whether the contractor makes a strong showing that it does not discriminate, it might not be subject to the strict scrutiny outlined in *Croson*. A possible disadvantage of this approach is that the state or local agency may find itself choosing higher-priced firms, albeit ones with better affirmative-action records. Another disadvantage is that this procedure requires more management time and judgement and is more susceptible to protests and litigation.

A related approach involves giving prime contractors a monetary reward for utilization of HUB subcontractors. Construction and commodity bids are evaluated on the basis of lowest responsive and responsible bid. However, the successful bidder is given additional compensation depending upon the level of HUB utilization they achieve. For example, the prime contractor could receive up to 5 percent of the award if HUB subcontractors receive up to 20 percent of the award. The prime would receive nothing if no HUB subcontractors are used, 2.5 percent if HUB subcontractors receive 10 percent, and so forth.[281]

B. Identity of Disadvantaged Groups

Under *Croson*, it is necessary to identify each race and ethnic group that has suffered discrimination. We do not view that principle as requiring a similar factual showing for narrowly defined groups, such as Asians of Japanese ancestry. Such a rule might preclude inclusion of smaller groups, regardless of the discrimination they might have suffered in fact. Valid statistics are generally unavailable for smaller groups for several reasons. First, government data are not available (for example, the Census does not report separate minority business data for Native Americans; they are included in the Asian census data). Second, generally, few members of the group have had the opportunity to participate in the procurement process. Finally, it would be difficult to obtain a

[281] Such a program has been used successfully by the Audubon Institute in New Orleans.

statistically significant sample of survey responses from smaller groups, even if the government data were available.

C. Establishing Goals

It is not yet clear whether *Croson* requires that future goals be based on historical measures of actual availability, current actual availability or estimates of what current availability would be but-for past discrimination (i.e., potential availability). This subsection considers some of the issues concerning the choice of measure.

1. Current Availability

While basing goals on current availability is clearly unobjectionable, the courts have not addressed explicitly how to measure current availability for the purposes of establishing goals. To calculate goals based on the current availability of HUBs it is necessary to address several methodological issues. The first issue concerns the extent to which availability should be restricted to firms that are currently qualified to fulfill a particular procurement. We described in Chapter 3 how restricting the pool of firms that have the same business qualifications would perpetuate the effects of discrimination since discrimination may limit the ability of HUBs to obtain those qualifications. If, for example, discrimination makes it difficult for HUBs to obtain bonding or to obtain experience as subcontractors, basing availability on firms that have particular levels of bonding or specified years of experience working on similar projects would not remedy the discrimination that has led to the underutilization of HUBs in the first place. We believe it best, in light of this concern and the availability of useful information, to base current availability on establishments with at least one paid employee. This approach excludes the large number of small firms that consist only of their owner. While this approach is consistent with Justice O'Connor's not unfavorable reference to *Ohio Contractors Assn. v. Keip*—a lower-court decision that upheld goals that were also not based on

detailed qualifications—it has not been explicitly accepted or even addressed by the Supreme Court or by lower courts.[282]

The second issue concerns the level of industry detail at which it is necessary to estimate current availability.[283] Government agencies purchase hundreds of different kinds of goods and services. Ordinarily, different pools of firms provide different pools of these goods and services. We believe that it is infeasible to estimate availability for each of these goods and services because of the lack of reliable data at the detailed industry level and the prohibitive cost of such a study. We have calculated goals for the major procurement categories—construction, professional services, other services and commodities—because we believed that those were the categories for which reliable figures could be calculated at reasonable cost. Nevertheless, these categories are quite broad—commodities, for example, includes goods as diverse as magazines, bus parts, computers and paperclips—so that the overall estimate of availability for a given category could be higher or lower than the availability for any industry within that category. While there is no case law condemning this approach,[284] neither is there any case law that says it is acceptable.[285]

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[282] The courts seem to be favorably disposed to this measure of availability. See, for example, *Contractors Association v. Philadelphia*, 6 F.3d 990, 1005 (3d Cir. 1993); *AGC of California v. Coalition for Economic Equity*, 950 F.2d 1401, 1414 (9th Cir. 1991); *Concrete Works of Colorado, Inc. v. Denver*, 823 F. Supp. 821, 834 (D. Colo. 1993). But see *Bilbo*, in which the court expressed particular concern that the statistical disparities presented did not compare persons with equivalent *qualifications*.

[283] Another issue concerns the level of detail for which race and ethnicity need to be considered; we discuss that below.

[284] See *Bilbo*, however, in which the court criticized overinclusiveness in some of the disparity calculations.

[285] We note, however, that we have used weights for the differing magnitudes of procurement in different industries when aggregating our measures as described in Chapter 3. Thus, our measures are not as gross as simple statistics for each procurement category. We also report availability estimates for each two-digit SIC code industry in Appendix H.

Using fairly aggregate measures of availability may be less problematic for agencies that have liberal waiver provisions that exempt contractors from meeting the goals where there is limited HUB availability and where goals are set on a contract-by-contract basis. In these cases, procurement officials and HUB program officers with detailed knowledge of availability can either increase or decrease the goals from the aggregate target depending upon their personal knowledge of HUB availability; they can also consider granting waivers when there is clearly a limited supply of HUBs and where prime contractors have made a good-faith effort.

2. Potential Availability

Discrimination not only reduces revenues and raises costs for existing HUBs, it also deters potential minority entrepreneurs from starting businesses and impedes the expansion of existing HUBs. Consequently, actual availability is less than potential availability as we discussed in Chapter 5. Setting goals higher than actual availability could help stimulate the formation of HUBs and thereby close the gap over time between actual and potential availability.

No court has specifically addressed the question of whether goals could be based on potential availability. On the negative side, *Croson* held that, on the facts presented in the case, it would have been "sheer speculation" to determine what availability would have been in the absence of discrimination. More positively, however, the Court has previously allowed such an adjustment in the analogous area of prior employment discrimination. In *United States v. Paradise*,[286] the Court upheld the use of an interim 50 percent racial quota for promotions, even though the ultimate goal was 25 percent and current availability was no more than that. Faced with an egregious showing of the defendant's discrimination and recalcitrance in remedying the situation, the Court concluded that the 50 percent promotion quota was the constitutional form of relief that simply regulated the speed

[286] 480 U.S. 149 (1987).

at which the defendant was to reach 25 percent minority employment within the defendant's upper ranks.

Justice O'Connor wrote a dissenting opinion in which Justices Rehnquist and Scalia joined and with which Justice White agreed. Justice O'Connor would have reversed the imposition of the 50 percent quota, in part because it "far exceeded the percentage of blacks in the trooper force, and there is no evidence in the record that such an extreme quota was necessary."[287] The dissenters conceded, however:

> [t]his is not to say that the percentage of minority individuals benefitted by a racial goal may never exceed the percentage of minority group members in the relevant work force. But protection of the rights of nonminority workers demands that a racial goal not substantially exceed the percentage of minority group members in the relevant population or work force absent compelling justification.[288]

Given Justice O'Connor's longstanding emphasis on using the relevant work force for assessing affirmative-action efforts and her authorship of the plurality opinion in *Croson*, this language is persuasive authority that a minority goal can exceed current availability by some amount. Moreover, the opinion suggests that with compelling justification a goal can even "substantially exceed" current availability.

Another factor suggesting that goals can be based on potential availability is that there are no known post-*Croson* cases in which a HUB goal was deemed unconstitutional because it exceeded current availability. Moreover, there are at least two post-*Croson* appellate decisions in which the issue of a minority goal in excess of current availability survived a summary judgment challenge to

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[287] *Id.* at 198.

[288] *Id.* at 199.

its constitutionality. The first is *Cone Corp. v. Hillsborough County.*[289] Unfortunately, the Eleventh Circuit in that case shed little light on this aspect of its ruling and instead relied on the flexibility of the goal and the goal's targeting of different minority groups and exclusion of some minority-owned businesses. Similarly, in *Contractors Association v. Philadelphia*, the Third Circuit overturned, with little explanation, a summary judgement ruling by a lower court that had found that a goal could not be larger than the calculated availability figure.[290] Both the courts' implicit acceptance that a minority goal in excess of availability is constitutional appears to be correct under *Paradise.*

A further consideration in setting goals in excess of actual availability is whether those goals can be met. While this determination should be made on a case-by-case basis for procurements, we believe general factors should be examined. The first factor is the availability of potential minority and woman entrepreneurs. To assess this, the representation of minorities and women with the relevant experience to start a business can be examined. For example, the percent of lawyers who are currently women constrains the number of law firms that could be owned and operated by women. The second factor is the historical rate of entry of HUBs. The number of HUBs has expanded more rapidly than the number of all firms since the early 1980s. That suggests that there is a pool of potential minority and woman entrepreneurs who can be drawn upon to start businesses. The third factor is the ability of existing HUBs to expand. The fourth factor is the experience in meeting current goals with qualified HUBs or the experience of other agencies in meeting similar goals.

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[289] See *Cone Corp. v. Hillsborough County*, 908 F.2d 908 (11th Cir.), *cert. denied*, 498 U.S. 983 (1990), *on remand*, 777 F. Supp. 1558 (M.D. Fla. Nov. 13, 1991), *remanded*, 995 F.2d. 185 and 5 F.3d 1397 (11th Cir. 1993).

[290] *Contractors Association v. Philadelphia*, 6 F.3d 990 (3d Cir. 1993)

Justice O'Connor's *Paradise* dissent suggests that large potential availability adjustments to actual availability figures will not be viewed favorably.[291] Setting goals higher than actual availability but less than potential availability, and perhaps increasing the goals toward potential availability in modest steps over a number of years, might strike an acceptable medium for the Court.

D. Program Length

There are at least three considerations in determining how long a program should last and how frequently to evaluate such a program. The first consideration concerns the period of time necessary to remedy the forms of discrimination described earlier. The second consideration concerns the frequency with which new data will become available to evaluate the program. An updated *Census of Minority and Women-Owned Businesses* was conducted in 1992, but, based on past publication lags, complete data will not be available until 1996. The third consideration concerns changes in the composition of procurement. Since the calculation of availability involves a weighted average of availability across detailed goods and services industries, changes in the kinds of goods and services that are procured can affect availability and the goals.

These considerations suggest that an update of the goals in 1996 when new HUB data become available may be useful. Subsequent updates of availability should probably take place every five years. Additional updates would be desirable whenever there are substantial changes in the composition of procurement. It would probably be advisable to include a presumptive sunset clause in no more than ten years, subject to an analysis at that time of whether discrimination or its effects remain a significant problem.[292]

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[291] 480 U.S. at 198.

[292] Justice O'Connor looked favorably on a 10-year sunset provision in *Northeastern Florida AGC*.

E. Geographic Scope

After *Coral*, jurisdictions within the Ninth Circuit may not include out-of-jurisdiction ("nonlocal") HUBs within the program unless they do or have actively tried to do business within the jurisdiction. Each nonlocal firm need not make a separate showing that it has suffered discrimination within the jurisdiction. If there is an adequate showing of a discriminatory environment within the relevant industry in the jurisdiction, then the Court will presume that a nonlocal firm that has tried to compete in the jurisdiction has suffered discrimination. This holding, like all of the holdings in *Coral*, is subject to revision by the Supreme Court and is obviously less relevant to entities in Texas than to agencies in the Ninth Circuit's jurisdiction, but we consider it likely to be adopted by the Supreme Court or the Fifth Circuit. Indeed, in *Northeastern Florida AGC*, Justice O'Connor referred to exclusion from a program of minority "groups against whom no discrimination ever had occurred *in the city*."[293] If that last phrase was intentional, it certainly suggests basic agreement with *Coral*.

F. Achievement of HUB Goals

In assessing the extent to which an entity has achieved its HUB goals, it is important to make sure that the calculation of the utilization of HUBs is consistent with the calculation of the HUB goals. HUB utilization and goals should be based on the same universe of procurement activity. Therefore, if certain procurement categories are excluded for the purposes of establishing the goals, then these procurement categories should be excluded for the purposes of determining whether the goals have been met. For example, we have excluded public utilities such as gas and electric companies from our analysis of availability since entry by firms into public utility markets is restricted. Public utility procurements should therefore be excluded from the dollar base used for assessing whether the goal has been achieved. If procurements from certain geographic areas are

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[293] L.Ed.2d. at 602 (emphasis supplied).

excluded for the purposes of establishing goals, then procurements from those areas should also be excluded for the purposes of calculating utilization. For example, we have reported possible HUB goals using the State of Texas as the geographic market. If the State constructed its program to rely on a different market, our goals would have to be recalculated.

Another issue concerns the calculation of HUB participation. The possible goals we present are based on the assumption that the percent of total procurement dollars received by HUBs should, in the absence of discrimination, approximate the percent of firms that are HUBs. In theory, all procurement dollars received by HUBs should be included for the purposes of assessing whether an entity has achieved this goal. In practice, it is often difficult to identify which dollars were received by HUBs at the different levels of prime contractor, subcontractor or supplier.[294] These allocations are further complicated if the prime contractor is a joint venture composed of both HUBs and non-HUBs. We can consider different rules for allocating the dollars over the different participants. First, one could specify that a contractor (or a participant in a joint venture) should be credited for all award dollars they have received less any payments made to subcontractors. Then one would further identify whether the subcontracted dollars were received by HUBs or non-HUBs. Second, contractors could be credited for all dollars they received as the prime less payments to *both* subcontractors and suppliers. In this case, one would need to identify the HUB status of additional parties in order to credit all the contract dollars appropriately. Third, contractors could be credited for their profits only (that is, all expenses would be subtracted out). Fourth, the different participants could be credited with fractions of the contract dollars in proportion to the relative costs born by each party. These

[294] For example, the detail and accuracy at which HUB receipts can be identified may be limited. It might be difficult to identify the race and sex of subcontractors and suppliers to first-tier subcontractors.

rules provide information about the recipients of awarded dollars at varying levels, and, thus, each rule requires a different level of research into identifying those recipients.

It is important to emphasize that these rules can have a large effect on the true utilization of HUBs and on the opportunities available to non-HUB contractors to evade the intent of a goal program. A good example arose in Maryland over the purchase of structural steel. Structural steel can be a large component of cost for some projects. In this instance, some non-HUB construction firms met their minority-participation goals by requiring their steel installers to pay for the cost of the structural steel which was purchased from non-HUBs. The State of Maryland has since excluded the purchase of structural steel from the dollars that can be counted toward the MBE goals.

G. Enforcing Goals and Minimizing Abuse

Without vigorous enforcement of the goals and vigilant attention to potential abuses, goal programs easily can fail to provide much meaningful assistance to HUBs.[295] Several problems often arise:

- Non-HUB primes amy not meet the HUB participation levels specified in their contracts. This can arise in several ways. First, HUB subcontractors are replaced with non-HUB contractors. Second, HUB subcontractors are not used to the extent originally agreed upon in the contract. Third, HUB subcontractors are not paid in full for the work they perform. Fourth, as a result of change orders the dollar value of the contract increases but HUBs are not used for the additional work. One solution to these problems is to require the non-HUB prime contractor, possibly as a condition of receiving payments, to provide documentation, possibly in the form of canceled checks from the HUBs, that they have met their goals.

- Non-HUB primes may try to meet their goals on their contracts in ways that do not create meaningful business opportunities for HUBS. For example, as mentioned above, primes may try to meet the goals by having HUB

[295] Bates and Williams, for example, find that the absence of fraud penalties tends to encourage the development of front firms while strong certification programs along with financial and technical assistance tends to encourage minority business development. See Timothy Bates and Darrel Williams, "Preferential Procurement Programs Do Not Necessarily Help Minority-Owned Businesses," February 1994.

subcontractors pay for goods and services that the primes would ordinarily purchase. To take another example, non-HUBs may simply pay the HUB a fee for using the HUB on the project but not have the HUB actually perform useful business functions. While the HUB may find this satisfactory, it obviously defeats the purpose of the program. To correct these sorts of problems, agencies need to make sure that only firms that perform commercially useful functions get certified. Moreover, during the course of the project, agency officials need to check that the HUBs used on the project are performing commercially useful work.

- Businesses that are not owned and controlled by members of the protected classes covered by the program may try to obtain HUB certification.[296] A common problem is where a husband and wife or father and daughter put the ownership of the business in the name of the woman and attempt to persuade certifying authorities that the woman has active control over the business. Another frequent problem is where non-HUBs establish a HUB primarily for the purpose of evading the program.[297] One way to correct these problems is to conduct careful certifications of HUBs and to review these certifications periodically. Unfortunately, this solution often creates its own problems: excess bureaucracy, slowness in certifying firms and the possibility that legitimate HUBs will not receive certification. Another way to correct these problems is to develop an investigation process to detect fraud and abuse and impose stiff penalties on firms that are found guilty of such fraud and abuse.[298]

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[296] Bates reports that an investigation of MBEs who had received contracts from the City of Indianapolis resulted in the City revoking the certification of 30 percent of its certified vendors. See Timothy Bates, "Why Do Minority Business Development Programs Generate So Little Business Development," 1994.

[297] For example, a Baltimore County Grand Jury found that "a great number of certified minority businesses have traded the opportunity to gain a foothold in the construction industry for the quick profit available from selling the use of their MBE name to nonminority firms." Baltimore City Grand Jury, "Special Report Concerning the Maryland Minority Business Enterprise Program," 1992, p. 4. See also, "Some Contractors Say Special Help Is No Favor," *The New York Times*, June 27, 1994, B4; "Minority Biz Owner Says Whites Looted Firm," *Boston Herald*, November 9, 1993, 1, 1; "State Finds Whites Control Minority Firm," *Boston Herald*, October 5, 1993, BUS; "Minority Firm Hiring by MWRA Beset by Abuses," *The Boston Globe*, August 10, 1993, METRO/REGION, 1; "Two Contractors Indicted for Allegedly Cheating Minority Firm," *Boston Herald*, December 4, 1992.

[298] For example, the State of Maryland closely monitors and enforces compliance with its minority participation program. Under its laws, acts of fraud such as those described in the text are felony offenses punishable by fines up to $20,000 or imprisonment for up to five years. Annotated Code of Maryland, State Finance and Procurement Article, Section 14-308(a). Another Maryland statute allows procurement officers to require substantial proof of compliance; for example, they can require that prime contractors provide copies of purchase orders, subcontracts and all records documenting minority participation. If a prime contractor is found to be out of compliance and fails to correct all violations, the State may apply any of the following sanctions: (i) termination of the contract; (ii) referral to the Office of the Attorney General for appropriate actions; or (iii) initiation of any other specific remedy identified by the contract. Code of Maryland Regulation

V. Parameters for Setting Possible Program Goals

It is not the the purpose of this study to recommend any particular program. A goals-based program is an option that the State may consider. If the State considers such a program, however, any goals it adopts should be tied to the availability of businesses owned by those race or sex groups included in the program. This section reports estimates of availability that could be used by the State as the basis for a goal-oriented program. We calculated these estimates under certain assumptions concerning the program(s) that the State might implement. The precise program(s) that the State might develop, however, depends upon a number of considerations that are outside of the purview of this particular study. The estimates of availability we report may need to be modified depending upon the precise nature of the program(s) ultimately adopted. Notably, the estimates of actual availability we report below are significantly lower than the 30 percent goal under the current HUB Program.

We have taken the following approach and/or made the following assumptions for the State.

- HUBs will be counted toward the goals regardless of their geographic location. We assume that even if the State adopts the apparent geographic limitations imposed by the *Coral Construction* decision, HUBs from outside of the State will be able to show that they have been victims of discrimination and, therefore, should be allowed to be certified to meet the goal.

- The goals are weighted to reflect the extent to which firms from various locations are likely to be awarded contracts.

- The goals are based on the actual availability of HUBs with at least one paid employee. The depressing effects of discrimination on HUB formation could be used to increase the goals based on actual availability somewhat, as indicated in our previous discussion of potential availability.

- The goals are only applied to procurements for which HUBs could, in principle, compete. We have excluded expenditures for those goods and services for which legal or economic restrictions preclude the existence of multiple firms (e.g., gas and electric companies).

(COMAR) §21.11.03.13.

- We report goals for African Americans, Hispanics, Asians and other minorities, and women. The State, however, needs to make a policy decision on which, if any, of these groups should be covered by the program. That decision should be informed by the results of this study and the relevant case law.

Table 7.2 reports the HUB goals based on both actual and potential availability for the State of Texas for each race and sex group by major procurement category.[299] In order to calculate goals for the State, we relied on the State's actual spending patterns by two-digit SIC code and the geographic location of its vendors. We restricted our analysis to expenditures for procurements awarded to commercial vendors and for which HUBs could potentially compete. We excluded expenditures for those goods and services that are not competitively bid.

As described in Chapter 3, we found that the preponderance of the State's procurement spending in all categories went to the Metroplex, Gulf Coast, and Central Texas regions. In construction a large share also went to the South Texas region. Therefore, the calculation of the possible goals is weighted more heavily toward these areas.

Based on our analysis, we found that the overall possible goal for HUBs based on actual availability is 16 percent in construction, 20 percent in professional services, 33 percent in other services and 13 percent in commodity purchasing. The goals for African American firms are especially low, because of their low availability in most industries. However, as we have shown in Chapters 5 and 6, discrimination has suppressed the formation of businesses by African Americans and other minorities.

We also have, therefore, calculated possible HUB goals based on potential availability. We have calculated these goals for African Americans; Hispanics and Asians and other minorities to

[299] The precise methodology used to calculate actual and potential availability is discussed in detail in Chapters 3, 4 and 5.

TABLE 7.2

ACTUAL AND POTENTIAL AVAILABILITY ESTIMATES FOR SETTING POSSIBLE GOALS

STATE OF TEXAS

Race/Sex Group	Actual Availability	Potential Availability
Construction		
African American	1.60 %	3.71 %
Hispanic	8.40	14.87
Asian and Other Minorities[1]	0.30	0.70
Minority Subtotal	10.30	19.28
White Women	5.90	5.90
Total HUBs	16.20	25.18
Professional Services		
African American	1.40 %	4.39 %
Hispanic	5.10	8.84
Asian and Other Minorities[1]	1.90	1.51
Minority Subtotal	8.40	14.75
White Women	11.60	11.60
Total HUBs	20.00	26.35
Other Services		
African American	3.50	10.50
Hispanic	9.90	16.54
Asian and Other Minorities[1]	2.30	1.83
Minority Subtotal	15.70	28.88
White Women	17.30	17.30
Total HUBs	33.00	46.18
Commodities		
African American	0.80 %	4.03 %
Hispanic	3.10	5.88
Asian and Other Minorities[1]	1.10	0.71
Minority Subtotal	5.00	10.62
White Women	7.60	7.60
Total HUBs	12.60	18.22

Note: This table reports the parameters that could be used to establish HUB goals for the State of Texas. Actual availability is based on the methodology presented in Chapter 3. Potential availability is calculated using the methodology described in Chapter 5.

[1]Asian and Other Miorities include: Asian Indian, Chinese, Japanese, Korean, Vietnamese, Filipino, Hawaiian, other Asian or Pacific Islander, Aleut, Eskimo and American Indian.

Source: State of Texas central payment data. Census of Minority and Women-Owned Business data.

account for the effects of discrimination on business formation by these groups. The overall goal for HUBs based on potential availability is 25 percent in construction, 26 percent in professional services, 46 percent in other services and 18 percent in commodity purchasing. As mentioned earlier, HUB goals, under some legal views, could be set somewhat higher than actual availability to help close the gap between actual and potential availability.

In the next chapter, we summarize our findings concerning the scope of discrimination against HUBs and our suggestions for remedying this discrimination.

CHAPTER 8
CONCLUSION

We have documented a pattern of discrimination against minority and women-business owners in the State of Texas from both statistical and direct evidence. This discrimination makes it harder for businesses owned by minorities and women to obtain public and private-sector work. Tables 8.1 through 8.4 summarize our findings as reported in earlier chapters.

Table 8.1 reviews the evidence of discrimination against HUBs operating in the construction industry. We see that African Americans have been substantially underutilized by the State even in the program period; they have been substantially underutilized in the private sector and their rate of business formation is about half of that projected absent discrimination. The private sector and

TABLE 8.1

SUMMARY OF EVIDENCE OF DISCRIMINATION AGAINST HUBS IN THE CONSTRUCTION INDUSTRY

Type/Source of Evidence	African American	Hispanic	Asian, Native American & Other	Total Minorities	White Women
Disparity Ratios in the Pre-Program Period (% of Dollars)	1.4	23.7	47.8	20.9	88.9
Disparity Ratios in the Program Period (% of Dollars)	3.2	22.4*	65.6	21.0*	99.3
Disparity Ratios for Subcontractor Utilization in the Pre-Program Period (% of Subcontracts):					
Five State Agencies	21.4	26.7	37.2	26.8	58.6
TxDOT	26.6	27.8	66.0	29.1	219.2
Disparity Ratios for Subcontractor Utilization in the Program Period (% of Subcontracts):					
Five State Agencies	32.8	36.7	120.8	41.9	67.0
TxDOT	92.7	37.5	136.1	49.6	218.8
Disparity Ratios for Private Sector Utilization (% of Dollars)	30.5*	32.4*	55.8	33.0*	71.7*[2]
Disparity Ratios for Business Formation/ Self-Employment	47.9*	67.8*	42.7*[3]	†	--
Disparity Ratios for Self-Employment Earnings	66.4*	69.4*	68.8[4]	†	63.7*
Share of HUB Survey Respondents Who Reported Discrimination	48.4	35.2	38.9[1]	38.5	19.1

Note: *Statistically significant at the five percent level or better.
†Not calculated for the aggregate group.
[1]The share of HUB survey respondents listed in the Asian, Native American & Other column represents Asians only. The share for Native Americans was 27.6. Other minorities are included in the column for total minorities.
[2]The disparity ratio for private sector utilization is for all women, including but not limited to white women.
[3]The disparity ratio in the Asian, Native American & Other column represents Asians only. There were insufficient data to conduct this analysis for Native Americans.
[4]The earnings disparity ratio in the Asian, Native American & Other column represents Asians only. The earnings disparity ratio for Native Americans and other minorities was 47.4, and it was statistically significant.

business formation disparities are both statistically as well as substantively significant. Finally, the earnings of African Americans from self-employment are less than three-quarters of those of similarly situated whites, and this difference is also statistically significant. The disparities are similar for Hispanics and Asians.[300] Our findings for white women show that in both the pre-program and program periods they have not been substantially underutilized by the State. In the private sector, however, they are underutilized at a substantively and statistically significant rate, and they earn significantly less from their businesses than similarly situated white men. In their response to the mail survey, all four groups reported experiences of discrimination. African Americans had the highest rate of reported experiences of discrimination; followed by Asians, Native Americans and other minorities; and Hispanics. White women had the lowest rate of reported experiences of discrimination. We reported anecdotes of discrimination from HUBs who own construction firms in Chapter 6. A further review of the anecdotal evidence of discrimination is given in Table 8.4.

Table 8.2 summarizes the evidence of discrimination against HUBs operating in the professional and other services industries. We see that all groups have been substantially underutilized by the State in other services even in the program period. In professional services, all groups except Asians and other minorities have been substantially underutilized in the program period. These disparities are statistically significant for white women in both professional and other services and for Hispanics in other services. All groups have been substantially underutilized in the private sector, and these disparities are statistically significant. The rate of business formation for African Americans is about half of that projected absent discrimination, and for Hispanics the rate is roughly three-quarters of what we would expect. Finally, the earnings of African Americans and Hispanics

[300] Fewer of the disparities for Hispanics and Asians are statistically significant, but this is most likely due to the small number of observations available for those groups.

TABLE 8.2

SUMMARY OF EVIDENCE OF DISCRIMINATION AGAINST HUBS IN THE SERVICES INDUSTRY

Type/Source of Evidence	African American	Hispanic	Asian, Native American & Other	Total Minorities	White Women
Other Services					
Disparity Ratios in the Pre-Program Period (% of Dollars)	25.2*	14.3*	9.0*	16.0*	31.7*
Disparity Ratios in the Program Period (% of Dollars)	22.7	21.8*	44.7	25.3*	33.0*
Professional Services					
Disparity Ratios in the Pre-Program Period (% of Dollars)	47.4	43.7	151.1	67.9	10.3*
Disparity Ratios in the Program Period (% of Dollars)	40.3	36.3	274.6*	90.8	33.9*
Professional & Other Services					
Disparity Ratios for Private Sector Utilization (% of Dollars)	32.6*	38.8*	48.2*	40.2*	47.0*[2]
Disparity Ratios for Business Formation/ Self-Employment	45.8*	73.0*	126.0*[3]	†	--
Disparity Ratios for Self-Employment Earnings	70.9*	75.3*	90.7[4]	†	53.5*
Percent of HUB Survey Respondents who Reported Discrimination	41.7	24.1	26.1	29.7	16.3

Note: *Statistically significant at the five percent level or better.
†Not calculated for the aggregate group.
[1]The share of HUB survey respondents listed in the Asian, Native American & Other column represents Asians only. The share for Native Americans was 19.1. Other minorities are included in the column for total minorities.
[2]Disparity ratios for private sector utilization are for all women, including but not limited to white women.
[3]The business formation disparity ratio in the Asian, Native American & Other column represents Asians only. There were insufficient data to conduct this analysis for Native Americans.
[4]The earnings disparity ratio in the Asian, Native American & Other column represents Asians only. The earnings disparity ratio for Native Americans and other minorities was 72.7, but it was not statistically significant.

from self-employment are three-quarters or less than those of similarly situated whites, and this difference is also statistically significant. The earnings of white women from their businesses are

even lower—roughly half those of similarly situated whites—and this disparity is statistically significant as well. In their response to the mail survey, all four groups reported experiences of discrimination. Again, African Americans had the highest rate of reported experiences of discrimination; followed by Asians, Native Americans and other minorities; and Hispanics. White women had the lowest rate of reported experiences of discrimination. We reported anecdotes of discrimination from HUBs who own professional and other services firms in Chapter 6. A further review of the anecdotal evidence of discrimination is given in Table 8.4.

Table 8.3 reviews the evidence of discrimination against HUBs operating in commodities. We see that African Americans have been substantially underutilized by the State in the program period; they have been substantially underutilized in the private sector and their rate of business formation is about half of that projected absent discrimination. All of these disparities are statistically significant. The earnings of African Americans from self-employment are less than two-thirds of those of similarly situated whites, and this difference is also statistically significant. The disparities are similar for Hispanics, although the disparities are smaller (the ratios are higher) in all areas except the private sector. We find that Asians and other minorities are substantially underutilized only in the private sector, but this disparity is statistically significant. Our findings for white women show that in the program period they are underutilized by the State at a substantively and statistically significant rate, and they are likewise substantively underutilized in the private sector. They earn significantly less from their businesses than similarly situated white men—roughly half. In responding to the mail survey, all four groups reported experiences of discrimination. As in the other industry categories, African Americans had the highest rate of reported experiences of discrimination. In this case, Hispanics had the second highest rate, followed by Asians and Other Minorities. White women had the lowest rate of reported experiences of discrimination. We reported anecdotes of

TABLE 8.3

SUMMARY OF EVIDENCE OF DISCRIMINATION AGAINST HUBS IN COMMODITIES

Type/Source of Evidence	African American	Hispanic	Asian, Native American & Other	Total Minorities	White Women
Disparity Ratios in the Pre-Program Period (% of Dollars)	88.0	62.3*	51.2*	63.5*	63.0*
Disparity Ratios in the Program Period (% of Dollars)	32.9*	55.7*	175.7*	78.8	78.3*
Disparity Ratios for Private Sector Utilization (% of Dollars)	45.1*	40.4*	60.0*	46.0*	70.7*[2]
Disparity Ratios for Business Formation/ Self-Employment	29.7*	65.4*	154.6*[3]	†	--
Disparity Ratios for Self-Employment Earnings	62.2*	69.1*	91.7[4]	†	54.1*
Share of HUB Survey Respondents who Reported Discrimination	44.8	19.6	16.5[1]	26.0	9.7

Note: *Statistically significant at the five percent level or better.
†Not calculated for the aggregate group.
[1]The share of HUB survey respondents listed in the Asian, Native American & Other column represents Asians only. The share for Native Americans was 24.4. Other minorities are included in the column for total minorities.
[2]Disparity ratios for private sector utilization are for all women, including but not limited to white women.
[3]The business formation disparity ratio in the Asian, Native American & Other column represents Asians only. There were insufficient data to conduct this analysis for Native Americans.
[4]The earnings disparity ratio in the Asian, Native American & Other column represents Asians only. The earnings disparity ratio for Native Americans and other minorities was 99.4, but it was not statistically significant.

discrimination from HUBs who own construction firms in Chapter 6. A further review of the anecdotal evidence of discrimination is given in Table 8.4.

Table 8.4 reviews the evidence of discrimination reported on the mail survey and in the personal interviews. As described in more detail in Chapter 6, the evidence of discrimination spans a wide variety of sources of discrimination in each industry category.

TABLE 8.4

SUMMARY OF ANECDOTAL EVIDENCE OF DISCRIMINATION OBTAINED FROM SURVEYS AND INTERVIEWS

Industry & Source of Discrimination	African American	Hispanic	Asian & Other	White Women
Construction				
Prime Contractors	S	I, S	S	I,S
Bonding or Surety Companies	I, S	I, S	S	S
Banks & Other Financial Institutions	I, S	S	S	S
Suppliers	S	S	S	I, S
Public Agencies (including Obstacles Presented by the Bidding Process)	I, S	I, S	I, S	I, S
Commodity Purchasing				
Prime Contractors	I		I	
Bonding or Surety Companies			I	
Banks & Other Financial Institutions	S	S	I, S	I, S
Suppliers	S	S	S	S
Public Agencies (including Obstacles Presented by the Bidding Process)	S	I, S	S	I, S
Professional & Other Services				
Prime Contractors	I, S	I, S	I, S	I, S
Bonding or Surety Companies	S	I, S	I	I
Banks & Other Financial Institutions	I, S	I, S	I, S	I, S
Suppliers	I	I	I	
Public Agencies	I, S	S	I, S	I, S
Private Clients (Potential & Actual)	..I	I		I

Key: "S" indicates that evidence was obtained from the HUB survey.
"I" indicates that evidence was obtained from the personal interviews.

By encountering discrimination in many business dealings, firms operated by minorities and women experience higher costs—for example, when manufacturers charge HUBs higher prices than they charge non-HUBs—and realize lower revenues—for example, when prime contractors refuse to use the services of HUB subcontractors. This discrimination tends to make HUBs smaller than they would be otherwise and reduces the incentive for minorities and women to start their own businesses. The result is that businesses operated by minorities and women are smaller in size and fewer in number than would be the case in the absence of discrimination. This is consistent with our statistical finding that minorities are much less likely to start businesses than whites with similar qualifications. More broadly, the statistical disparities we have reported are consistent with the many claims of discrimination by minorities and women in Texas and with the independent findings by courts and academic researchers of the existence of race and sex discrimination.

The Texas Legislature or certain State agencies may decide to use race/sex-conscious and race/sex-neutral programs to encourage the use of existing HUBs as well as the development of new HUBs. Currently, the State has a program to offset the disadvantages that HUBs face as a result of marketplace discrimination. This program was instituted in 1991, so our analysis examined the experience of HUBs both before and after the program's inception. As described in more detail in Chapter 3, we found that although the utilization of HUBs by the State has increased under the HUB program, significant disparities remain for many race or sex groups in a mixture of industries. In our analysis, we found that the percent of HUBs available varies widely between procurement categories and between race and sex groups. To the extent the State continues its goal program, it is advisable that the State tailor its goals to the availability of HUBs in each procurement category.

Only with strict enforcement will any program be effective. During our survey and interview research, we heard many complaints from HUBs about fraud and abuse under the current program.

A carefully designed and systematically executed payment verification system will greatly enhance any program's chance of success.

APPENDIX A