The Economics of Supplier Diversity: Examining Areas of Potential Interest for GLI with respect to GRC 2011 and Potential Amendments to GO 156

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1. Economic Arguments for Supplier Diversity

   a. Paucity of Economic Literature on Diversity and Lack of Rigor in Business Literature

Overall, economists, with their focus on efficiency (often narrowly defined and short-term), have done a poor job of examining and valuing diversity, be it in terms of human communities or the biosphere. Until quite recently, most economists viewed ecosystem services as free, and, as such, traditional economics failed to take into account the value of biodiversity. Likewise, most economists have failed to adequately account for the value of Supplier Diversity (SD). TGG's economic literature review concludes that the economic literature on the value of supplier diversity is weak.[1]

Much of the management literature on procurement, as well as recent business trends, have championed the consolidation of suppliers to promote supply chain efficiency. In contrast to the economic literature, the topic of supplier diversity is widely discussed in the business literature. However most of this business literature is qualitative relying heavily on case studies, polling and interviews. Some of the business literature is also lacking in rigor and often aspirational, promoting SD because "it's the right thing to do" (or conversely promoting supplier consolidation on the basis of efficiency with minimum empirical research [2]). Very little empirical research is available with rigorous quantitative analysis of the economic case for SD. Nor would it appear that a robust economic framework has yet been developed to attempt to assign a value of supplier diversity.

Despite the paucity in the literature, an economic case for SD can be made based on existing studies and demographic information. The main economic arguments for SD are the following:

[1] The weakness of the economic and business literature is also discussed by Shah and Ram (p 77), Whitfield and Landeros (p 16) , González (p 5), Herring (p 208).

[2] Ogden, Jeffrey A., "Supply base reduction: an empirical study of critical success factors," Journal of Supply Chain Management, 2006.
< http://www.accessmylibrary.com/article-1G1-154694433/supply-base-reduction-empirical.html >

- supply and demand arguments
- marketing/reputation value
- interdependence of communities and business
- resilience in diversity
- private sector case studies/polling/interviews
- lessons from GO 156
- an economic case for SD based on quantitative research.

b. Supply and Demand Arguments

Almost all well-founded economic arguments for SD start out with demographic fundamentals. The Greenlining Institute (GLI) literally wrote the book (or Report) on this for California in its annual Supplier Diversity Report Card. As such, the demographics fundamentals will be summed up very briefly.

Minority Demand Increasing

Communities of color in California (and the US in general) continue to grow rapidly with the largest growth in the Latino community. In fact, Latinos are projected to become the state's largest racial/ethnic group by 2011.[3] According to GLI's 2009 SD Report Card (p. 3), the California majority-minority population is made up of 56% minority and 44% white[4] (based on the 2008 US Census). In contrast, based on the same Census data, the US population as a whole is about one-third minority and two-thirds non-minority. By 2050, the US population is projected to be 55% minority (p. 3) and California's will be 72% (p. 4 of GLI's 2010 SD Report Card). As GLI has noted in its 2008 SD Report Card, the nation's diverse future has already arrived in California.

In tandem with the increasing diversification of the US population, the increased purchasing power for minorities has been documented by U.S. Minority Business Development Agency. Total purchasing power in the US was over \$6.5 trillion in 2000 and just over 20% of that amount (\$1.3 trillion) was wielded by the minority population. The MBDA reports that according to the Bureau of Economic Analysis, by 2045, minority purchasing power is expected to rise to 32.3% of the US total or \$4.3 trillion (1998\$), under constant income disparity. If the income disparity is eliminated, minority purchasing power could soar to 45.5% or \$6.1 trillion (1998\$) by 2045.[5]

[3] U.S. Census Bureau. (2002). State and County Quickfacts. < http://quickfacts.census.gov/qfd/states/06000.html >
[4] By white, we assume that GLI means white non-Latino, given that white Latinos are considered minority. Unless otherwise specified, this report uses white to mean white non-Latino.
[5] Minority Purchasing Power: 2000-2045, U.S. Minority Business Development Agency, September 2000, pp 2-3. < http://www.nmsdcus.org/nmsdc/app/template/Content.vm/attachmentid/1658 >

In the US as a whole, the high current level and projected growth of minority purchasing power is clear. California is even more diverse, so minority purchasing power is even stronger. [Note: TGG has not looked at the projections for California, but it this data can be provided if required by GLI.]

Supply of MBEs Increasing

According to GLI's 2010 SD Report (our underlining):

> The state's minority owned businesses are also growing at a much faster rate than US businesses in general. Between 1997 and 2002, the last years in which data are available, the number of Latino-owned businesses grew 31%, the number of African American-owned businesses at 45%, and the number of Asian American-owned businesses at 24%. [6][6] Taking these growth rates into account, we project that California is now home to between one million to 1.5 million minority owned businesses.

This analysis is corroborated by Thalia González in her white paper, "Supplier Diversity is Simply Good for Business", where she indicates:

> Current estimates show that there are 1.5 million minority-owned businesses in California based on the recent 2002 Survey of Business Owners, adjusted annual growth rates, as well as a consideration for the undocumented businesses in California. U.S. Department of Commerce Minority Business Development Agency. Survey of Business Owners. Retrieved June 1, 2009 from http://www.census.gov/econ/sbo/index.html [7]

In terms of the US as a whole (our emphasis):

> Diversity, more specifically, is having a momentous impact on the business environment. For example, minority-owned businesses have become a fast-growing segment of the U.S. economy, growing from less than 7 percent of businesses in the United States in 1992 to almost 15 percent by 1997 (U.S. Small Business Administration 2001). In fact, growth rates in both numbers and gross receipts of minority-owned firms exceeded those of nonminority firms between 1992 and 1997 (U.S. Department of Commerce 2004). According to the most recent available Census data, there are approximately 3.9 million minority-

[6] [Footnote in original] Projections based on growth rates reported in US Census Survey of Business Owners 1997 and 2002.

[7] Thalia González, "Supplier Diversity is Simply Good for Business: the Importance of Establishing, Developing and Sustaining Supplier Diversity," Black Economic Council, August 18, 2009, , footnote 26, p 5. < http://www.blackeconomiccouncil.com/docs/Supplier_Diversity_Good_Business.pdf >

owned businesses that generate $637 billion in sales revenue and employ 4.5 million people.[8]

Gaps Persist in Supplier Diversity

Many companies have responded to changing demographics and MBE growth rates by establishing SD programs. According to Shah and Ram, the MBDA projections cited above were "regarded as an 'eye opener' for corporate America (Diversityinc.com, 2001). It appeared to constitute compelling evidence of the business case for supplier diversity."[9]

However, despite continued progress since G.O. 156 came into effect , MBE spending by California's regulated utilities remains well below population parity in terms of the overall minority population. Moreover, the utilities' MBE spending is quite uneven. There is significantly higher under-representation among many individual minority communities (e.g. Latino), as well as many underutilized areas of procurement within utilities (particularly white collar areas).[10]

In the unregulated private sector, even companies with exemplary SD initiatives (e.g., Xerox (13.2% MBE Spend), Waste Management (10.5%), Eli Lily (10% by 2006), Eaton Corp. (6.5%), Caterpillar (5%))[11] often lag well behind population parity.

According to a 2005 Boston Consulting Group Study (The New Agenda for Minority Business Development):

> Even though the number of minority businesses has reached unparalleled heights, their proportion does not yet fully reflect the growing size and importance of minority communities in the United States—soon to account for 40 percent of the population. Fueling the disparity is the fact that minority businesses are disproportionately represented in low-growth and no-growth sectors. They also tend to rely on personal debt and family financing over business loans, equity, and other tools that are otherwise commonly accepted in the capital markets. As

[8] Whitfield, Gwendolyn and Landeros, Robert, Journal of Supply Chain Management, "Supplier Diversity Effectiveness: Does Organizational Culture really Matter?," Fall 2006, p 16.
< http://www.accessmylibrary.com/article-1G1-154694432/supplier-diversity-effectiveness-does.html >

[9] Shah, Mayank and Ram, Monder, "Supplier diversity and minority business enterprise development: case study experience of three US multinationals," Supply Chain Management: An International Journal 11/1, 2006, pp 75-81.

[10] GLI 2009 and 2010 Report Cards.

[11] MBE Spend Data from various case studies, NYT, Diversity Inc. Magazine Surveys. Can provide exact citations later.

a result, minority businesses often lack the size, scale, and capabilities of their majority counterparts.[12]

[…]

A significant gap remains between minority-owned businesses and the overall business community in the United States. As noted in Exhibit 7, minority-owned firms account for only:

• 2.7 percent of total U.S. gross revenue from all firms

• 4.3 percent of all U.S. employment

• 9 percent of U.S. firms with $500,000 or more in revenue

• 5 percent of U.S. firms with more than 100 employees.

Obviously, minority-owned firms overall are significantly smaller in size, but there's more to the story. Net worth for example is another factor that plays a critical role, particularly since ethnic minority-owned businesses traditionally rely on equity financing from the savings of the owner or his/her friends and family. A recent study by the Pew Hispanic Center found that during the most recent recession (1999–2002), the net worth of African-American and Hispanic-American households decreased dramatically, by 27 percent for each group, while white American households experienced an increase in net worth of 2 percent. Overall, the net worth of white households, the study found, was eight times greater than that of Hispanic-American households and more than 11 times greater than that of African-American households.[13]

TGG believes that the wealth gap identified in the BCG Report is an important factor in the minority business gap. This business gap includes (i) the lag between the proportion of minority businesses compared to the minority population (ii) the lag between MBE performance and the overall US business community (iii) the lag between MBE procurement spending and population parity. In the US, there is also a big gap in incomes between whites and minorities (notably between whites and Blacks, Hispanics, and Native Americans). But as big as the income gap is, the wealth gap is even larger.

People with less wealth and less access to capital are definitely handicapped in starting and growing businesses. And this feeds into the aspects of MBEs discussed in the BCG report (such as smaller size and higher likelihood of MBEs being sole proprietorships).

[12] Holland, Richard and Lowry, James H., "The New Agenda for Minority Business Development", Boston Consulting Group, 2005, p. 1.
[13] Ibid, pp 9-10.

And the business gap also perpetuates the wealth gap, since business ownership (at least in successful businesses) is one of the most common ways of building wealth.

Moreover, the current economic crisis has been particularly difficult for minorities, making existing inequities worse, and resulting in relatively higher unemployment and increased income and wealth disparities. So SD is now even more important to address both long-standing and recently intensified gaps between white and minority incomes and wealth.[14]

As the GLI 2010 Report Card has emphasized, there is a continuing under-representation of MBEs in California utilities, particularly in professional services/white collar areas.

According to Waste Management CPO, Brad Holcomb, when the company undertook a spend analysis, it reviewed its data and discovered the following:

> "We have found that there is an underutilization of diverse suppliers in some of the more corporate spend areas like human resources, IT and legal, mostly because they [note: i.e., these departments] did not have to think about it or had training or education in the past," Holcomb says.[15]

Our understanding is that the CPUC recognizes the problem of underutilization of MBE suppliers in certain procurement areas, particularly related to professional services/white collar areas (e.g. Legal, Finance), and is currently examining this problem in the context of OIR 09-07-027. The other area of underutilization among the utilities identified by GLI, is in the significantly higher under-representation among many individual minority communities (e.g. Latino) in MBE spending. So even within Supplier Diversity initiatives, there is an equity gap among the various communities targeted by MBE Spending, as well as a tendency to pigeonhole MBE spending in more blue-collar procurement areas (Auto Dealers & Gasoline Service Stations; Construction; Home Furniture, Furnishings & Equipment).

To summarize the supply and demand argument, there is an economic case for SD in terms of demographics (shifting composition of the population and economy). Demand refers to the continued increasing diversification of the California and US populations, as well as the significantly increased purchasing power projected for these minority populations in the near future. Supply refers to the increase in MBEs (and more broadly

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[14] See Glantz, Aaron, "Flat Unemployment Rate Masks the Race Gap," New America Media, April 3, 2010. < http://newamericamedia.org/2010/04/flat-unemployment-rate-masks-the-race-gap.php > for further discussion of the impacts of the recession on minorities.

[15] Teague, P. & Hannon, D., "The changing face of supplier diversity," Purchasing, 134(13), < http://www.accessmylibrary.com/article-1G1-135425832/changing-face-supplier-diversity.html >

to the increasing proportion of minorities in the workforce), which are growing at a faster rate than US businesses.

The key lags between the minority supply and demand elements include (i) the lag between the proportion of minority businesses compared to the minority population (ii) the lag between MBE performance and the overall US business community (iii) the lag between MBE procurement spending and population parity.[16] These continued lags demonstrate why Supplier Diversity initiatives are important, and why the CPUC and private sector companies must encourage refinement and targeting of SD programs and adopt Best Practices in order to address these lags.

This is a period of intense demographic change, and it is not unusual for there to be some lags in response. But, smart companies know that there are opportunities to thrive in the 21st century, by understanding and adapting to changing demographics. So SD initiatives, which started out in the 1960s as government programs to create opportunities for MBEs, now represent a tremendous market opportunity for forward thinking companies (i.e. Walmart, IBM, AT&T).[17] The market-driven case for SD will be discussed in the following section.

c. Marketing/ Reputation Value

Related to the supply and demand argument, one of the most persuasive and intuitive arguments for SD, is that these programs improve a company's ability to market to diverse communities with growing purchasing power. This argument is put forward by many contemporary academics, who have examined SD.[18] In "Straight to the Bottom Line," (one of the bibles of procurement) the authors maintain that:

> A strong business case can be made for supplier diversity programs. Clearly the government still promotes the model that sets goals for spending with minority- and women-owned suppliers. However, financial services, automotive, and many consumer-based companies now recognize the strategic importance of a robust program. Demographics are shifting; minority groups are growing rapidly and are projected to grow even more rapidly in future years. With this in mind, many

[16] When we refer to a gap between MBE Supply and increased demand by minorities, we are not referring to a the traditional supply and demand gap of economic theory, which results in a new price equilibrium. Rather, the gap refers to the lags as outlined above.

[17] See Shah and Ram, op. cit. footnote 9, p 76 for a more complete discussion of the US public policy origins of SD programs, as well as the rise of the market-driven case for SD. Holland and Lowry, op. cit. footnote 12, also provide a detailed review of the history of SD and the emerging market-driven argument for SD.

[18] Ibid. Also see Adobor, Henry and McMullen, Ronald, "Supplier diversity and supply chain management: A strategic approach," Business Horizons (2007), 50, p 220; and Herring, Cedric, "Does Diversity Pay?: Racial Composition of Firms and the Business Case for Diversity," American Sociological Review, Vol. 74(2), p. 208.

> companies have concluded that sourcing with minority business makes sense because these groups represent an ever-expanding customer base.[19]

Other market-related arguments for SD include improving a company's ability to meet customer needs, improved understanding of the pulse of the minority market, improved quality of services and products, enrichment of the workplace through the broadening of employee perspectives, strengthening teams, and greater resources for problem resolution.[20]

According to Shah and Ram,

> As the experience of one of the case study firms – Ford – confirms, the 1990s witnessed a change in how the supplier diversity initiative was perceived in the automobile industry. From considering it merely as a matter of goodwill and social responsibility to a more commercial rationale, vehicle manufacturers started looking for new market revenue opportunities, and could immediately see the benefit of developing long-term relationships with the minority communities (MBDA, 2001).
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> But apart from this pure market-driven proposition, engaging MBEs in its supply chain brings in added value to the overall performance of the company. By doing business with MBEs, it provides the firm with market access to the new growth and a strategically important market segment, bring flexibility in its supply chain, provide stakeholder satisfaction and enhances the firms' ability to meet government set-aside or subcontracting goals (Diversityinc.com, 2001).[21]

As noted above, SD was originally motivated by a need to meet requirements of government contracts and regulation. Before the business case for SD was recognized (and in fairness, before it was as compelling), corporations also implemented such programs in order to enhance their public image and Corporate Social Responsibility (CSR) efforts. CSR and public image are still important to companies. According to Michael Porter, practicing strategic CSR, "generates opportunities, innovation, and

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[19] Rudzki, R., Smock, D., Katzorke, M. & Stewart Jr., S., Straight to the Bottom Line. Fort Lauderdale, FL: J Ross Publishing. Gonz, 2006, p. 143 <http://books.google.ca/books?id=o5vZUZ1R2qUC&printsec=frontcover&dq=straight+to+the+bottom+line&hl=en&ei=9wRbTNjsL8OC8gbAq5WLAg&sa=X&oi=book_result&ct=result&resnum=1&ved=0CCwQ6AEwAA#v=onepage&q&f=false >;

[20] Herring, op. cit., footnote 18, p 208. Note that Herring also covers the literature that contradicts the value-in-diversity business case. He then undertakes a quantitative analysis of pro-diversity hypotheses, which concludes that diversity is related to positive business outcomes and appear consistent with the case that diversity enhances an organization's creativity, problem-solving and performance (p 220).

[21] See Shah and Ram, op. cit. footnote 9, pp 77-78.

competitive advantage for corporations – while solving pressing social problems."[22] SD is scores high in terms of strategic CSR, but most business literature emphasizes that contemporary programs should not be viewed as charities. Instead, the CSR aspect of SD appears to strengthen the market-driven argument: a good public image can enhance marketing opportunities and increase loyal customer base among minority communities.

[Note: there is considerable research on the business case for strategic CSR and it can be explored in greater detail if GLI is interested in more detail.]

The market-driven and CSR arguments may appear to be stronger for business-to-consumer (B2C) companies, rather than business-to-business (B2B) companies. A recent study by The Hackett Group (reported in IndustryWeek), based on results from nearly 40 Global 1000 companies found that:

> […] there are two primary drivers of supplier diversity efforts. While business-to-business companies are frequently focused on meeting supplier diversity requirements of customers and/or government contracts, business-to-consumer companies generally focus on the market value supplier diversity offers, in the form of increasing market penetration in diversity markets, driving social and economic benefits in targeted communities, and improving corporate image.[23]

However, TGG believes that as SD leaders such as Walmart and Ford introduce more aggressive Prime Contractor SD programs (which use their market power to force their suppliers to implement SD programs), B2B companies have increasing market incentives to improve SD. There is a case for utilities to implement similar Prime Contractor programs for their suppliers and use their market power to further increase SD among their Tier 1 and Tier 2 Suppliers. [Note: this is another area that TGG could further explore if GLI is interested].

Without this kind of pressure from their business customers (or via regulation or government procurement programs), B2B suppliers will indeed have less customer/market pressure to implement more SD than their B2C counterparts.

Furthermore, B2C companies with more highly differentiated products in competitive markets (e.g. restaurants, entertainment) need to be more responsive to the market-driven argument for SD. In the case of energy utilities, electricity and gas are mainly non-differentiated products in a frequently non-competitive or monopoly market.

[22] Porter, Michael and Kramer, Mark R., "Strategy and Society The Link Between Competitive Advantage and Corporate Social Responsibility," Harvard Business Review, December 2006, p 1.
[23] The Hackett Group, "Hackett: Most Supplier Diversity Programs Simply Fail to Deliver," Research Alert on The Hackett Group website, May 14, 2010.
< http://www.thehackettgroup.com/about/alerts/alerts_2010/alert_05142010.jsp >

As such, continued regulatory oversight of SD programs, along with increasing goals to emulate market pressures of a competitive market (as demographics evolve and diversity increases) are an essential role for the CPUC. SD is not a static issue in the US overall, and particularly in California. So in order to build on the success of the landmark G.O. 156, the CPUC must continue to raise the bar on voluntary SD goals. While utilities often are not subject to direct market pressure, SD benefits can be similar to those in non-regulated companies (i.e., as outlined above, by improving a company's ability to meet customer needs, improved understanding of the pulse of the minority market, improved quality of services and products, enrichment of the workplace through the broadening of employee perspectives, strengthening teams, and greater resources for problem resolution.) [24] In terms of CSR/public image benefits, like non-regulated companies, utilities also need public acceptance and support. Moreover because one of the roles of the regulator is to simulate market conditions for the monopoly utilities, these utilities also need regulatory approval and support.

d. Interdependence of Communities and Businesses

Another classic economic argument for SD is related to the interdependence of business and communities. Unfortunately, this argument has been neglected by laissez-faire economists, and its neglect has led to short-term and short-sighted decision-making that is detrimental for human communities. Fortunately, many economists are now moving away from laissez-faire to a more holistic approach to economics, which includes valuing human communities and the environment.

The fact that economically vibrant communities are better for business is a core premise for much of the academic literature of economic development and regional economics. TGG's understanding that a core premise for GLI is the interdependence of business and communities. SD programs can be implemented in such a way that corporate success and social welfare need not be a zero-sum game.[25] And SD can strengthen businesses and communities in a mutually reinforcing way. As corporations begin to implement more SD, they benefit from SD in all the ways discussed in the previous section. But the communities in which the businesses and suppliers are located also benefit and become more economically vibrant and empowered. As the local economy improves, businesses benefit from more customers with more purchasing power and better quality suppliers with more access to capital. Properly designed SD programs with an understanding of economic development can contribute to such a virtuous circle.

[24] Herring, op. cit., footnote 18, p 208.
[25] See Porter, Michael, op. cit., footnote 22 for further discussion of the link between competitive advantage and CSR.

[Note: a large body of literature exists on the interdependence of business and communities. TGG can further explore it if GLI is interested].

Economists have only recently begun to explore the economics of biodiversity in a rigorous manner. A recently released report led by the UNEP (United Nations Environment Programme) attempts to assign a value to ecosystem services and biodiversity. [26] There are many parallels between the economics of biodiversity and the economics of supplier diversity. One of the key commonalities is that there is an interdependence between healthy ecosystems and business (as there is an interdependence between economically healthy communities and business). Ultimately, without the biosphere, and without human communities, there would be no economy and no businesses. Similar to the case for SD, "the emerging business case for investment in ecosystem services promises to be significantly more engaging for business leaders than earlier emotional appeals to protect biodiversity," according to study author, economist Pavan Sukhdev.

[Note: The parallels between the economics of biodiversity and supplier diversity (as well as applicable findings from an economic framework valuing biodiversity) could be examined in more detail by TGG should GL be interested.]

e. Resilience in Diversity

Some of the academic literature flags another important economic argument for SD: a more diversified supplier network is a more resilient network. Diversity increased the robustness of a supplier network and provides more back-up and reliability. Supplier diversity can foster more competition, lead to better products and cost savings.

Unfortunately SD goes against the recent trend of supplier consolidation, championed by management literature and procurement specialists to promote supply chain efficiency.

However, some recent studies demonstrate how the potential conflicts between these goals can be reduced:

> One important area in which culture can be used to promote supplier diversity initiatives relates to cross-functional cooperation within the firm. At times, departmental objectives may differ within supply chains. For example, Teague and Hannon (2005) observe that the goals of supplier diversity and those of procurement differ. While procurement aims to rationalize the supply chain by

[26] "The Economics of Ecosystems and Biodiversity Report for Business," TEEB, July 13, 2010, < http://www.teebweb.org/ForBusiness/tabid/1021/language/en-US/Default.aspx >

reducing the number of suppliers, supplier diversity seeks to broaden the supplier base. Obviously, these two goals appear to be in direct conflict. This discord, however, can be reduced when everybody in the organization understands that, ultimately, everyone is working toward the same objective of delivering value.[27]

Again there are analogies here between the economic arguments for SD and those for biodiversity (in particular, as it relates to the food supply and monocultures). Traditional procurement practices may advantage a small number of suppliers who provide low-cost and other appealing features (such as being able to reliably deliver large volumes of highly standardized/narrowly sourced goods). But alternatives to traditional procurement may be able to add value to make up for higher costs and or other requirements for more complex procurement (such as in the case of a more diverse food supply, which requires managing seasonality and greater variety/lack of standardization).

[Note this is also an area where more research could be undertaken. Thalia Gonzalez, op. cit. has also addressed the resilience issue, as well as the related increased flexibility, and increased competition, offered by a more diversified supplier network.]

f. Private Sector Case Studies/Interviews/Polling

As discussed in Section 1.a., much of the business literature provides case studies and interviews related to the experience of large companies with Supplier Diversity. Most of these cases document positive experiences, as well as lessons learned in terms of best practices. SD case studies exist for many large corporate SD leaders, including, among others, UNISYS, Ford Motor Company, JP Morgan Chase, Caterpillar, IBM, Walmart, AT&T, Procter & Gamble and Gillette.
[Note: TGG can provide references and summaries for these studies if needed].

There is also a great deal of anecdotal reporting on the SD experiences of various corporations. While interesting in terms of qualitative data, case studies and interviews on their own do not provide a quantifiable economic argument for SD.

Nonetheless, when the body of the case studies is considered, the following patterns emerge (i) the implementation of SD programs is a growing trend among corporate leaders; (ii) many corporations are encouraging SD programs among their Tier 1 suppliers (i.e. Prime Contractor programs); (iii) SD is not just about public image or complying to government programs: many corporations view SD programs as an

[27] Adobor and McMullen, op. cit., footnote 18, p. 224.

essential part of their procurement strategy. Some go so far as to view SD programs as a competitive advantage that leads to positive business outcomes.

The case of Walmart's SD programs is particularly interesting, given importance of Walmart's supplier network (approximately 60,000 suppliers as of 2007), its enormous procurement budget, and the tremendous influence and market power that Walmart has over its supply partners. Walmart's spend on SD (which includes both minority- and women-owned businesses) has grown at a stellar rate since 1998 when its SD program spend was $2 million. In 2008, spending on SD was $6 billion, and combined direct and 2nd Tier spending was $8.1 billion, which represents an impressive 25% increase over the combined spending of $6 billion in 2007. As discussed above, Walmart uses its influence and market power to force 2nd Tier suppliers to implement SD programs of their own (such initiatives are known as Prime Contractor programs).[28]

There is no doubt that SD is an important way for Walmart to improve its somewhat tarnished public image, particularly in minority communities. However, Walmart is no charity. The impressive breadth and depth of Walmart's SD programs constitute a strong economic argument for the value of SD in the retail business.

As cited above, many national private sector SD leaders boast MBE spending of 5% to 13% of the total procurement budget. While these proportions are less than the CPUC's 15% voluntary MBE spending goal, it should be pointed out that companies operating nationally are doing business in other states that are typically much less diverse than California. On that basis, it is not surprising that national private sector SD leaders have MBE spending that is below the goals set for California utilities.

However, given that the minority communities represent approximately a third of the US population, the performance of national private sector SD leaders is still lagging minority population parity. Nonetheless, it is notable that the private sector is making so much progress in the absence of regulation. Recent increases in SD levels in the private sector further support the economic argument for SD.

Corporate polling also supports the economic argument for SD. According to a Purchasing.com poll from 2005, 65% of respondents indicated that SD was either a mid-level or high-level priority.[29] A study facilitated by Fortune Magazine and the Society for Human Resource Management found that more than 75% of the organizations surveyed were involved in "some type of diversity activity or initiative".[30]

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[28] Walmart website, < http://walmartstores.com/Diversity/253.aspx > and < http://walmartstores.com/pressroom/news/9093.aspx >.
[29] Teague and Hannon, op. cit., footnote 15, p. 1.
[30] Whitfield and Landeros, op. cit., footnote 8, p. 1.

[Note: This area could also be further researched. Also, although TGG has not researched the % of MBE by Walmart, it may have surpassed Ford in terms of having the biggest SD procurement program in absolute dollars in the world].

g. Lessons from GO 156: Regulation and Goals Work

GLI has already made an excellent case for the success of GO 156 in the 2010 SD (p 4).

[Note: While TGG does not have the exact data for increases in SD since GO 156 became effective, it would be interesting to analyze the evolution in MBE spending since 1988, and compare it with MBE spending in other jurisdictions or in the unregulated private sector. Our understanding is that the gains in MBE spending have been significant over the past 22 years.]

GO 156 is also recognized by the Boston Consulting Group Study as a milestone in the history of minority business development:

> California General Order 156 reaches farther than any state or local MBE initiative ever conceived. The General Order calls for the setting of goals, establishment of viable program initiatives, verification of racial or gender ownership status of suppliers and the adoption of a formal complaint procedure. This results in the California Public Utility Commission having the potential for withholding action on utility rate cases brought before it, where the affected utilities have not complied with the General Order.[31]

The management and organization psychology literature make a strong case that performance is improved when challenging goals are set. As such, TGG agrees with GLI that the CPUC must keep raising the bar set in GO 156 by (i) increasing the overall voluntary goals for SD spending to better reflect California's changing demographics with the goal of eventually achieving population parity; and (ii) targeting these goals in such a way as to address underutilized areas of procurement, and underutilized communities within the MBE spend. As discussed above, increasing MBE spending goals to emulate market pressures of a competitive market (as demographics evolve and diversity increases) is an essential role for the CPUC. SD is not a static issue in the US overall, and particularly in California, so in order to build on the success of the landmark G.O. 156, the CPUC must continue to raise the bar on voluntary SD goals.

[Note TGG suggests that in making the case before the CPUC to raise the bar via voluntary goals, it might be helpful to present academic literature which shows the strong link between business performance and goal-setting.]

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[31] Holland and Lowry, op. cit., footnote 12, Exhibit 1 (unpaginated, but between pp 6 and 7).

h. Economic Case for SD based on Quantitative Research

As discussed in Section 1. a., very little quantitative research is available with statistically significant analysis of the economic case for SD. Nor would it appear that a robust economic framework has yet been developed to attempt to assign a value of supplier diversity. However, one recent study has attempted to apply quantitative analysis to empirical research. According to Herring, the study's author:

> Many of the claims and hypotheses about diversity's impacts have not been examined empirically, so it is not clear what effect, if any, diversity has on the overall functioning of organizations, especially businesses.
>
> In this article, I empirically examine key questions pertaining to organizational diversity and its implications. Does diversity offer the many benefits suggested by the value-in-diversity thesis? Or, do costs offset potential benefits? Perhaps diversity is simultaneously associated with the twin outcomes of group-level conflict and increased performance at the establishment level.[32]

Herring's study tests eight hypotheses derived from the pro-diversity literature. The results support seven of the eight hypotheses: "racial diversity is associated with increased sales revenue, more customers, greater market share, and greater relative profits. Gender diversity is associated with increased sales revenue, more customers, and greater relative profits." [33]

The conclusions of the study appear to strongly support the economic case for SD:

> This research suggests that diversity—when tethered to concerns about parity—is linked to positive outcomes, at least in business organizations. The findings presented here are consistent with arguments that diversity is related to business success because it allows companies to "think outside the box" by bringing previously excluded groups inside the box. This process enhances an organization's creativity, problem-solving, and performance.[34]

A 2006 study by the Hackett Group (reported in InformationWeek and the Wall Street Journal) concluded that "world-class procurement organizations that focus heavily on supplier diversity don't sacrifice procurement savings by doing so. These leading companies have slightly higher adoption rates of supplier diversity programs as typical

[32] Herring, op. cit., footnote 18, p. 209.
[33] Ibid, p. 208.
[34] Ibid, p. 220.

companies, and they generate 133% greater return on the cost of procurement than average performers, Hackett says."[35]

Moreover, the Wall Street Journal, reporting on the same study, states that "such companies spend on average 20 percent less on their buying operations and have procurement staffs half the size of their peers whose supplier programs aren't as diverse."[36]

TGG is not convinced that the Herring or the Hackett studies present a definitive economic case for SD because it is not clear if there exists a causal relationship between SD and the positive business outcomes documents. Herring himself concedes that "it is possible that the associations reported between diversity and business outcomes exist because more successful business organizations can devote more attention and resources to diversity issues."[37] The same caveat applies to the Hackett study.

TGG also further questions whether organizations that are more diverse have other attributes that differentiate them from organization that are less diverse. For example, whites tend to be incumbents; compared with other US groups, whites tend to be older and have generally been in the US (and professional niches) longer. Thus, organizations that are newer and/or faster growing/hiring would tend to be more diverse than organizations that are older and/or more static.

More generally, in the US, regions that are more dynamic economically attract more migrants (both from rest of US and internationally) than regions that are less dynamic. So at both the company and regional level, diversity will tend to be lower in those less dynamic .

So there could be circularity in the apparent causal conclusions of the studies. Businesses that are dynamic/successful (for whatever reason) may tend to be more diverse owing to doing lots of hiring in the evolving and ever more diverse labor market (and in an era when laws and culture discouraged discriminatory practices). By comparison, businesses that are less dynamic/successful will tend to be more dominated by incumbents that are predominantly white.

While these studies do not make a wholly convincing case that SD generally and consistently improves business outcomes, they may provide significant support to disprove the converse. To wit, some would (and have) made the case that SD could be bad for business. These papers help to show that SD is unlikely to be bad for business.

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[35] InformationWeek, "Diversity Programs Benefit Bottom Line," August 17, 2006.
[36] The Wall Street Journal, "Moving the Market – Tracking the Numbers / Outside Audit: Benefits to Supplier Diversity May Go Beyond Social Good," p. C3, August 21, 2006.
[37] Ibid, p. 220.

At worst, SD could have minor/ambiguous impacts on business success. And to the extent that SD hurts any businesses, any such effects are likely small and/or transitory.

The results of the quantitative studies indicate that it is likely that SD could be significant advantage for businesses. For some businesses, this positive effect may be small and/or partially offset by some downsides. However for other businesses, SD could be a more significant plus.

i. Conclusion: Economic Arguments for Supplier Diversity

In Sections 1 b. to 1. h., TGG has outlined the main economic arguments for SD:

- supply and demand arguments
- marketing/reputation value
- interdependence of communities and business
- resilience in diversity
- private sector case studies/polling/interviews
- lessons from GO 156
- results of a few quantitative studies of SD.

While more quantitative empirical research would be desirable to make a stronger economic case for SD, TGG has concluded from the available quantitative research that SD could be a significant advantage and is unlikely to have any significant adverse impacts on any businesses. Moreover, many of the conceptual arguments (i.e. changing demographics, the MBE lags, marketing/reputation value of SD, resilience in diversity), as well as the qualitative research from private sector case studies provide a strong support for SD. Taken as a whole, all of these arguments constitute a reasonable economic case for SD.

2. Economic Case for Increasing Supplier Diversity in GRC 2011

a. TGG Review of Economics of SD Strengthens SD Recommendations for GRC 2011 in Direct Testimony

GLI hired TGG in GRC 2011 mainly to review and comment on the flawed IHS Global Insight job study, which PG&E attempted to use in order to justify its proposed $8 billion capital expenditure. TGG agreed with GLI's suggestion that in order to justify this high level of capital spending, we could recommend that PG&E increase its SD spending. Because of time constraints, TGG's direct testimony was written with only a limited background in SD. More particularly TGG was not fully aware (i) the CPUC's experience with SD and the implications of GO 156; and (ii) GLI's important role in advocating for SD at the CPUC. Fortunately, our recent research into the economic case for SD (in the US and in California in particular) has only strengthened the prescriptions set out in the Direct Testimony.

Section 3 of TGG's Direct Testimony demonstrates that there is a strong economic rationale for SD initiatives in GRC 2011. In Section 3.1 (pp 23-24), we outlined the particular importance of SD initiatives in the GRC, in which PG&E customers will be subject to higher rates during a deep and persistent economic crisis. We indicated that SD initiatives are of particular importance in this GRC given the significant amount of benefits and costs involved in the proposed capital expenditures (and other expenditures), as well as the uneven distribution of these benefits and costs. (p. 23)

Section 3.6 (pp 36-37) discusses specific SD issues in California, emphasizing the state's highly diverse and rapidly changing demographics, as well as PG&E's lagging performance in MBE spending as per GLI's 2009 SD Report Card.

Section 3.7 (pp 37-39) outlines the specific equity issue surrounding the upgrading of distribution infrastructure in the current GRC, indicating that a substantial portion of the upgrade costs will be borne by residential and small commercial customers. This provides yet another targeted argument for the importance of implementing more SD in order to offset some of the economic burden of the capital expenditure and create economic opportunities throughout the communities that will affected.

Finally, Section 3.8 of the Direct Testimony (p. 39) summarizes the economic argument for SD initiatives in GRC 2011:

> As demonstrated in Section 3, there is a strong economic rationale for supplier diversity initiatives. Such initiatives provide a mechanism to both address equity considerations and to mitigate adverse impacts of large capital expenditures on ratepayers (i.e. mitigating both customer and community impacts). While there is a strong case in general for supplier diversity, the current GRC is particularly appropriate for consideration of such initiatives. The review of LIEE and low-income solar initiatives has provided a number of lessons as to how PG&E should increase low-income customer and community benefits from other capital expenditures. One of the key means by which customer and community benefits could be increased [is] to enhance diversity/inclusion initiatives (such as supplier diversity) relating to utility capital expenditures.

In its 2010 SD Report Card, GLI recommends the incorporation of MBE spending directly into capital investments in order to justify them:

> Companies should incorporate minority spending into their lucrative capital projects. These projects lead to high returns for the companies and often lead to higher rates for consumers. To justify these rate increases, companies should demonstrate that major economic opportunities are being allocated equitably and are representative of the consumer base that supports these companies. (p. 27)

The 2010 Report Card also discusses the importance of SD in the Economic Downturn (pp 4-5). TGG has touched on this topic in our Direct Testimony. Consideration of the effects of the current recession on minorities further strengthens the case for SD in the current downturn. As indicated above:

Moreover, the current economic crisis has been particularly difficult for minorities, making existing inequities worse, and resulting in relatively higher unemployment and increased income and wealth disparities (including a higher level of housing foreclosures). So SD is now even more important to address both long-standing and recently intensified gaps between white and minority incomes and wealth.

b. PG&E in 2009: the Industry's Worst SD Performer

[Note: some of this material repeats Section of the July 8, 2010 Briefing Memo on SD Supporting Material, in order to consolidate the key information related to the economic case of strengthening PG&E's SD in GRC 2011.]

As indicated in TGG's Direct Testimony (p 37):

> Based on the Company's filing, PG&E is claiming that it is doing a good job in regard to diversity (both in terms of suppliers and employees). However, according to The Greenlining Institute 2009 Supplier Diversity Report Card, PG&E has lagged behind other utilities in terms of supplier diversity.[38] In fact, Greenlining assigned PG&E a grade of C- for Total Minority-Owned Business Enterprise Spending, putting the utility well behind Verizon, San Diego Gas & Electric, Southern California Gas and AT&T and only slightly ahead of Southern California Edison (which did not even meet the CPUC's 15% procurement goals for minority-owned businesses).
>
> With just 15.71% as a percentage of contractor dollars going to Minority-Owned Businesses, PG&E barely met the CPUC's 15% procurement goal. While PG&E's Total Minority Spending has increased considerably since 2004 when it was just over 10%, it is by no means an industry leader in supplier diversity and there is significant room for improvement. Given the particular importance of supplier diversity initiatives at this time, the Commission should direct PG&E to improve its current performance and should ensure that all possible efficient supplier diversity is being carried out in this GRC.

[38] [Footnote 67 in original: 2009 Supplier Diversity Report Card, The Greenlining Institue [sic], June 2009, p 5.<www.greenlining.org/resources/pdfs/2009GreenliningSupplierDiversityReportCard.pdf>.]

But PG&E’s poor performance gets worse in 2009, according to GLI’s 2010 Supplier Diversity Report Card. PG&E is the only utility to have decreased its proportional MBE spending, with 2009 results below even the CPUC’s modest 15% procurement goal (p. 7). GLI assigned PG&E a grade of D- for Total MBE Spending, putting the utility well behind Verizon, Southern California Gas, AT&T, San Diego Gas & Electric, and even Southern California Edison (which just met the CPUC’s 15% procurement goals for minority-owned businesses).

In the company specific recommendations of GLI’s 2010 SD Report Card, GLI recommends the following:

> Pacific Gas and Electric’s regression indicates the need for stronger commitment and organization from its supplier diversity program. As the only utility to take a significant step backwards, PG&E is now the industry’s worst supplier diversity performer. Greenlining specifically urges PG&E to improve its MBE spending for Technical and Analytical Instruments and reverse a negative trend in Asian American/Pacific Islander procurement. (p. 28)

TGG concurs with this recommendation. At a time when it is critical for PG&E to improves its SD performance, the utility is backsliding.

c. Diversity in Diversity Programs: Addressing Underutilized Areas and Communities

GLI’s 2010 Report Card provides more in-depth analysis into the distribution of spending across procurement categories and individual minority communities. This analysis indicates that there is a need to address underutilized areas of procurement and underutilized communities in PG&E’s SD program.

> This categorical analysis shows that in many instances of majority of spending with one racial group becomes pigeonholed into one or two spending categories. Moreover, certain spending categories are often underrepresented by minority suppliers. Overall supplier diversity success is compromised if the spending itself is racialized across different categories. (p 19)

[Note: TGG has noted a few potential minor errors or inconsistencies in the GLI 2010 SD Report Card analysis related to the racial distribution of spending across procurement categories. We can provide more details on this at a later date if GLI is interested.]

On p. 5 of the 2010 Report Card, GLI finds that across utilities “Spending towards MBEs was disproportionally skewed towards finished goods, raw materials, construction, transportation and repair rather than towards technical equipment and professional services.”

Notable examples of skewed spending for PG&E are presented on p. 20 and include:

- Zero spending with African-American or Latina women for Legal Services.
- Almost no contracts for Technical/Analyzing Instruments went to African Americans and Latinos.
- Latino men accounted for 76% of Transportation Equipment spending.

On p. 13 of the 2010 Report Card, GLI compares aggregated MBE spending by utilities and telecoms in 2009 with 2008 minority demographics. A chart is also provided with 2009 MBE spending by minority group for each utility. A comparison of the population breakdown with the aggregated MBE spending by utilities provides a graphic illustration of the minority business gap discussed above: the striking disparity between SD performance (both for the PG&E MBE spending and aggregated MBE spending) and the California’s current population.

An even more relevant comparison would be to contrast a breakdown of the minority populations in PG&E’s service area with PGE’s MBE spending by minority group. TGG has compiled a breakdown of the minority populations in PG&E’s service area.

TGG’s calculations are based on the state (Department of Finance) data, showing the distribution of population for 2000-2050, by race/ethnicity, for total California, PG&E Service Area (based on the 47 counties), ROC (non-PG&E 11 counties).[39]

[39] State of California, Department of Finance, *Population Projections for California and Its Counties 2000-2050*, Sacramento, California, July 2007.

	2000	2010	2020	2030	2040	2050
			Total California			
White (Non-MBE)	47.3%	42.0%	37.4%	33.3%	29.5%	26.4%
Native American	0.5%	0.6%	0.7%	0.7%	0.7%	0.7%
Latino	32.4%	37.1%	41.4%	45.4%	48.9%	52.1%
Asian-Pacific Islander	11.4%	12.4%	13.0%	13.4%	13.7%	13.8%
African-American	6.5%	5.8%	5.4%	5.0%	4.7%	4.5%
Multi-Race	1.9%	2.1%	2.2%	2.3%	2.4%	2.4%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
			PG&E Service Area (47 counties)			
White (Non-MBE)	54.6%	48.6%	43.7%	39.1%	35.0%	31.7%
Native American	0.7%	0.8%	0.9%	0.9%	1.0%	0.9%
Latino	24.2%	29.4%	34.0%	38.4%	42.3%	45.8%
Asian-Pacific Islander	12.5%	13.6%	14.2%	14.5%	14.7%	14.7%
African-American	5.7%	5.1%	4.8%	4.6%	4.4%	4.2%
Multi-Race	2.2%	2.4%	2.5%	2.6%	2.6%	2.6%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
			Other California [Non-PG&E Service Area (11 counties)]			
White (Non-MBE)	41.9%	37.1%	32.6%	28.6%	25.0%	21.8%
Native American	0.4%	0.5%	0.5%	0.6%	0.6%	0.6%
Latino	38.6%	42.7%	47.0%	50.9%	54.5%	57.7%
Asian-Pacific Islander	10.5%	11.4%	12.0%	12.5%	12.8%	13.0%
African-American	7.1%	6.4%	5.9%	5.4%	5.1%	4.8%
Multi-Race	1.6%	1.9%	1.9%	2.0%	2.1%	2.2%
TOTAL	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

As expected, compared with the total California data, the PG&E service area does differ somewhat. The main difference is that PG&E is more white (non-MBE) and less Latino. PG&E is also more Asian/Pacific Islander.

Again, the comparison between PG&E's MBE spending and the minority demographics of its service territory provide a striking demonstration of the minority business gap and the lag between PG&E's SD performance and the population that it serves. The biggest gap is the 23.7% disparity between the Latino businesses' share of MBE spending and its proportion in the service territory population.[40]

A final notable element in the 2010 Report Card relating to underutilized minorities is the fact that 2009 Latino and Asian MBE spending proportions are both down at PG&E compared to 2008 (pp 9-10). In fact, PG&E was the only company to report a decline in Latino MBE spending, "maintaining a position well below its industry peers" (p 10).

This underperformance is frankly surprising and highly worrisome, particularly given the importance of these two communities, as well as the high projected growth rates for the Latino community. TGG believes that this decline may indicate inertia in procurement and potential preferential treatment of traditional suppliers during the current downturn. More research may be required to understand these declines, but TGG supports GLI's position that underutilized areas of procurement and underutilized minorities must be monitored and addressed.

In terms of addressing the underutilized areas of procurement and underutilized communities within the MBE Spending, the 2010 Report card makes the following recommendation on p 27:

> Supplier diversity programs must undertake a more critical evaluation of spending practices by examining the racial distribution of spending across procurement categories. By adopting a simplified system of spending categories, similar to the one presented in this report, and attaching goals to these categories, companies can identify areas of underutilization. Broadly allocated diverse procurement will be necessary to achieve greater overall supplier diversity successes in the future.

Again, TGG supports GLI's position regarding the need to addressing underutilized areas of procurement and underutilized minority communities within SD programs.

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[40] The Latino gap of 23.7% was calculated by subtracting PG&E's Latino spend of 5.66% from the Latino population proportion of 29.4% in the PG&E service territory. The Latino gap for the aggregated utility data and the California population as a whole was 27.2%. It is not surprising that this aggregated gap is somewhat higher given that the PG&E service territory has a relatively lower Latino population (29.4% vs. overall CA of 34.5%). However the Latino gap remains strikingly high at PG&E given that the Latino spend is only 5.66% of total procurement (vs. 7.31% Latino spend in the aggregated MBE procurement for California).

Underutilization in procurement programs has been briefly discussed in management literature. Our understanding is that the CPUC is also interested in addressing this area.

Regulatory scrutiny of these underutilized areas and communities, consistent reporting, and more targeted SD programs with specific goals across procurement categories, as well as goals to increase participation of underutilized minorities can help to address the underrepresentation problems identified in this section.

TGG believes that more research into best practices in SD would be useful in making a better case for addressing underutilized areas.

[Note: TGG has also noted that the number of overall contracts MBE contracts may be low at PG&E. This may also limit diversity across diversity programs and exacerbate the problem of underutilized areas of procurement and underutilized minority community. This could be another area for future research.]

d. PG&E Benefits from Economically Vibrant Communities

Same argument as presented in 1. d. regarding the interdependence and business is true for PG&E. This argument is even more important during the current recession.

[Note: This could be an area for further research by TGG.]

OUTLINE OF OTHER AREAS TO EXPLORE IN MAKING AN ECONOMIC CASE FOR SUPPLIER DIVERSITY

3. Addressing the Arguments Against (or Limiting) Supplier Diversity
    a. Tension between Goals of Procurement to Consolidate Suppliers for Efficiency and Goals of Supplier Diversity to Increase Suppliers
    b. Diversity Programs Bureaucratic/Hard-to-Manage/Inefficient
    c. Voluntary Regulatory Goals (as per GO 156) Not So Voluntary
        i. Tend Towards Quotas and Set-Asides
        ii. Lead to Onerous Reporting Requirements
        iii. Resistance to Specific Goals in Underutilized Areas
    d. Difficulty Identifying/Finding Certified MBE Suppliers (especially in underutilized areas of procurement and underutilized communities)
    e. Problem of Cheating on MBE Certification
    f. MBEs Too Small/Not Sophisticated Enough to Handle Large-Scale Business Contracts
    g. Fastest Growing Immigrant Groups Among Those with Lowest Education Levels

4. Best Practices in Supplier Diversity
    a. Common Themes from Literature Review
    b. Measuring the Supplier Diversity Program Performance in Organizations
        i. Getting the Metrics Right
        ii. Hackett Study SD Program Metric Problems (in WSJ)
        iii. Number of Overall Contracts
        iv. Measuring Performance of SD in Underutilized Areas of Procurement and Underutilized Communities
    c. Compare PG&E's Supplier Diversity Efforts to Best Practices

5. Education
    a. Particular Importance of Mentoring
    b. Importance of Supplier Diversity as Incentive for Success within Communities of Color

6. Beyond GO 156
    a. Build on Success of GO 156
    b. Supplier Diversity is not a Static Issue so the Bar Should be Raised
    c. Supplier Diversity Goals Should be Refined through Sub-Goals in Underutilized Areas of Procurement and Underutilized Communities
    d. Consistent and Transparent Reporting Needed
    e. Modifications to GO 156 Should Reflect:

i. Historic Lessons from Success of GO 156
ii. Continued and Increasing Diversification in the CA Economy
iii. Best Practices in Supplier Diversity
iv. Transfer of Knowledge from Success of Private Sector Programs

f. Comments on the 09-07-027 Workshops Regarding Barriers to Competition and Expanding Underutilized Areas

7. Protectionism: a Caveat
   a. Comment on GLI’s Position at the CPUC Workshops (related to 09-07-27)