback.

The state of California pledged its commitment to conduct a new strategy cycle with the spend analysis pilot project in 2015. The overarching project goal was to understand how DGS might strengthen its EPP program as mandated by Governor Edmund G. Brown Jr.'s Executive Order B-18-12 and meet the statutory requirements of California Public Contract Code 12400-12404. Another goal of the project was to see where metrics for measuring leadership in sustainable purchasing might exist in a comparison to the outcomes for a federal and state spend analysis. This goal set the foundation for conducting the Economic Input Output – Life Cycle (EIO LCA) analysis.

Planning and making the request

Prior to beginning the spend analysis project, it was necessary to gain a deeper understanding of spend analysis methodologies and California government programs that may align with the three cores of SPLC sustainability (environment, social and economic). Several articles, reports, standards and research papers were read in the areas of spend analysis methodologies, industrial economics, gross domestic products and trade. Key references included: Carnegie Mellon University EIO-LCA, ISO 14040; carbon disclosure and standards (global reporting as well as California Air Resources Board regulatory Cap and Trade programs); U.S. Bureau of Labor Statistics and U.S. Federal Trade Commission reports; GSA spend analysis solicitation and report; CalEnviroScreen; and approaches to identifying California disadvantaged communities from California Office of Environmental Health Hazards Assessment and California Department of Justice Transparency in Supply Chain Act program.

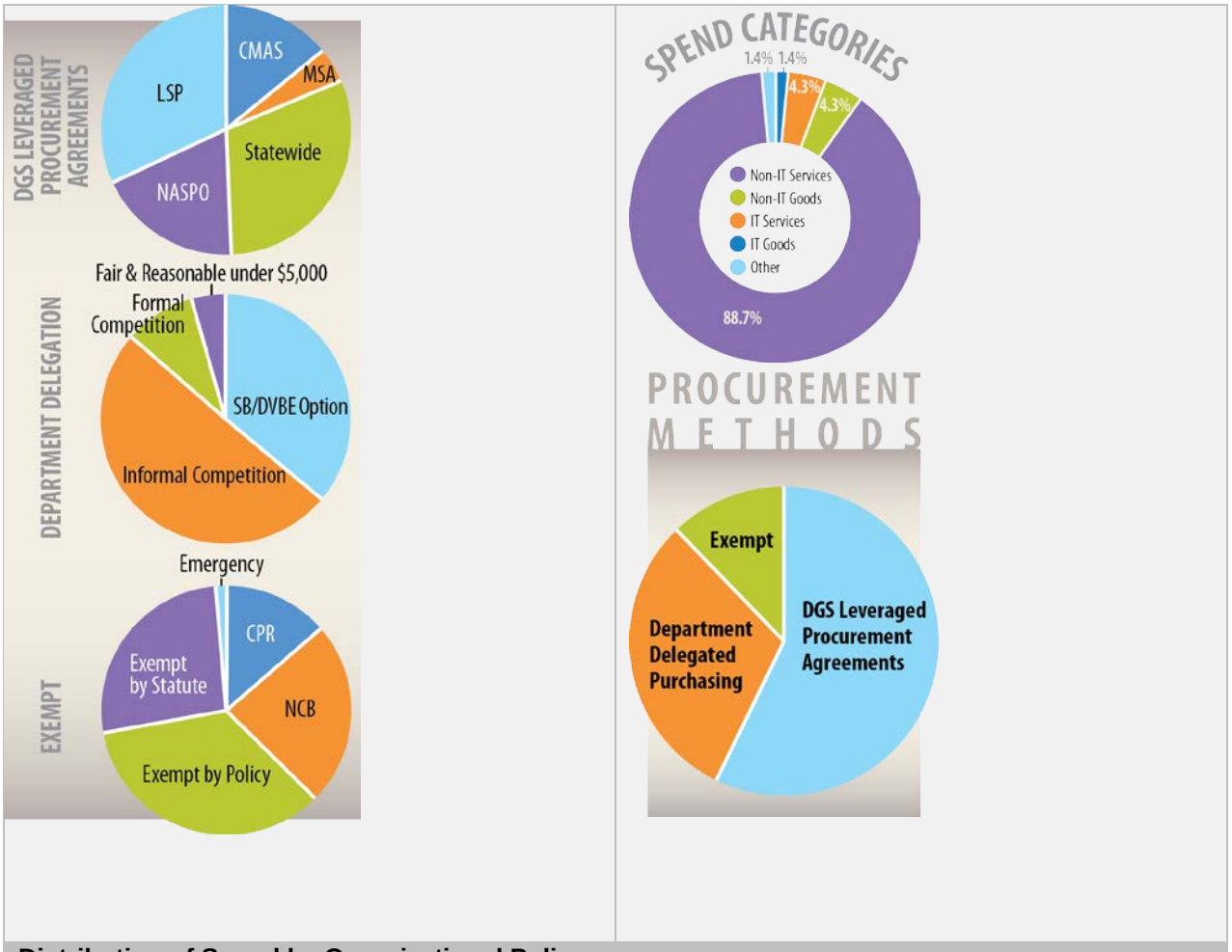
An explanation on how existing state programs, sustainability initiatives and the EPP program correlate with the three cores of SPLC sustainability help to create a shared understanding of the benefits of running a spend analysis. These were key points in winning DGS executive management approval to fund the project, employ temporary personnel and commission a contractor.

Preparing the data and solicitation

It is important to understand how organizational spend is maintained to identify the data gathering approach, limits, and key stakeholders. California state spend is tracked using multiple enterprise resource planning (ERP) systems. The type of data stored in each is guided by statute, policy and capabilities of each ERP system.

As the state's central procurement authority, DGS establishes procurement policy for state agencies. Procurement policy for tracking and recording contract spend established the data parameters. State procurement and contracting policy directs departments to enter contract information, greater than five thousand dollars, into the State Contract & Procurement Registration System (SCPRS). Data entries must include contract types (category and method) and exclude non-

reportable transactions.[1] There are five spend categories in SCPRS: non-information technology (IT) services, non-IT goods, IT services, IT goods and other. The methods include leveraged procurement agreements (LPA), delegated purchasing authority and exempt (as shown in the figure below). These methods help to understand where contract decisions are made and where DGS has direct and indirect influence to optimize improvements in sustainable purchasing.



Distribution of Spend by Organizational Policy
The state categorizes it's spend based on spend categories and procurement methods (LPA, Delegation and Exempt). These categories and methods align with procurement policy covered in the State Contracting Manual (SCM).

Examining the distribution of spend aided DGS' Procurement Division to determine how best to take action to further sustainability efforts. The greatest opportunity to leverage cost savings and increase sustainability is through the LPA contract process. Specifications and solicitations for LPAs are developed within DGS. DGS identifies LPA contracts as "EPP" and posts them on the Buying Green website (*www.dgs.ca.gov/buyinggreen*). The second opportunity to increase sustainable

[1] Non-reportable transactions are based on dollar thresholds or exempt from DGS Office of Legal Services (OLS) oversight such as California Department of Transportation projects funded by federal or local tax sources and California Department of Human Resources for state employee benefits, occupational health and safety or training services.

purchases is through the State Contracting Manual, a statewide procurement policy document. Departments with delegated purchasing authority follow the State Contracting Manual to create contracts within their internal department procurement offices. They report these transactions within SCPRS. A third opportunity is through governors' executive orders. Executive order B-18-12 is an administrative policy that applies to government operations exempt from DGS authority.

DGS ran the spend analysis with three fiscal years of SCPRS data, understanding that SCPRS "exempt spend" may only be recorded in departments EPR systems. Analyzing multiple years of data was important to convey the challenges of measuring improvements and thus leadership on the basis of spend alone. Sways in spending can reflect decreased spending related to recession or operational changes. Another challenge to consider is data quality. The cleaner the data, the less time is spent on cleansing it and the more accurate the results of the spend analysis will be. The SCPRS report data was cleansed and established the data size and fields for the next step of developing the solicitation for a spend analysis.

Scope of Work

The solicitation was written to address not only environmental, social and economic impact hotspots but also to identify key stakeholders and communicate the results of the project in an outreach event.

☑☐TIP

Dataset

Informing bidders on the size and type of data points may help guide the service provider in calculating their bid price. The dataset for fiscal years 2013-14 spend was outlined in the solicitation. A breakdown of additional fiscal spend was provided after contract award. Recommendations were given to run multiple years of spend data simultaneously.

Total number of data set records: 99,047

Total fiscal year 2013-14 expenditures: $30,099,015,291

Total number of suppliers: 4,456

Breakdown of records by supplier:

- Data by supplier name: Total quantity 4,456
- Small business/disabled veteran business enterprises suppliers: Total quantity 1,739
- Non-small business suppliers: Total quantity 2,738
- Supplier zip code: Total quantity 2,593
- UNSPSC: normalized total quantity 8,268

☑☐TIP

Degree of Influence

Understanding the organization's policy in relation to the data maintained with an enterprise resource system can help determine the amount of spend data to analyze. Policies assist in gaining management support and understanding where the greatest opportunities are to influence change. To reduce the cost of running a spend analysis, first run a budget report based on spend then by industries that have high risk for environmental, social or economic impacts. Is funding a concern? Costs can be deferred over time or projects more manageable by focusing on high risk, high impact areas of spend where there is the greatest opportunity to influence change.

Planning the engagement process

Stakeholder Outreach – Gaining executive management support

Executive management's commitment to sustainability is essential for engaging stakeholders and to build momentum for running a sustainable purchasing program. Presenting the results of the spend analysis offers a data-informed approach to gain executive management support. Sure to grasp their attention when presenting the information is to partner the results with organizational sustainability efforts currently underway. Taking this context into account builds on sustainability concepts that are familiar to management. As an outcome of the presentation the DGS director endorsed the event.

Stakeholder Outreach – Invitation to stakeholders

The DGS director sent a personal invitation to department directors asking them to send key department decision makers to attend an upcoming outreach event. In addition to the director's invitation, a DGS broadcast went out to all department contract and procurement officials, grant program managers and technical subject matter experts. Invitations sent to strategic stakeholder would request their participation in a Sustainable Purchasing Stakeholder Forum. The morning included a session on basic concepts, results of DGS spend analysis, the progress DGS made and the afternoon strategy development workshops.

The Sustainable Purchasing Stakeholder Forum

A Sustainable Purchasing Stakeholder Forum was held on Feb. 28, 2017 at DGS headquarters. The outreach event brought together a diverse set of stakeholders from top hotspot departments, sustainability and purchasing executives to explain current efforts, possibilities and new steps DGS had taken to advance sustainable purchasing beyond the concept of a "green" commodity. Convening a group this size was to invoke collaboration and increase opportunities to promote better outcomes. Participants were given an infographic to portray key highlights of the spend analysis as well as help guide them in discussions and decision processes to form new strategies. Discussions would include all aspects of purchasing: direct, indirect and DGS exempt. A preview of the Green Buyer website would further strengthen the importance of collaboration. This website provides transparency in purchasing and enables departments the ability to compare their EPP purchasing progress in relation to other departments' progress statewide.

Two strategy development workshops were held in the afternoon that combined training, small group exercises, and strategic planning facilitation to address high priority areas of spending. The first workshop focused on opportunities for the state to advance policy priorities through its direct procurement of goods and services. The second workshop focused on opportunities for the state to advance policy priorities through its administration of grants and pass-through funds.

Analysis Results

This pilot project successfully quantified the environmental impact associated with state spend for three fiscal years and prioritized actions to address hot spots. The success can be attributed to the support and commitment of executive management and stakeholder engagement and training offered to state government.

Using sustainability spend analysis to prioritize

A sustainability spend analysis was used to understand the environmental, social and economic impacts associated with the state of California's spend. This spend analysis project helped DGS prioritize spend areas with the greatest opportunities for improvement, understand the challenges

of measuring leadership in sustainable purchasing, and convene stakeholders across the state government to address impacts.

To perform the spend analysis, DGS awarded a contract to IERS, LLC to quantify the impacts associated with three fiscal years of state spending. The results of this analysis are documented in a report submitted by IERS to DGS, which has been attached to this submission:

> *Suh, S., Bergesen, J., Choudhary, S.T., Broeckx-Smith, S. (2017): Life Cycle Assessment of California State Spend For the Fiscal Years 2012-15: Spend Analysis Summary Report, IERS LLC, Goleta, CA, USA.*

The analysis estimated the environmental impacts of over $97 billion of state spending from 2012 to 2015, which included over 300,000 individual line items and over 12,000 different commodities and services.

To estimate impacts, IERS employed an environmentally-extended input-output (EEIO) LCA approach using the Comprehensive Environmental Data Archive (CEDA) database. This uses national average data on emissions and resource consumption of over 400 economic sectors to estimate the supply-chain environmental impacts of purchases made by the state of California. The analysis focused on GHG emissions, but also included toxicity, waste generation, water consumption and energy consumption.

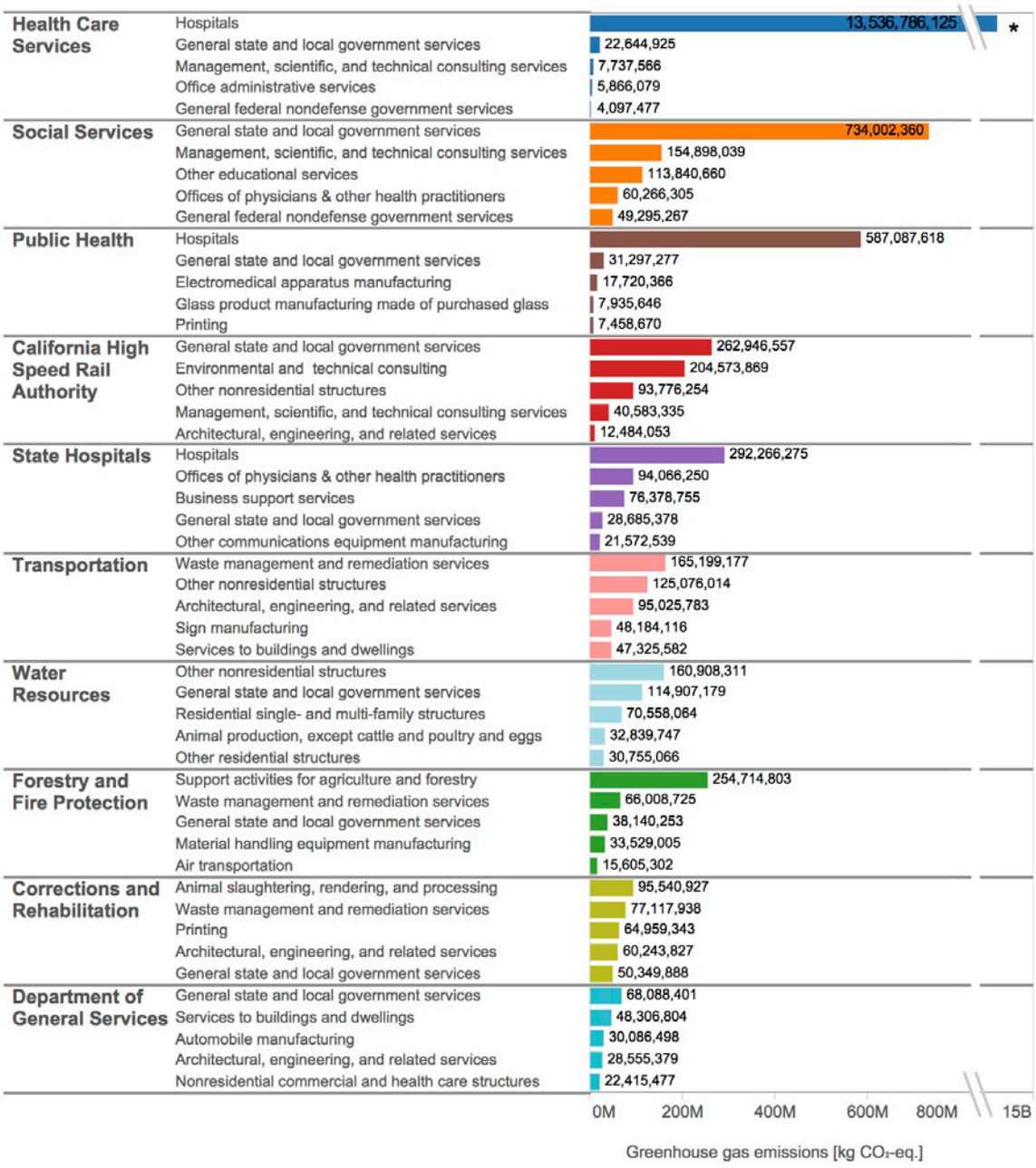
After the supply-chain environmental impacts of the spend has been estimated, the results were prioritized by key contributing departments, spend areas (i.e. commodities and services) and suppliers. Key areas were identified for more in-depth investigation, including:

- Public health administration (PHA)
- Beef
- Pharmaceuticals

For these spend areas, contribution analyses were conducted to identify major contributing inputs, supply chain activities and substances that generate most of the impact.

Over 25 million metric tons of carbon dioxide equivalent (CO2-eq) GHGs were associated with the supply chain of state spend for the three fiscal years considered (2012-15). Figure 1 presents the GHG emissions from the top five purchases by each of the top 10 state of California departments.

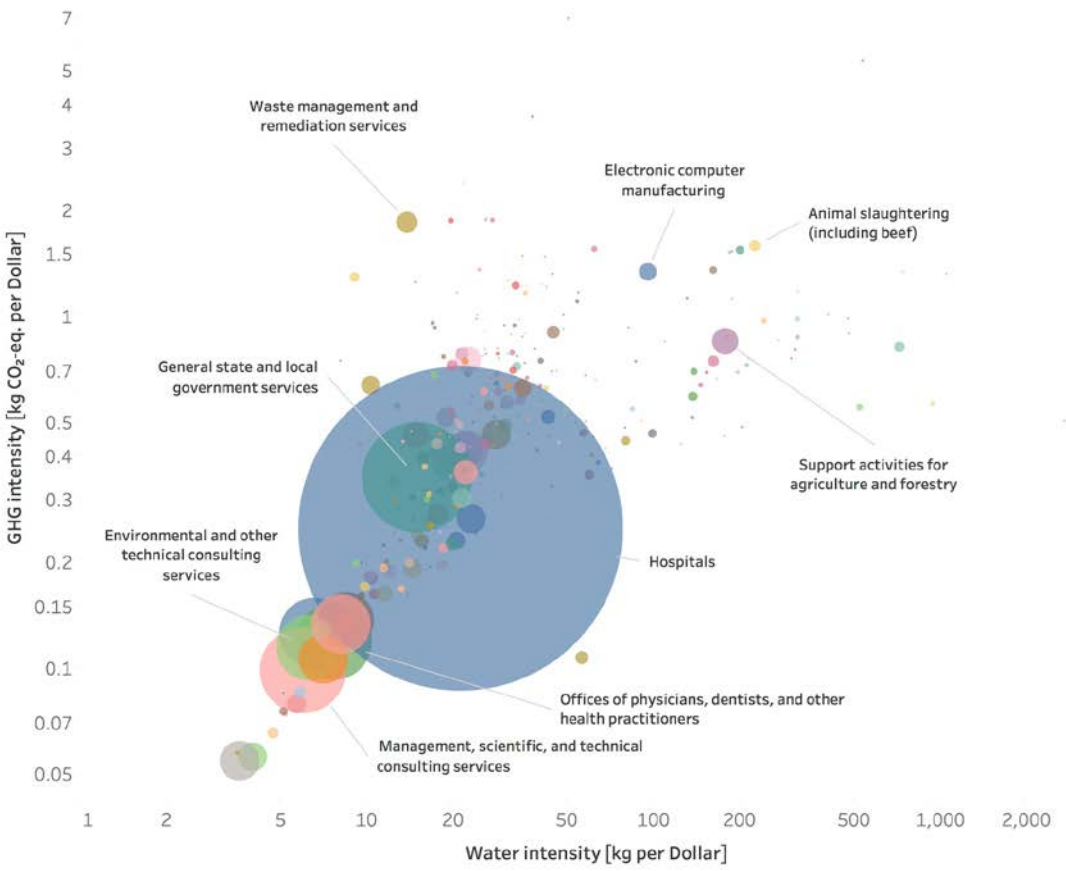
Spending related to public health administration (PHA), which includes hospitals, stand out as the greatest contributors to the GHG emissions (and other environmental impacts) of state spend.



Top GHG Emissions by Department
Figure 1. Contributions of the top five spend categories by the ten highest contributing departments to greenhouse gas emissions.

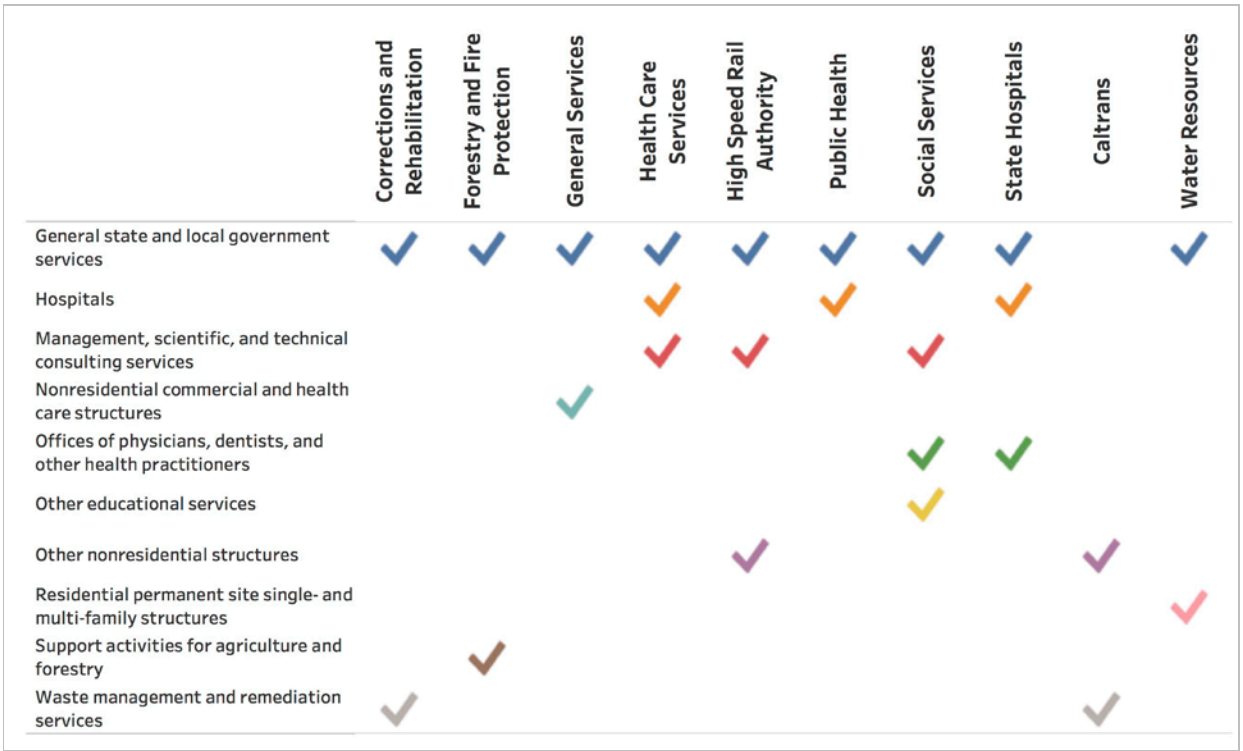
Figure 2 shows the GHG emission intensity (kg CO2 per dollar of spend) and water consumption intensity (kg per dollar of spend) for all spend areas of the state of California analyzed. Total spend for fiscal years 2012-15 are indicated by the size of the circle. While hospitals and state and local government services do not show the highest impact intensity among all the spend areas, the large amount of spending on these services ensures that hospitals and local governments funded by state grants related to public health administration dominate the total supply-chain impacts of the state

(greater than 50 percent of GHG emissions). Further, this graphic emphasizes that actions taken to reduce GHG emissions might have synergies that help organizations also reduce other environmental impacts, for instance water consumption.



GHG and Water Consumption Intensities
Figure 2. GHG intensity and water consumption intensity by spend areas. Bubble size corresponds to total spend on each good or service for fiscal years 2012-15. GHG intensity is measured in kilograms of CO2-eq per dollar spent and water consumption intensity is measured in cubic meters of potable water per dollar spent.

Finally, a goal of the project was to help state agencies prioritize their efforts to reduce their supply-chain environmental impacts. To support that goal, the spend analysis identified key spend areas (commodities and services) that are purchased or funded by multiple departments, highlighting the opportunity for collaboration among those departments. Figure 3 highlights the importance of cross-departmental collaboration. Many top state departments purchase similar goods and services, meaning that these departments can work together to more effectively develop strategies to lessen the supply-chain environmental impacts of these common spend areas.



Inter-departmental Collaboration
Figure 3. The importance of inter-departmental collaboration is to address impacts of key spend categories. Check marks indicate the spend categories that are among each department's top five contributors to GHG emissions and are color-coded by category.

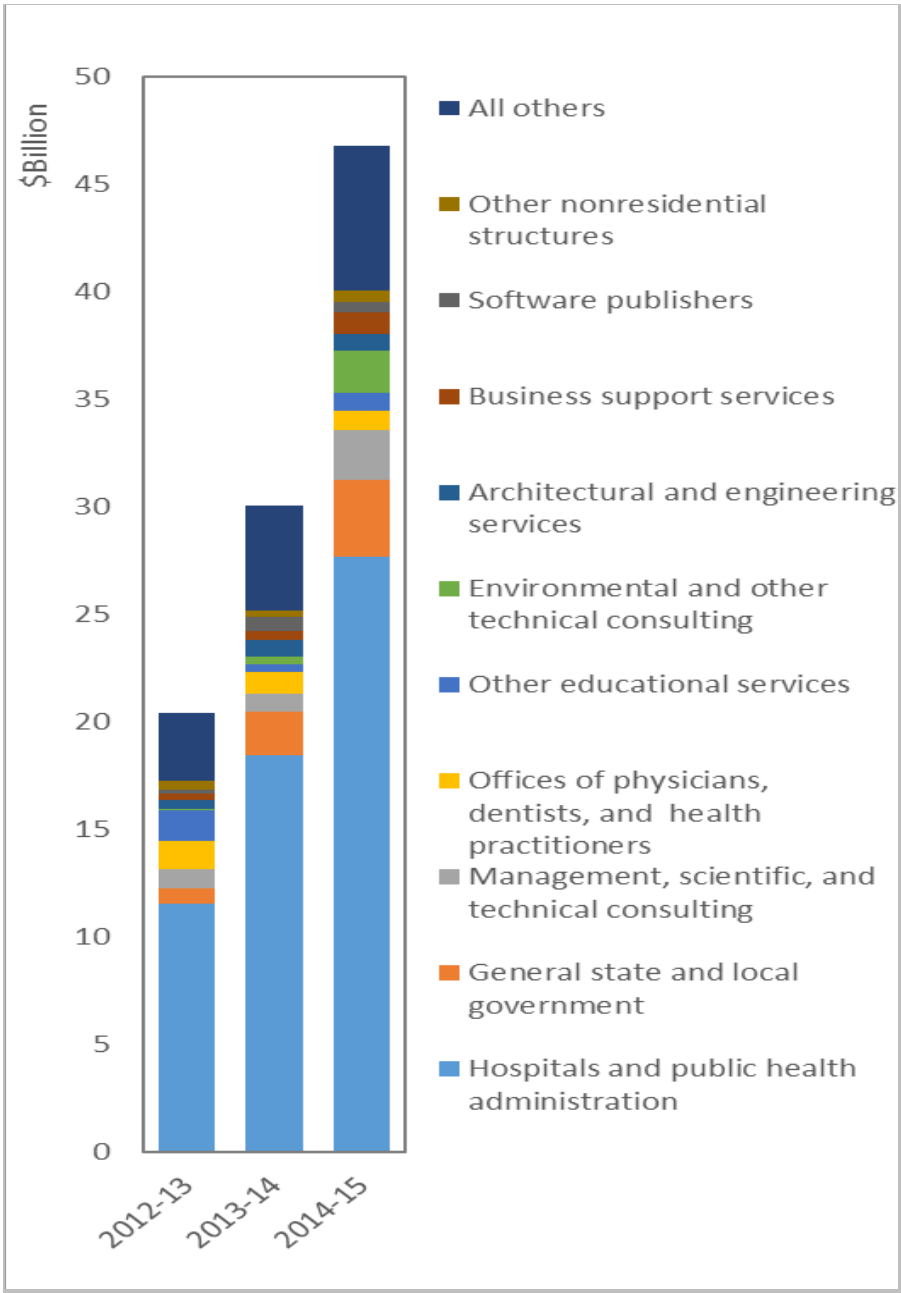
For spend areas that were identified as important in this prioritization, relevant certifications, ecolabels and disclosure programs were researched that could potentially help address some of the impacts of those purchases. While social impacts in the supply chain were not quantified (e.g. labor conditions), many ecolabels and third party programs can help to address relevant social impacts for the spend areas that were identified as priorities.

Challenges in Measuring Leadership

A goal of this spend analysis was to pilot test and inform *how* to measure leadership in sustainable purchasing for government organizations that differ in size.

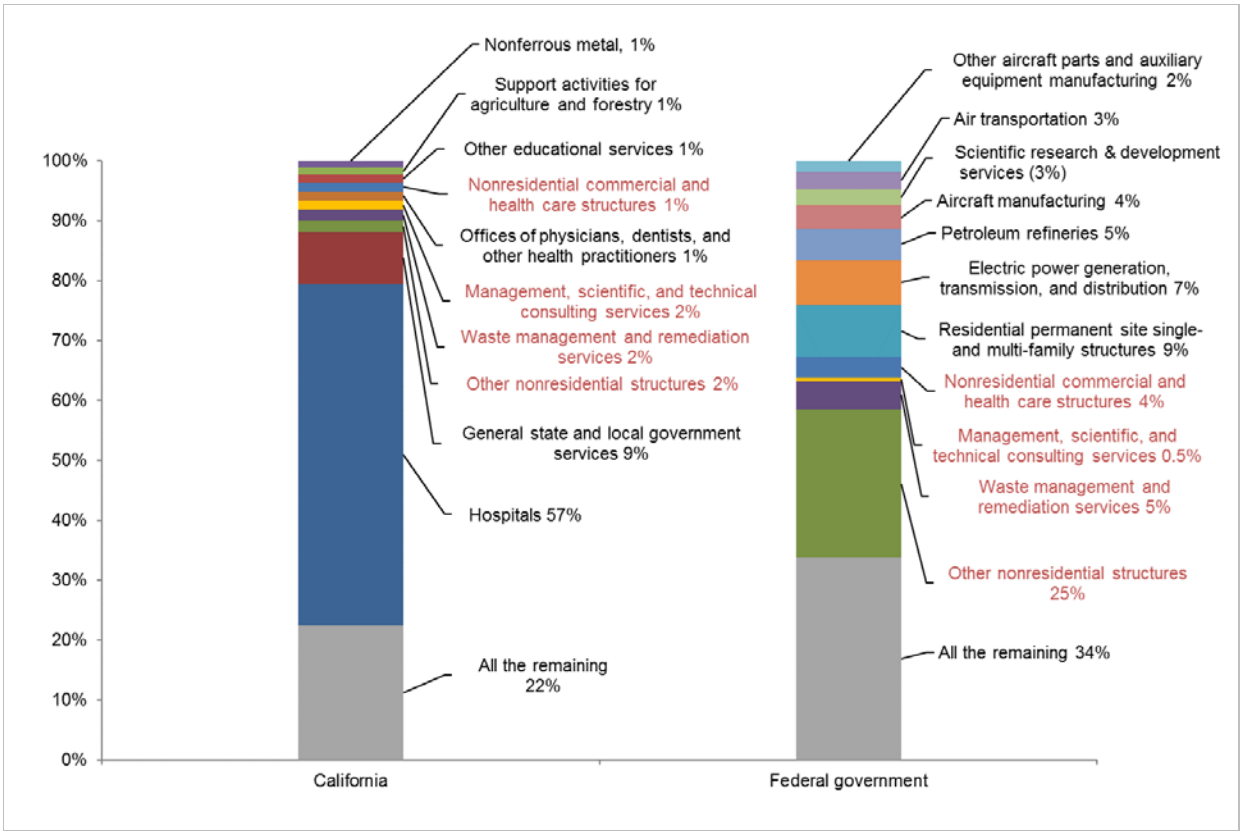
Figure 4 shows how the state of California spend analyzed in this analysis changed from year to year. Spend increased from around $20 billion in 2012-13 to over $46 billion by 2014-15. This change is partly due to spending freezes during the recession, as evidenced by state Executive Orders B-1-11, B-2-11 and B-3-11 (www.gov.ca.gov/anews.php?id=1-2011-January). These

changes emphasize the challenge measuring progress in sustainable purchasing from year to year for organizations such as the state of California. For example, achievements that reduce the environmental impacts associated with certain spend areas could be obscured by increases or decreases in spending depending on broader economic and political conditions.



Spend Influx Overtime
Figure 4, shows how the state of California spend analyzed in this analysis changed from year to year. Spend increased from around $20 billion in 2012-13 to over $46 billion by 2014-15.

Results from California were compared to the spend analysis results conducted for the GSA using the same underlying environmental data and EIO-LCA model. Figure 5 shows the main contributors to state of California and federal spending for the years analyzed. The differences in the types of goods and services procured at the state and federal level are evident. Federal spending includes more infrastructures, while the state of California is dominated more by services (mainly hospitals). Some sectors are purchased in common between the two levels of government, suggesting that collaboration is possible; however, this comparison mainly highlights the challenge in measuring leadership in sustainable purchasing for different types of organizations. Goals to increase sustainable purchasing for the state may look substantially different than those for the federal government.



California and Federal Spend Comparison
Figure 5. Comparison of top purchases contributing to GHG emissions for California state (2012-15) and federal spending reported by the GSA (2011). Common spend categories are highlighted in red.

Analysis Limitations

A quantitative analysis to measure the social and socio-economic impacts associated with spending by the state of California was not conducted due to a lack of budget. As an alternative, third-party certification programs that measure social and socio-economic impacts were identified for hotspot industry categories instead.

Changes in Purchasing and Related Practices

Engaging the state's supply chain to report GHG emissions and water management practices are highlights of the actions DGS has begun from the outcomes of this pilot project. Such work sends a clear signal to the marketplace that environmental performance is becoming an increasingly important metric in supplier evaluation and in the selection of environmentally preferable products by large organizations.

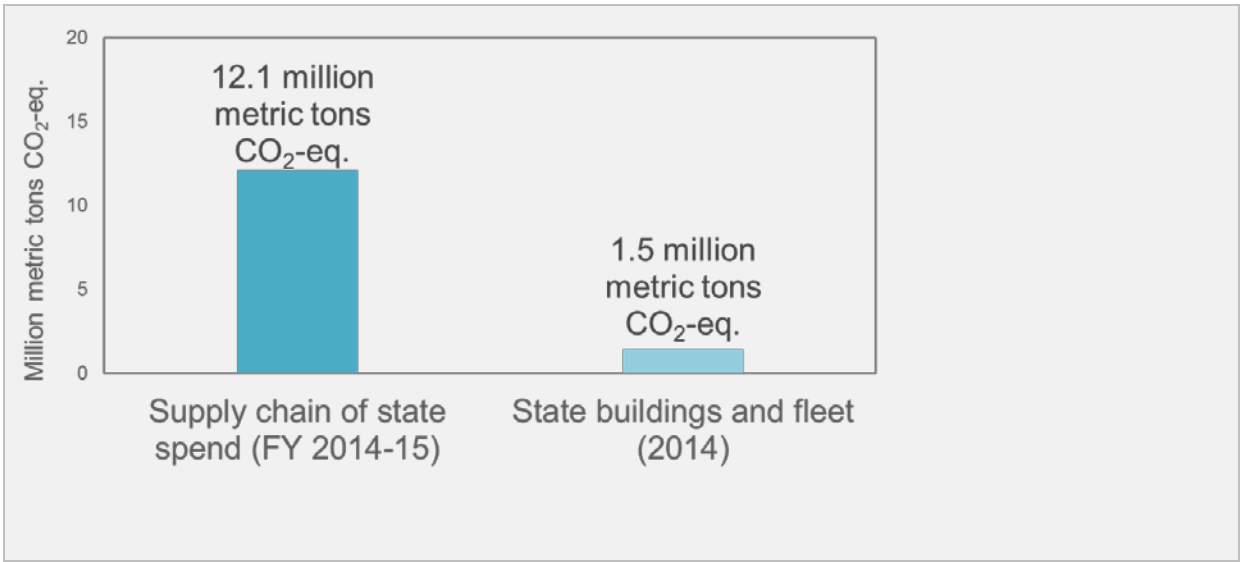
Feedback received following the forum is also helping to inform the best pathway to begin a new strategy cycle. A first step is to merge the EPP roadmap into the state of California's Sustainability Roadmap. The Government Operations Agency is leading this effort in collaborations with DGS. The sustainability roadmap will send a clear message to departments of the importance of sustainable purchasing. Department directors will be asked to sign and commit to meeting the state's sustainability policies.

Unexpected Results

The opportunity of the supply chain

Sustainability spend analysis can help shape organizations' priorities for addressing their overall environmental, social and economic (ESE) impacts. The state of California already has undertaken significant measures to reduce the energy consumption and associated GHG emissions of state buildings and vehicles. Progress on these reductions is measured on the state's green building website (www.greenbuildings.ca.gov/).

While these reductions are significant, spend analysis revealed that the GHG emissions associated with the state's supply chain in fiscal year 2014-15 are over *eight times* those of their buildings and fleet in 2014. This result was surprising to stakeholders, and was useful for helping them to understand the importance of focusing on the supply chain of services and products procured by the state.



GHG Emissions – State Buildings and Fleet vs Supply Chain
Figure 6. Comparison of the state of California's supply-chain GHG emissions with those of their buildings and fleet for fiscal year 2014-15. The emissions associated with the supply chain are over eight times those of state buildings and fleet.

Complexity of government procurement

The procurement process at large government organizations can be complex and it is therefore important to understand how statutory authority gives procurement departments varying influence over different kinds of spending. For instance, there are different types of contracts that pass through the DGS. While DGS has operational control over most procurement functions, it has limited influence over others such as grant money coming from the federal government, highway and waterway infrastructure projects. It was important to understand the types of contracts that DGS had control over before investing time and effort into more in-depth analysis options to exert improvement options. Therefore, focus was given to contract types that were under DGS' influence and had a higher likelihood of being implemented once the initial spend analysis was completed. Also, due to the significant quantity of public health care spend (e.g. hospitals, government administration, etc.) and associated impacts, additional investigation was conducted to verify accuracy of UNSPSC codes and to understand the composition of the Public Health Administration services spend. Data verification was essential to refine results. This occasion highlights the need for engaging suppliers to provide accurate information and training staff on the relevance of UNSPSC codes.

LESSONS LEARNED

- A deep understanding of the complex procurement processes is essential to put the results of the spend analysis into an action. In particular, different vehicles and segments of procurements present varied opportunities that influence procurement decisions.
- To conduct a quantitative spend analysis for all three areas of sustainability—environmental , social, and economic—the purchaser should call out the various types of LCA analytics: EIO LCA to understand environmental cradle to gate concerns and S-LCA to understand the social and economic impacts of spend. The Guidelines for Social Life Cycle Assessment of Products, (2009) United Nations Environment Programme provides "a map, a skeleton and a flash light for stakeholders engaging in the assessment of social and socio-economic impacts of products life cycle." (*www.unep.fr/shared/publications/pdf/DTIx1164xPA-guidelines_sLCA.pdf*).
- Engagement with grantees and/or suppliers for top priority spend categories is essential to improve the reliability of spend analysis results and, more importantly, to understand how meaningful impact reductions can be achieved in these areas.
- Provision of information on social and financial implications of purchasing, such as job creation potential and cost savings, help public organizations make informed decisions in the context of sustainable purchasing.
- EIO-LCA spend analysis is a cradle to gate analysis and is useful for identifying upstream impacts. It enables the buyer to consider the sustainability level of the industry, supplier and commodity within the procurement process. To assess the full spectrum of upstream and downstream impacts for commodities, a cradle to grave LCA is required.
- Communicating the outcomes of a spend analysis in conjunction with a cross-functional collaborative provides an opportunity to learn of other ongoing sustainable procurement practices within an organization. Through the outreach forum, DGS learned Department of Water Resources (DWR) has implemented the use of Envision™ for its sustainable infrastructure projects.

Benefits

Spend analyses help to identify and prioritize spend categories with highest impacts, a "hotspot" analysis so that actions to improve outcomes are strategic. Conveying the results as a multi-organizational approach can bring about shared lessons, greater collaboration and opportunities to streamline processes to further sustainable purchasing practices globally. This approach also can help to standardize and, therefore, lessen supplier's burden in addressing an array of purchasers' requests for information. By mapping the process to conduct a spend analysis, outreach event, and sharing results it leads other organizations to gain more insight into procurement processes. Others can reference the lessons learned by those conducting similar work and plan accordingly to avoid pitfalls or celebrate like achievements. Cost and time to run a spend analysis will lessen as purchasers and suppliers become more familiar with the overall process.

Internal Benefits

- Identifies new methods to reduce impacts and offer improvements.
- Assists to convey the message and engage stakeholders to hear external perspectives and practices.
- Inventory buyers supply chain.
- Benchmarks states spend.
- Establishes foundation to measure leadership.
- Supports new strategies to further address ESE outcomes.

External Benefits

- Provides guidance.
- Leverages industry.
- Offers potential to streamline processes.
- Benchmarks leadership.
- Earmarks innovations.
- Conveys challenges to benchmark spend and measure leadership across fiscal years.
- Bridges SPLC guidance with practical purchasing processes to enable more robust collaborations of driving leadership practices and outcomes.

Cost of the Spend Analysis project

DGS is a founding member of SPLC and participated in the collaboration to develop version 1.0 of SPLC Guidance for Leadership in Sustainable Purchasing. As an outcome of this effort, DGS committed to running a spend analysis pilot project. Participation was to test and validate SPLC guidance.

Planning for the spend analysis pilot project began in late 2014. DGS spent several weeks to research the methodologies and benefits of life cycle assessments. The knowledge assisted in writing future justifications and the support from executive management. It was necessary to gain support from California's chief procurement officer before the project could officially be initiated. DGS Office of Fiscal Services and Office of Human Resources would need to approve the justifications for funding and staffing resources.

DGS was granted approval to hire a retired annuitant and fund the costs. The spend analysis solicitation was posted in April 2015 and awarded by June 30, 2015. The contractor, IERS, and DGS engineering staff met on several occasions throughout the contract term.

The contract called for a two-phase approach, a hotspot analysis and then further drill down impact analysis. During Phase I of the contract, Task 3 was completed in 2016 where the outcome of this

analysis was shared as a training session at California Green Summit in spring of 2016 and in May at the SPLC 2016 Summit in Washington, D.C.

Phase II began in the later months of 2016 where the preliminary draft final report was published at the end of December. Originally an outreach event was planned for October 2016 but postponed until the analysis was finalized and the report was ready for release. The costs to conduct the work are:

- Cost of spend analysis contract: $319,000.
- Cost savings in competitive bid: $300,000.
- Cost of temporary staff for term of project: $120,000.
- Cost of permanent staff for term of project: $700,000 (includes staff hours dedicated directly to the life of the project: engineering manager, senior engineer, associate engineer, graphic designer and research program specialists)

Total cost of spend analysis is approximately $1 million.