

[PUBLISH]

IN THE UNITED STATES COURT OF APPEALS
FOR THE ELEVENTH CIRCUIT

No. 96-5274

D.C. Docket No. 94-1848-CV-KLR

ENGINEERING CONTRACTORS ASSOCIATION OF SOUTH FLORIDA INC.,
ASSOCIATED GENERAL CONTRACTORS OF AMERICA, South Florida Chapter,
Inc., GOLD COAST ASSOCIATED BUILDERS AND CONTRACTORS, INC.,
CONSTRUCTION ASSOCIATION OF FLORIDA, INC., UNDERGROUND CONTRACTORS
ASSOCIATION OF SOUTH FLORIDA, INC., AIR CONDITIONING AND
REFRIGERATION ASSOCIATION, INC.,

Plaintiffs-Appellees,

versus

METROPOLITAN DADE COUNTY, JOAQUIN AVINO, County Manager of
Metropolitan Dade County, BETTY FERGUSON, JAMES BURKE, ARTHUR E.
TEEL, JR., SHERMAN S. WINN, BRUCE KAPLAN, PEDRO REBOREDO, MAURICE
FERRE, LARRY HAWKINS, DENNIS MOSS, JAVIER SOUTO, MIGUEL DE LA
PORTILLA, ALEXANDER PENELAS, NATACHA MILLAN, Individually and in
their official capacities as members of the Board of County
Commissioners,

Defendants-Appellants,

BLACK BUSINESS ASSOCIATION, INC., ALLIED MINORITY CONTRACTORS
ASSOCIATION, INC., NATIONAL ASSOCIATION FOR THE ADVANCEMENT OF
COLORED PEOPLE, Miami Dade Branch,

Intervenors-Defendants-Appellants.

Appeals from the United States District Court
for the Southern District of Florida

(September 2, 1997)

Before CARNES, Circuit Judge, and FAY and CAMPBELL*, Senior Circuit
Judges.

*Honorable Levin H. Campbell, Senior U.S. Circuit Judge for
the First Circuit, sitting by designation.

CARNES, Circuit Judge:

This appeal involves an Equal Protection Clause challenge to three substantially identical affirmative action programs administered by Dade County, Florida. Those programs provide for the use of race-, ethnicity-, and gender-conscious measures in awarding County construction projects. Specifically, the programs establish preferences for construction enterprises owned and controlled by blacks, Hispanics, or women. The district court declared all three programs unconstitutional and permanently enjoined their operation. See *Engineering Contractors Ass'n v. Metropolitan Dade County*, 943 F. Supp. 1546 (S.D. Fla. 1996). We affirm.

I. BACKGROUND FACTS AND PROCEDURAL HISTORY

The following summary of undisputed facts, as well as the procedural history of this case, is drawn primarily from the district court's thorough opinion, see 943 F. Supp. at 1551-53.

A. UNDISPUTED FACTS

Three affirmative action programs enacted by the Dade County Board of Commissioners are at issue in this appeal: (1) the Black Business Enterprise ("BBE") program, enacted in 1982 and most recently amended in 1994; (2) the Hispanic Business Enterprise ("HBE") program, enacted in 1994; and (3) the Women Business Enterprise ("WBE") program, enacted in 1994. For the sake of convenience, we adhere to the district court's convention of

referring to the programs collectively as the "MWBE" (Minority & Women Business Enterprise) programs.

To qualify to participate in one of the MWBE programs, a business must be owned and controlled by one or more black, Hispanic, or female individuals, and it must have an actual place of business in Dade County. MWBE joint ventures must have at least one member that is certified under one of the three MWBE programs. Additionally, each MWBE participant must demonstrate that it does not exceed the size limits for "small business concerns" as defined by the Small Business Administration of the United States Department of Commerce. However, an MWBE participant that exceeds the size limit may retain its certification if it demonstrates that "it continues to experience the kinds of racial [or gender] discrimination addressed by [the programs]." Metropolitan Dade County Code § 2-8.2(3)(e).

The MWBE programs apply to certain classes of County contracts for which "participation goals" have been set. This case concerns only construction contracts, which means that only the following three Standard Industry Classification ("SIC") classes of County contracts are involved:

- (1) SIC 15: General Building Construction;
- (2) SIC 16: Heavy Construction other than Building Construction;
- (3) SIC 17: Specialty Trade Construction (including electrical, plumbing, heating, ventilation, and air conditioning).

For the foregoing classes of contracts, the County has set participation goals of 15% for BBEs, 19% for HBEs, and 11% for

WBEs. The participation goals apply to all construction contracts in excess of \$25,000 that are funded in whole or in part by the County. The County is required to make every reasonable effort to achieve the participation goals, and may use any of the following five "contract measures" to do so:

- (1) **Set Asides** -- Under this measure a contract is set aside for bidding solely among MWBEs. In general, the County may use the set-aside measure if there are at least three MWBE businesses available to perform the contract. However, the County also may waive competitive bidding if there are at least two MWBEs available, if neither of those MWBEs has been awarded a County contract for like goods or services in the last three years, and a price analysis is done to ensure the price is competitive.
- (2) **Subcontractor Goals** -- This measure requires a prime contractor to subcontract a certain percentage of work to MWBEs. The percentage is determined on a case-by-case basis. A waiver is available if the prime contractor can demonstrate that MWBEs are not available to do the work at a competitive price. However, the inability of an MWBE to obtain bonding is not considered grounds for a waiver.
- (3) **Project Goals** -- With this measure, the County creates a pool of MWBE subcontractors from which it selects firms for specified types of work under County contracts.

- (4) **Bid Preferences** -- This measure artificially "reduces" an MWBE bid price by as much as ten percent for purposes of determining the lowest bid. The actual price the County pays for the work is unaffected by this "reduction."
- (5) **Selection Factors** -- This measure is similar to a bid preference, but operates on factors other than price. For instance, when bid evaluation procedures assign weights to various factors, MWBE performance on those factors may be boosted by up to 10%.

Once a contract is identified as being covered by a participation goal, it is submitted to a review committee for determination of whether a contract measure should be applied. The County Commission makes the final determination on that issue, and its decision is appealable to the County Manager. The County Manager's decision is final, unless the County Commission exercises its discretion to review and override it.

Annually, the MWBE programs are reviewed for their efficacy. Every five years, when the "Survey of Minority-Owned Business Enterprises" is published by the Census Bureau, the County Commission must decide whether to continue the programs.

B. PROCEDURAL HISTORY

The Dade County BBE program has been challenged before. In South Florida Chapter of Associated General Contractors v. Metropolitan Dade County, 723 F.2d 846 (11th Cir. 1984), this Court upheld the program in its entirety. We did so applying the

standard enunciated by Chief Justice Burger in the principal opinion in Fullilove v. Klutznick, 448 U.S. 448, 100 S. Ct. 2758 (1980), which was neither strict scrutiny nor any other traditional standard of equal protection review.

Five years after we upheld Dade County's BBE program, the Supreme Court pulled the props out from under our decision by abandoning the Fullilove standard insofar as state and local race-conscious remedial programs are concerned. Such programs must satisfy the exacting strict scrutiny standard, the Court held in City of Richmond v. J.A. Croson Co., 488 U.S. 469, 493-95, 109 S. Ct. 706, 721-22 (1989) (four-member plurality opinion); accord id. at 520, 109 S. Ct. at 735-36 (Scalia, J., concurring) (agreeing that "strict scrutiny must be applied to all governmental classifications by race"). The Croson decision prompted several non-minority plaintiffs to bring a second constitutional challenge to Dade County's BBE program. That case was tried in federal district court July 1992, but before the court rendered a final judgment the parties reached a settlement and stipulated to a dismissal with prejudice. That abortive litigation is not without effect on the present case, however, because by stipulation, the evidence from that settled case has been made a part of the record in this case.

This case was filed in September 1994 by six trade associations whose members regularly perform work, either as prime contractors or subcontractors, on County projects. The complaint named only the County and certain related parties as defendants.

However, three entities have intervened as party defendants: (1) the Black Business Association, Inc.; (2) the Allied Minority Contractors Association, Inc.; and (3) the Miami Dade Branch of the National Association for the Advancement of Colored People. The plaintiffs challenge the County's MWBE programs only as they apply to the construction industry, i.e., only with respect to SIC 15, 16, and 17.

The district court held a four-day bench trial in December 1995 and heard closing arguments on April 18, 1996. On September 17, 1996, the district court entered a comprehensive opinion containing findings of fact and conclusions of law. Engineering Contractors Ass'n v. Metropolitan Dade County, 943 F. Supp. 1546 (S.D. Fla. 1996).

Applying strict scrutiny, the district court found that the County lacked the requisite "strong basis in evidence" to support the race- and ethnicity-conscious measures contained in the BBE and the HBE programs. Applying intermediate scrutiny to the WBE program, the district court found that the County had presented insufficient probative evidence to support its stated rationale for implementing a gender preference. Therefore, the district court concluded that the County had failed to demonstrate a "compelling" interest in remedying race or ethnicity discrimination in the Dade County construction market (for the BBE and HBE programs), and that

it likewise had failed to demonstrate an "important" interest in remedying gender discrimination through its WBE program.¹

In a separate analysis, the district court assumed the existence of a sufficient evidentiary basis to support the existence of the MWBE programs in order to examine whether the programs were sufficiently related to the interests they purported to serve. The court held that the BBE and HBE programs were not narrowly tailored to serve a compelling governmental interest in remedying past or present discrimination on the basis of race or ethnicity, even if sufficient evidence to support the existence of those programs had been demonstrated. Likewise, the district court held that the WBE program was not substantially related to an important governmental interest in remedying past or present discrimination, even if the evidence had been sufficient to support the existence of that program.

The district court followed its opinion with a final judgment that enjoined the County from continuing to operate its MWBE programs for construction work. This appeal followed.

II. ISSUES

¹The preceding paragraph describes the substance of the district court's conclusions, although the district court's opinion phrases those conclusions a little differently. In its opinion, the district court holds that the BBE and HBE programs fail strict scrutiny, and that the WBE program fails under intermediate scrutiny, because the "evidence presented by the defendants does not constitute an adequate showing of discrimination." 943 F. Supp. at 1584. Combining those holdings together with the district court's statement of the legal standards governing strict and intermediate scrutiny, 943 F. Supp. at 1554-56, we understand the district court's conclusions to be as we have described them.

Despite the evidentiary complexity of this case, this appeal presents only four major issues. The standards of review applicable to those issues are set out in Part III of this opinion, but before we get there we will briefly outline in this Part what those issues are and describe our organizational approach for considering them.

The first issue is whether the plaintiffs have standing. For the reasons discussed in Part IV, we conclude that they do, which necessitates that we address the remaining issues, i.e., the merits issues. We begin addressing the merits with a discussion in Part V of the legal standards for scrutinizing affirmative action programs of the type involved in this case.

That leads into Part VI of this opinion, which involves the second and third major issues presented in this appeal. The second major issue is whether the district court erred in finding that the County lacked a "strong basis in evidence" to justify the existence of the BBE and HBE programs. Similarly, the third major issue is whether the district court erred in finding that the County lacked a sufficient probative basis in evidence to justify the existence of the WBE program. To the extent practicable, we discuss concurrently the evidence related to those two issues, because much of the statistical evidence in this case is derived from studies related to more than one MWBE program. As we review that evidence, we will separately consider each MWBE program in light of the standard of review applicable to it.

Finally, the fourth major issue, which we discuss in Part VII, is whether the MWBE programs are adequately tailored to the interests they are purported to serve. Because we conclude that the district court did not clearly err in finding that the MWBE programs lack a constitutionally sufficient evidentiary foundation, our analysis of this issue is limited to the most obvious problems associated with the County's tailoring of the MWBE programs. As will be seen, there are several.

Our conclusion is contained in Part VIII.

III. STANDARDS OF REVIEW

The legal standards by which a race-, ethnicity-, or gender-conscious affirmative action program is to be evaluated are discussed in Part V of this opinion. Applying those standards in the first instance is within the province of the district court, not this Court. Our province is to review the decisions and judgment of the district court, but our authority to do so is confined by the standards of review. We examine them below, separately discussing the standard of review applicable to each of the four major issues in this appeal.

A. STANDING

Standing is a jurisdictional question. "The federal courts are under an independent obligation to examine their own jurisdiction, and standing 'is perhaps the most important of [the jurisdictional] doctrines.'" FW/PBS, Inc. v. City of Dallas, 493 U.S. 215, 231, 110 S. Ct. 596, 607 (1990) (quoting Allen v. Wright,

468 U.S. 737, 750, 104 S. Ct. 3315, 3324 (1984)) (alteration in FW/PBS). As with all jurisdictional issues, this Court reviews standing de novo. See, e.g., McKusick v. City of Melbourne, Fla., 96 F.3d 478, 482 (11th Cir. 1996) (citation omitted).

B. EVIDENTIARY FOUNDATION OF THE BBE AND HBE PROGRAMS

Both the Supreme Court and this Court have held that a district court makes a factual determination when it determines whether there exists a sufficient evidentiary basis justifying affirmative action on the basis of race or ethnicity. See Wygant v. Jackson Bd. of Educ., 476 U.S. 267, 277, 106 S. Ct. 1842, 1849 (1986) ("[T]he trial court must make a factual determination that the employer had a strong basis in evidence for its conclusion that remedial action was necessary."); Ensley Branch, NAACP. v. Seibels, 31 F.3d 1548, 1565 (11th Cir. 1994) (same); Howard v. McLucas, 871 F.2d 1000, 1007 (11th Cir. 1989) (same).

We review a district court's factual findings only for clear error. See Fed. R. Civ. P. 52(a) (mandating that "[f]indings of fact shall not be set aside unless clearly erroneous"). The Supreme Court has provided considerable guidance on how the appellate courts are to apply the clearly erroneous standard. Because this appeal is concerned chiefly with whether the district court clearly erred in finding that the County had failed to demonstrate a sufficient evidentiary foundation to justify the existence of the MWBE programs, a detailed review of the Supreme Court's guidance on the clearly erroneous standard is warranted.

We cannot hold a district court's finding of fact is clearly erroneous unless, in view of the entire record, we are "left with a definite and firm conviction that a mistake has been committed." Anderson v. City of Bessemer City, 470 U.S. 564, 573, 105 S. Ct. 1504, 1511 (1985) (citation and internal quotation marks omitted). That is an exacting standard, purposefully designed to restrict second guessing in the factfinding arena. As the Supreme Court has explained:

This standard plainly does not entitle a reviewing court to reverse the finding of the trier of fact simply because it is convinced that it would have decided the case differently. ... If the district court's account of the evidence is plausible in light of the record viewed in its entirety, the court of appeals may not reverse it even though convinced that had it been sitting as the trier of fact, it would have weighed the evidence differently. Where there are two permissible views of the evidence, the factfinder's choice between them cannot be clearly erroneous.

Id. at 573-74, 105 S. Ct. at 1511 (citations omitted). Furthermore, our scope of review is no less circumscribed when the district court's factfindings rest on physical or documentary evidence instead of credibility determinations. See id. at 574, 105 S. Ct. at 1511-12.

The Supreme Court has explained with unmistakable clarity our duty in evaluating the district court's factfindings in this case. That duty most emphatically is not to decide whether we agree with the district court's view of the evidence. Instead, we must determine only whether the district court's view of the evidence, as reflected in its factfindings, is a permissible one, i.e., a plausible one in light of the entire record.

C. EVIDENTIARY FOUNDATION OF THE WBE PROGRAM

Neither the Supreme Court nor this Court has squarely held that a district court makes a factual determination when it determines whether there exists a sufficient evidentiary basis justifying affirmative action on the basis of gender. Although we have had occasion to review the evidentiary foundation of gender-conscious affirmative action, we have conducted that review without specifically explaining whether we were reviewing the evidence de novo or instead reviewing the district court's view of the evidence for clear error.

For example, in Ensley Branch, 31 F.3d at 1581, we reviewed the evidentiary foundation of a gender-conscious affirmative action program and concluded that "[t]he record before us contains substantial anecdotal and statistical evidence of past discrimination against women." Although we did not explain specifically in that case that we were reviewing the district court's evidentiary factfindings, instead of reviewing the evidence de novo, a close reading of the opinion reveals the nature of our review. We examined the district court's findings that "[f]or many years announcements for positions as police patrolman and firefighter were restricted to males only" and that "women were grossly underrepresented in a variety of City positions." Id. (citation and internal quotation marks omitted). After reviewing those factual findings, we concluded: "These and related findings by the district court justify the district court's finding that there is more than ample reason for the Personnel Board and the

City of Birmingham to be concerned that they would be in time held liable for discrimination.” Id. (emphases added) (citations and internal quotation marks omitted).

As a close look at our Ensley Branch opinion reveals, when we review the evidentiary basis of a gender-conscious affirmative action program, we do not review the evidence de novo. Instead, we review the evidence to determine whether it can “justify the district court's finding” that the gender-conscious affirmative action program is or is not rooted in evidence of current or past discrimination in the relevant economic sphere. In other words, the same clearly erroneous standard governs our review of the evidentiary sufficiency issue involving gender-conscious programs that governs our review of the evidentiary sufficiency issue involving race- or ethnicity-conscious programs.

That is true even though, as we will explain in more detail later, gender-conscious affirmative action programs may rest safely on a weaker evidentiary foundation than race- or ethnicity-conscious programs. For gender-conscious programs, we decide if the district court clearly erred in determining whether the government had a sufficient probative basis in evidence to justify affirmative action. For race- or ethnicity-conscious programs, we decide if the district court clearly erred in determining whether the government had a strong basis in evidence to justify affirmative action. Because in both circumstances the district court makes the same basic type of determination (factual), it

would be illogical to apply a different standard of review. We review both determinations under the clearly erroneous standard.

D. "NARROW TAILORING" AND "SUBSTANTIAL RELATIONSHIP"

A district court applies law to the facts when it determines whether a race- or ethnicity-conscious remedy is narrowly tailored to serve a compelling government interest, and whether a gender-conscious remedy bears a substantial relation to an important governmental interest. After identifying the factual predicate for the affirmative action program in question, the district court makes a legal determination about whether the program's terms are sufficiently tied to its legitimate goals to pass constitutional muster. This Court reviews de novo a district court's application of law to the facts. See Simmons v. Conger, 86 F.3d 1080, 1084 (11th Cir. 1996).

We now apply the foregoing standards of review to the issues in this appeal, beginning with the standing issue.

IV. STANDING

The intervenors' have mounted a two-pronged attack on the plaintiffs' standing. First, the intervenors argue that because the plaintiffs failed to put on any evidence that they were or would be affected by each of the MWBE programs, they had no standing to challenge each program. We disagree.

The undisputed facts reveal that the plaintiffs are six trade associations whose members regularly perform work for the County. There are a number of companies within each association, and the

intervenors stipulated that the County "will likely exclude in the future -- based on racial, ethnic and sexual criteria -- plaintiffs' non-[MWBE] members from bidding for certain contracts." That stipulation covered all three programs, and relieved plaintiffs of the duty to put on any evidence that they would be affected by any or all of the three programs. The very purpose of a stipulation is to relieve a party of the burden it would otherwise have of introducing evidence to prove a fact. See Fed. R. Civ. P. 16(c)(3) (providing that at the pretrial conference the district court may take action directed toward "obtaining admissions of fact and of documents which will avoid unnecessary proof").

As this Court recently explained, parties may not stipulate to jurisdiction, but they may stipulate to facts that bear on our jurisdictional inquiry. See West Peninsular Title Co. v. Palm Beach County, 41 F.3d 1490, 1492 n.4 (11th Cir.), cert. denied, 116 S. Ct. 338 (1995). When the record contains such stipulations, we look to the record to determine whether "the stipulated facts give rise to jurisdiction." Id. (emphasis omitted). Here, the parties' stipulation that the plaintiffs likely will be excluded from performing future contracts with the County due to the race-, ethnicity-, and gender-conscious criteria of the MWBE programs is the end of the inquiry as to whether the plaintiffs likely will be adversely affected by all three affirmative action programs at issue in this case.

The second prong of the intervenors' attack on the plaintiffs' standing is similar to the first. The intervenors contend that because the plaintiffs failed to establish -- by stipulation or evidence -- which of the five "contract measures" likely will adversely affect them, they lack standing to challenge the MWBE programs in toto. We disagree. The existence of each the programs, including all of its component parts, must withstand the appropriate level of constitutional scrutiny if that program is to be upheld. Either a program is grounded on a proper evidentiary factual predicate or it is not. If it is, then that program sails on to the next stage of the analysis, where each component contract measure is tested against the "narrow tailoring" and "substantial relationship" requirements. On the other hand, if a program is not grounded on a proper evidentiary basis, then all of the contract measures go down with the ship, irrespective of any narrow tailoring or substantial relationship analysis.

By stipulation, the plaintiffs' members are competing with MWBEs for County construction contracts, and because of the MWBE programs they do not compete on an equal basis. When the government loads the dice that way, the Supreme Court says that anyone in the game has standing to raise a constitutional challenge. "The injury in cases of this kind is that a discriminatory classification prevent[s] the plaintiff from competing on an equal footing." Adarand Constructors, Inc. v. Pena, ___ U.S. ___, ___, 115 S. Ct. 2097, 2105 (1995) (alteration in original) (citation and internal quotation marks omitted). "To establish standing, therefore, a party challenging a set-aside program ... need only demonstrate that it is able and ready to bid on contracts and that a discriminatory policy prevents it from doing so on an equal basis." Northeastern Florida Contractors v. City of Jacksonville, 508 U.S. ___, ___, 113 S. Ct. 2297,

2303 (1993). We are satisfied that the plaintiffs have standing to challenge the constitutionality of the MWBE programs, and we turn now to the merits of that challenge.

V. LEGAL STANDARDS FOR SCRUTINIZING AFFIRMATIVE ACTION PROGRAMS

A. RACIAL AND ETHNIC PREFERENCES

Because the BBE and HBE programs create preferences based on race and ethnicity, the relevant constitutional standard applicable to those programs is the strict scrutiny test articulated in City of Richmond v. J.A. Croson Co., 488 U.S. 469, 109 S. Ct. 706 (1989). That test requires a "searching judicial inquiry" into the justification for the preference, because without that kind of close analysis "there is simply no way of determining what classifications are 'benign' or 'remedial' and what classifications are in fact motivated by illegitimate notions of racial inferiority or simple racial politics." Id. at 493, 109 S. Ct. at 721. Accordingly, strict scrutiny is designed both to "'smoke out' illegitimate uses of race by assuring that the legislative body is pursuing a goal important enough to warrant use of a highly suspect tool" and to "ensure[] that the means chosen 'fit' this compelling goal so closely that there is little or no possibility that the motive for the classification was illegitimate racial prejudice or stereotype." Id.

Under strict scrutiny, an affirmative action program must be based upon a "compelling governmental interest" and must be "narrowly tailored" to achieve that interest. E.g., Ensley Branch, 31 F.3d at 1564 (citations omitted). As we have observed:

In practice, the interest that is alleged in support of racial preferences is almost always the same -- remedying past or present discrimination. That interest is widely accepted as compelling. As a result, the true test of an affirmative action program is usually not the nature of the government's interest, but rather the adequacy of the evidence of discrimination offered to show that interest.

Id. at 1565 (citations and internal quotation marks omitted).

If a race- or ethnicity-conscious affirmative action program is to be upheld, "the district court must make a factual determination that [there exists] a strong basis in evidence" to support the conclusion that remedial action is necessary. Id. (citation and internal quotation marks omitted); see also Croson, 488 U.S. at 500, 109 S. Ct. at 725 (plurality opinion). As we explained in Ensley Branch, "[c]ertain aspects of this inquiry are well established." 31 F.3d at 1565. A "strong basis in evidence" cannot rest on "an amorphous claim of societal discrimination, on simple legislative assurances of good intention, or on congressional findings of discrimination in the national economy." Id. (citing and applying Croson) (internal quotation marks omitted). However, a governmental entity can "justify affirmative action by demonstrating 'gross statistical disparities' between the proportion of minorities hired ... and the proportion of minorities willing and able to do the work." Id. (citations omitted). "Anecdotal evidence may also be used to document discrimination, especially if buttressed by relevant statistical evidence." Id. (citation omitted). Accordingly, "if the [County] could show that it had essentially become a 'passive participant' in a system of racial exclusion practiced by elements of the local construction industry," the Supreme Court has made it "clear that the [County] could take affirmative steps to dismantle such a system." Croson, 488 U.S. at 492, 109 S. Ct. at 721 (plurality opinion).

Here, the district court reviewed the evidence and made a factual determination that the County lacked the requisite strong basis in evidence to support the County's conclusion that race- and ethnicity-conscious remedial action is necessary. 943 F. Supp. at 1584. As previously explained, our role in re-reviewing that evidence is limited.

Our task is not to determine whether the district court's factfinding is "correct" in the sense of ultimate truth. Instead, under the clearly erroneous standard, our duty is to examine the record solely to determine whether the district court's view of the evidence is a permissible one, a plausible one in light of the entire record.

B. GENDER PREFERENCES

1. The Effect of the VMI Decision

At first blush, the relevant constitutional standard to be applied to the WBE program is not entirely clear. Traditionally, gender-based affirmative action programs have been governed by intermediate scrutiny, meaning that "[t]o withstand constitutional challenge, ... classifications by gender must serve important governmental objectives and must be substantially related to achievement of those objectives." Craig v. Boren, 429 U.S. 190, 197, 97 S. Ct. 451, 456-57 (1976). That has been the standard for two full decades, and the district court applied it to this case. See 943 F. Supp. at 1556.

The district court was concerned, however, by the Supreme Court's recent decision in United States v. Virginia, 116 S. Ct. 2264 (1996) (invalidating the maintenance of single-sex education program at Virginia Military Institute) (hereinafter "VMI"). In VMI, the Court held that "[p]arties who seek to defend gender-based government action must demonstrate an 'exceedingly persuasive justification' for that action." Id. at 2274 (citations omitted). The phrase "exceedingly persuasive justification" permeates the Court's VMI opinion, id. at 2271, 2274, 2276, 2282, 2287, and that phrase connotes more intense scrutiny than do customary descriptions of intermediate scrutiny. See id. at 2294 (Scalia, J., dissenting) (suggesting that the majority had effectively adopted a form of strict scrutiny for gender classifications).

Nevertheless, the VMI Court expressly disclaimed "equating gender classifications, for all purposes, to classifications based on race or national origin." Id. at 2275 (majority opinion).

The district court assumed without deciding that traditional intermediate scrutiny still applies to gender-conscious affirmative action programs. See 943 F. Supp. at 1556. Finding that the WBE program lacked a sufficient evidentiary foundation to withstand traditional intermediate level scrutiny, the district court found it unnecessary to decide whether the VMI decision raised the constitutional hurdle over which gender-conscious affirmative action programs must leap. See id. We conclude that the district court was correct to apply intermediate scrutiny to the WBE program.

First, although the phrase "exceedingly persuasive justification" has more linguistic verve than conventional descriptions of intermediate scrutiny, it does not necessarily follow that a new constitutional standard for judging gender preferences is embodied in that phrase. Concurring in VMI, Chief Justice Rehnquist suggested that the "phrase is best confined, as it was first used, as an observation on the difficulty of meeting the applicable test, not as a formulation of the test itself." VMI, 116 S. Ct. at 2288 (Rehnquist, C.J., concurring). Similarly, Justice Scalia suggested that the answer to whether the justification for a gender classification is "exceedingly persuasive" is properly derived from considering whether the classification serves important governmental objectives and is substantially related to their achievement. Id. at 2294 (Scalia, J., dissenting). That is an attractive resolution of the issue -- especially in view of the fact that the majority opinion in VMI recites the time-honored intermediate scrutiny standard with approval even as it explains how a district court must evaluate whether the

proffered justification for a gender classification is "exceedingly persuasive." See id. at 2275 (majority opinion).

Moreover, a holding that the Supreme Court has abandoned traditional intermediate scrutiny in favor of a more restrictive formulation would mean that the Court has overruled sub silentio its long line of precedents applying intermediate scrutiny to gender classifications. See id. at 2288 (Rehnquist, C.J., concurring) (listing Supreme Court precedents applying traditional intermediate scrutiny). Even if the VMI case portends a major change in the Supreme Court's approach to gender classifications, "we are not at liberty to disregard binding case law that is so closely on point and has been only weakened, rather than directly overruled, by the Supreme Court." Florida League of Prof'l Lobbyists v. Meggs, 87 F.3d 457, 462 (11th Cir. 1996). The Supreme Court has cautioned us that "[i]f a precedent of this Court has direct application in a case, yet appears to rest on reasons rejected in some other line of decisions, the Court of Appeals should follow the case which directly controls, leaving to this Court the prerogative of overruling its own decisions." Rodriguez de Quijas v. Shearson/American Express, Inc., 490 U.S. 477, 484, 109 S. Ct. 1917, 1921-22 (1989); see also Agostini v. Felton, ___ U.S. ___, ___, ___ S. Ct. ___, ___, (June 23, 1997) (reaffirming that holding of Rodriguez de Quijas). Of course, we take that admonition seriously. See, e.g., Brisentine v. Stone & Webster Eng'g Corp., ___ F.3d ___, ___ (No. 96-6866, 11th Cir. 1997); Scala v. City of Winter Park, ___ F.3d ___, ___ n.2 (No. 96-3121, 11th Cir. 1997).

There is a long line of directly applicable Supreme Court precedents applying traditional intermediate scrutiny to gender classifications. More specifically, the Supreme Court held in Mississippi University for

Women v. Hogan, 458 U.S. 718, 724, 102 S. Ct. 3331, 3335 (1982), that intermediate scrutiny was the appropriate test to apply to a gender-based classification favoring women, which is the same type of classification created by the County's WBE program. Instead of overruling Mississippi University for Women, the VMI Court cited that case as "immediately in point" and the "closest guide" for the VMI decision itself. VMI, 116 S. Ct. at 2275, 2271. The Supreme Court is not in the business of overruling its own precedents by citing them with approval, and we decline to hold that the Court did so in the VMI case. Unless and until the Supreme Court tells us otherwise, intermediate scrutiny remains the applicable constitutional standard in gender discrimination cases, and a gender preference may be upheld so long as it is substantially related to an important governmental objective.

2. The Requisite Evidentiary Showing

In attempting to satisfy the important governmental objective prong of the intermediate scrutiny test, the County contends that the objective of the WBE program is to "redress discrimination against women." That stated objective is typical, and it is unquestionably a sufficiently "important" one to sustain a gender-conscious affirmative action program. See Califano v. Webster, 430 U.S. 313, 318, 97 S. Ct. 1192, 1195 (1977) (upholding affirmative action in the calculation of Social Security retirement benefits where "[t]he challenged statute operated directly to compensate women for past economic discrimination"); see also, e.g., Ensley Branch, 31 F.3d at 1580 (holding that "the government interest prong of the inquiry can be satisfied by a showing of societal discrimination in the relevant economic sector"). Therefore, as in the racial analogue, "the true test of an affirmative action program is usually not the nature of the government's interest, but rather the

adequacy of the evidence of discrimination offered to show that interest." Id. at 1565 (citation and internal quotation marks omitted).

Although it is clear that both gender-conscious and race- or ethnicity-conscious programs must be tested for evidentiary sufficiency, the measure of the evidence required is less clear in the gender context. The Supreme Court has not addressed the question explicitly, and there is a similar dearth of guidance in the reported decisions of other federal appellate courts. As the Third Circuit has observed, "Few cases have considered the evidentiary burden needed to satisfy intermediate scrutiny in this context and there is no Croson analogue to provide a ready reference point." Contractors Ass'n v. City of Philadelphia, 6 F.3d 990, 1010 (3d Cir. 1993). The Supreme Court has told us plainly that race- and ethnicity-conscious programs must be tested for a "strong basis in evidence," and a body of appellate jurisprudence has developed to provide that label with meaningful content. See, e.g., Croson, 488 U.S. at 499-504, 109 S. Ct. at 724-27 (identifying factors that cannot form a "strong basis in evidence"); Ensley Branch, 31 F.3d at 1565 (citing and applying Croson). In the gender context, however, we must work without an analogous evidentiary label from the Supreme Court, and the jurisprudence is less developed.

Regardless of what label might be affixed to the standard, it is clear to us that a gender-conscious affirmative action program can rest safely on something less than the "strong basis in evidence" required to bear the weight of a race- or ethnicity-conscious program. We agree with the Third Circuit that "[l]ogically, a [local government] must be able to rely on less evidence in enacting a gender preference than a racial preference because applying Croson's evidentiary standard to a gender preference would eviscerate the difference between strict and

intermediate scrutiny." Contractor's Ass'n, 6 F.3d at 1010; see also Peter Lurie, Comment, The Law as They Found It: Disentangling Gender-Based Affirmative Action Programs from Croson, 59 U. Chi. L. Rev. 1563, 1584-89 (1992) (concluding that "[t]he factual predicate required cannot be equal to that needed to support a racial classification" because "[a]ppending a Croson-style factual predicate to the standard disingenuously transforms" intermediate scrutiny into strict scrutiny).

While there is a difference between the evidentiary foundation necessary to support a race- or ethnicity-conscious affirmative action program and the evidentiary foundation necessary to support a gender preference, that difference is one of degree, not of kind. In both circumstances, the test of the program is the adequacy of evidence of discrimination, but in the gender context less evidence is required. The difficulty, of course, is in determining how much less.

Thus far, the Third Circuit is the only federal appellate court that has explicitly attempted to clarify the evidentiary requirement applicable to gender-conscious programs. In Contractors Association, it announced that the intermediate scrutiny standard "requires the [government] to present probative evidence in support of its stated rationale for the gender preference, discrimination against women-owned contractors." Contractors Ass'n, 6 F.3d at 1010 (emphasis added). After announcing the "probative evidence" standard, the Contractors Association court went on to hold that the evidence of discrimination against women that the government had offered was "insufficient to create an issue of fact." Id. at 1011. It reached that conclusion even though the government had offered some evidence of discrimination against women, including a statistical study, an affidavit, and the testimony of a witness who had appeared at a city council hearing. See id.

Plainly, the evidence offered by the government in Contractors Association was "probative" as that word is commonly understood, because it tended, at least to some extent, to prove discrimination against women. See, e.g., Black's Law Dictionary 1203 (6th ed. 1990) (defining "probative evidence" as evidence "tending to prove" or which "contributes toward proof"). The probative evidence in Contractors Association was nonetheless judged "insufficient." We think that the court's holding in Contractor's Association is more helpful than the "probative evidence" standard the opinion articulates. Under the Third Circuit's holding, evidence offered in support of a gender preference must not only be "probative," it must also be "sufficient."

We agree with the Third Circuit's de facto requirement that a proponent of a gender-conscious affirmative action program must present not only probative evidence of discrimination, but sufficient probative evidence of it. Of course, that formulation begs the question of when the evidence becomes "sufficient," but no more so than the Supreme Court's requirement of a "strong basis in evidence" in the racial analogue begs the question of when the evidence becomes "strong." In both contexts, the evidentiary standards necessarily are tautological when the words alone are considered and must draw meaning from an evolving body of case law that will define them. Although the difference between the "strong basis in evidence" standard applicable to race- or ethnicity-conscious programs and the less-stringent "sufficient probative evidence" standard applicable to gender-conscious programs cannot be measured or described with scientific precision, we have previously recognized two principal guidelines that mark the boundaries of intermediate scrutiny evidentiary analysis.

First, “[u]nder the intermediate scrutiny test, a local government must demonstrate some past discrimination against women, but not necessarily discrimination by the government itself.” Ensley Branch, 31 F.3d at 1580. Indeed, “[o]ne of the distinguishing features of intermediate scrutiny is that, unlike strict scrutiny, the government interest prong of the inquiry can be satisfied by a showing of societal discrimination in the relevant economic sector.” Id. (citations omitted). Thus, to be sufficient the evidence need not be about governmental discrimination.

Second, the intermediate scrutiny evidentiary review is not to be directed toward mandating that gender-conscious affirmative action is used only as a “last resort,” Hayes v. North State Law Enforcement Officers Ass'n, 10 F.3d 207, 217 (4th Cir. 1993) (racial discrimination case), but instead to ensuring that the affirmative action program is “a product of analysis rather than a stereotyped reaction based on habit,” Contractors Ass'n, 6 F.3d at 1010 (quoting Metro Broadcasting, Inc. v. FCC, 497 U.S. 547, 582-83, 110 S. Ct. 2997, 3018-19 (1990)). Nevertheless, any “‘analysis’ that rests upon unsupported factual premises cannot possibly be ‘reasoned,’ and an untrue and widely-held generalization about men or women is by definition a ‘stereotype.’” Lamprecht v. FCC, 958 F.2d 382, 393 n.3 (D.C. Cir. 1992) (Thomas, Circuit Justice). That is why the intermediate scrutiny evidentiary “inquiry turns on whether there is evidence of past discrimination in the economic sphere at which the affirmative action program is directed.” Ensley Branch, 31 F.3d at 1581. Unsupported generalizations will not suffice.

Although sufficiency-of-the-evidence standards may elude precise formulation, we believe the foregoing two guidelines will assist courts in determining when a government has presented sufficient probative

evidence in support of its stated rationale for enacting a gender preference, i.e., when the evidence is sufficient to show that the preference rests on evidence-informed analysis rather than on stereotypical generalizations. Under those guidelines, the government must satisfy an "intermediate" standard -- less stringent than the "strong basis in evidence" standard associated with strict scrutiny, yet more demanding than merely any probative evidence. The Third Circuit's actual holding in Contractors Association that the evidence there was insufficient, a holding with which we agree, provides some guidance to bench and bar. We hope our decision about whether the district court clearly erred in finding that the specific evidentiary showing in this case is insufficient will provide additional guidance. Future cases may serve to clarify further the evidentiary standard applicable to gender-conscious affirmative action programs, but for the time being we need only decide whether the district court clearly erred in finding that Dade County failed to meet its evidentiary burden in this case.

In this case, the district court reviewed the evidence that the County offered in support of the WBE program, and it made a factual determination that the evidence was "insufficient to provide the factual predicate to support the County's state[d] rationale for its gender preference program." 943 F. Supp. at 1584. As with the racial and ethnicity preference programs, we have a limited role to play in evaluating that factfinding. We will not review the evidence to determine whether we would have reached a different conclusion if we had been sitting as the trier of fact. Instead, we will review the evidence only to determine whether the district court's view of the evidence is a permissible one, a plausible one in light of the entire record.

VI. THE EVIDENCE

The County put forward two types of evidence in support of its MWBE programs: (1) statistical evidence and (2) nonstatistical or "anecdotal" evidence. Because much of the statistical evidence is derived from studies related to more than one MWBE program, we will review the statistical evidence for all three of the programs simultaneously, bearing in mind that a less stringent standard of review applies to the WBE program. After reviewing the statistical evidence, we will review the anecdotal evidence, which is focused almost exclusively on the BBE program.

Before turning to the evidentiary details, however, we address an issue that bears on much of the analysis that will follow. With respect to the BBE program, most of the statistical evidence presented by the County is "post-enactment" evidence, i.e. evidence based on data related to years following the County's initial enactment of the BBE program in 1982. As we and a number of other circuits have held, the use of that kind of evidence is permissible:

Although Croson requires that a public employer show strong evidence of discrimination when defending an affirmative action plan, the Supreme Court has never required that, before implementing affirmative action, the employer must have already proved that it has discriminated. On the contrary, formal findings of discrimination need neither precede nor accompany the adoption of affirmative action.

Ensley Branch, 31 F.3d at 1565; see also Concrete Works v. City & County of Denver, 36 F.3d 1513, 1521 (10th Cir. 1994), cert. denied, 514 U.S. 1004, 115 S. Ct. 1315 (1995); Contractors Ass'n, 6 F.3d at 1003-04 (3d Cir. 1993); Harrison & Burrowes Bridge Constructors, Inc. v. Cuomo, 981 F.2d 50, 60 (2d Cir. 1992); Coral Constr. Co. v. King County, 941 F.2d 910, 920 (9th Cir. 1991).

Without repeating everything we had to say in Ensley Branch on this subject, it warrants emphasis that consideration of post-enactment

evidence is appropriate when affirmative action programs are scrutinized, because "[a] violation of federal statutory or constitutional requirements does not arise with the making of a finding; it arises when the wrong is committed." Wygant v. Jackson Bd. of Educ., 476 U.S. 267, 289, 106 S. Ct. 1842, 1855 (1986) (O'Connor, J., concurring). Therefore, if the County can demonstrate that, notwithstanding its affirmative action efforts, it remains a "'passive participant' in a system of racial exclusion practiced by elements of the local construction industry," Crosby, 488 U.S. at 492, 109 S. Ct. at 721 (plurality opinion), there is no justification for invalidating the County's voluntary efforts to dismantle that exclusionary system, at least to the extent that those efforts are narrowly tailored to accomplishment of that goal. This is particularly true in light of the fact that the relief granted to the plaintiffs by the district court is a permanent injunction against the continued operation of the MWBE programs. See Contractors Ass'n, 6 F.3d at 1004 (observing that "[b]ecause injunctions are prospective only, it makes sense to consider all available evidence ... including the post-enactment evidence").

Although post-enactment evidence is admissible to determine whether an affirmative action program is constitutional, such evidence carries with it the hazard that the program at issue may itself be masking discrimination that might otherwise be occurring in the relevant market. In view of that hazard, the County contends that the district court erred when it "failed to consider that the 12 year pre-existing BBE program caused the foregoing [statistical] measures of participation to understate disparity for Black participation." On that point, the County is mistaken, because the district court did consider that possibility.

In fact, the district court observed that the County's use of post-enactment evidence was "skewed by the challenged affirmative action program," 943 F. Supp. at 1558, even though the court nevertheless considered in detail the post-enactment evidence that the County itself chose to present. What the district court did not do is speculate about what the data might have shown had the BBE program never been enacted. We find no fault in that approach, because a strong basis in evidence can never arise from sheer speculation. Government actors are free to introduce post-enactment evidence in defending affirmative action programs, but if that evidence fails to meet the applicable evidentiary burden, a federal court cannot simply presume that, absent the programs, sufficient evidence of discrimination would have been found. Like the district court, we take the County's evidence as we find it, or rather as the County presented it.

A. THE STATISTICAL EVIDENCE

The County presented five basic categories of statistical evidence to the district court: (1) County contracting statistics; (2) County subcontracting statistics; (3) marketplace data statistics; (4) The Wainwright Study; and (5) The Brimmer Study. Below, we describe and summarize each of those categories of statistical evidence in turn.

1. County Contracting Statistics

The heart of the County's statistical analysis is a study that compares the following three factors for County nonprocurement ²

²When Dade County engages with the private sector in business activities, the County classifies those activities as "procurement" or "nonprocurement." In general, nonprocurement business activities include construction, personal and professional services, leases, and concessions. Approximately 90% of the County's overall

construction contracts: (1) the percentage of bidders that were MWBE firms; (2) the percentage of awardees that were MWBE firms; and (3) the proportion of County contract dollars that have been awarded to MWBE firms. The study makes those comparisons for two time periods: 1989-91 and 1993. Fiscal year 1992 was not included in the study, because of the extraordinary expenditures associated with Hurricane Andrew. The statistics for the years that were included may be summarized as follows:

construction expenditures fall are classified as nonprocurement, which understandably prompted the County to focus its statistical presentation on nonprocurement construction contracting data. The County's expert, Dr. Manuel Carvajal, testified that the nonprocurement construction contracting statistics were the most probative statistical evidence of discrimination that the County had.

BBE: 1989-91

Category	BBE Bidders (%)	BBE Awardees (%)	Contract \$ (%)
SIC 15	13.8	15.0	1.8
SIC 16	5.2	3.4	0.5
SIC 17	16.2	13.5	4.8

BBE: 1993

Category	BBE Bidders (%)	BBE Awardees (%)	Contract \$ (%)
SIC 15	17.5	24.6	7.8
SIC 16	16.6	24.1	9.9
SIC 17	21.3	20.0	14.0

Defendants' Exhibit L.

HBE: 1989-91

Category	HBE Bidders (%)	HBE Awardees (%)	Contract \$ (%)
SIC 15	31.0	33.0	15.0
SIC 16	23.2	21.9	14.2
SIC 17	28.6	31.1	7.2

HBE: 1993

Category	HBE Bidders (%)	HBE Awardees (%)	Contract \$ (%)
SIC 15	31.7	33.9	24.4
SIC 16	22.5	26.5	18.2
SIC 17	29.5	30.0	32.7

Defendants' Exhibit M.

WBE: 1989-91

Category	WBE Bidders (%)	WBE Awardees (%)	Contract \$ (%)
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SIC 15	6.9	6.0	1.0
SIC 16	3.2	2.2	2.9
SIC 17	13.3	13.5	4.4

WBE: 1993

Category	WBE Bidders (%)	WBE Awardees (%)	Contract \$ (%)
SIC 15	13.5	6.1	0.9
SIC 16	9.2	5.7	5.3
SIC 17	9.8	15.0	25.4

Defendants' Exhibit N.

At least one thing is fairly obvious from the foregoing statistics. For the BBE and HBE statistics, there are no consistently negative disparities between the bidder and the awardee percentages. In fact, by 1993, the BBE and HBE bidders are being awarded more than their proportionate "share" of the total number of County contracts in every SIC category, when the bidder percentages are used as the baseline for predicting those shares. There are a couple exceptions to that observation, but in general it is true. Therefore, as an initial matter, we certainly cannot conclude that the district court clearly erred by failing to find a strong basis in evidence of discrimination against BBEs and HBEs from disparities between bidder and awardee percentages.

For WBEs, the bidder/awardee results are decidedly mixed. For SIC 17, WBEs consistently have been awarded more than their proportionate share of County contracts. For SIC 15 and SIC 16 in years 1989-91, the difference between the WBE bidder and awardee

percentages is small, but disfavorable to the WBEs. For those same categories in 1993, however, the difference between WBE bidders and awardees is more disfavorable to WBEs -- at the same time the favorable disparity in SIC 17 has also increased. Without further analytical refinement, we cannot say that the district court clearly erred by failing to find in the mixed picture presented by the WBE bidder/awardee disparities a sufficiently probative basis in the evidence of discrimination in the relevant economic sector to justify the County's use of a gender preference.

The County's study refined the foregoing statistical analysis by bringing into the mix the percentage of County construction contract dollars actually being awarded to MWBEs. To do that, the study calculated "disparity indices" for each program and SIC code. In colloquial terms, a disparity index compares the amount of contract awards a group actually got to the amount we would have expected it to get based on that group's bidding activity and awardee success rate. More specifically, a disparity index measures the participation of a group in County contracting dollars by dividing that group's contract dollar percentage by the related bidder or awardee percentage, and multiplying that result by 100%. The closer the resulting index is to 100%, the greater the measured group's participation in the contracting dollars. For instance, if the BBEs represented 10% of bidders, and were awarded 10% of contract dollars, the bidder disparity index would be:

$$\begin{aligned} & \text{(Contract Dollar \% } \div \text{ Bidder \%) } \times 100 \% = \\ & \text{(10\% } \div \text{ 10\%)} \times 100\% = \end{aligned}$$

1 x 100% = 100% or "full participation"

Similarly, if the BBEs represented 10% of awardees, but were awarded only 5% of contract dollars, the awardee disparity index would be:

(Contract Dollar % ÷ Awardee %) x 100 %=

(5% ÷ 10%) x 100%=

.5 x 100% = 50% or "half participation"

The utility of disparity indices or similar measures to examine the utilization of minorities or women in a particular industry has been recognized by a number of federal circuit courts. See Concrete Works, 36 F.3d at 1523 n.10 (10th Cir. 1994) (employing disparity index); Contractors Ass'n, 6 F.3d at 1005 (3d Cir. 1993) (employing disparity index); Associated Gen. Contractors v. Coalition for Economic Equity, 950 F.2d 1401, 1414 (9th Cir. 1991) (employing similar statistical data); see also Stuart v. Roache, 951 F.2d 446, 451 (1st Cir. 1991) (employing similar statistical data); Cone Corp v. Hillsborough County, 908 F.2d 908, 915-16 (11th Cir. 1990) (employing similar statistical data).

In general, and as the district court recognized, disparity indices of 80% or greater, which are close to full participation, are not considered indications of discrimination. For instance, the EEOC's disparate impact guidelines use the 80% test as the boundary line for determining a prima facie case of discrimination. 29 C.F.R. § 1607.4D. Additionally, none of the circuits that have explicitly endorsed the use of disparity indices have indicated that an index of 80% or greater might be probative of

discrimination. See Concrete Works, 36 F.3d at 1524 (10th Cir. 1994) (crediting disparity indices ranging from 0% to 3.8%); Contractors Ass'n, 6 F.3d at 1005 (3d Cir. 1993) (crediting disparity index of 4%). The district court did not consider disparity indices of 80% or greater to be probative of discrimination. In light of the foregoing authority, including the EEOC's guidance on the subject, we cannot say that view of the evidence was clearly erroneous.

After calculation of the disparity indices, the County's study tested the statistical significance of the results through the application of standard deviation analysis. The standard deviation figure describes the probability that the measured disparity is the result of mere chance. As we previously have recognized:

Social scientists consider a finding of two standard deviations significant, meaning there is about one chance in 20 that the explanation for the deviation could be random and the deviation must be accounted for by some factor other than chance.

Peightal v. Metropolitan Dade County, 26 F.3d 1545, 1556 n.16 (11th Cir. 1994) (quoting Waisome v. Port Authority, 948 F.2d 1370, 1376 (2d Cir. 1991)).

The disparity indices for the County's contracting statistics, together with their corresponding standard deviation values,³ are as follows:

BBE: 1989-91

³Disparity indices that the County's expert identified as having no statistical significance are indicated by the inclusion of a dash in the corresponding "Standard Deviation Value" column.

Category	Bidder Disparity Index	Standard Deviation Value	Awardee Disparity Index	Standard Deviation Value
SIC 15	12.6%	3.26	11.6%	3.39
SIC 16	10.1%	2.61	15.5%	1.94
SIC 17	29.7%	2.35	35.6%	1.84

BBE: 1993

Category	Bidder Disparity Index	Standard Deviation Value	Awardee Disparity Index	Standard Deviation Value
SIC 15	44.9%	1.81	31.9%	2.59
SIC 16	59.3%	1.40	40.9%	2.50
SIC 17	65.6%	--	69.9%	--

Defendants' Exhibit L.

HBE: 1989-91

Category	Bidder Disparity Index	Standard Deviation Value	Awardee Disparity Index	Standard Deviation Value
SIC 15	48.4%	2.86	45.5%	2.98
SIC 16	61.2%	2.12	64.9%	1.89
SIC 17	25.3%	3.53	23.2%	3.69

HBE: 1993

Category	Bidder Disparity Index	Standard Deviation Value	Awardee Disparity Index	Standard Deviation Value
SIC 15	76.9%	1.06	72.1%	1.19
SIC 16	80.8%	--	68.8%	1.31
SIC 17	110.9%	--	109.1%	--

Defendants' Exhibit M.

WBE: 1989-91

Category	Bidder Disparity Index	Standard Deviation Value	Awardee Disparity Index	Standard Deviation Value
SIC 15	14.6%	2.19	16.8%	1.92
SIC 16	89.8%	--	128.9%	--
SIC 17	33.2%	1.99	32.7%	1.94

WBE: 1993

Category	Bidder Disparity Index	Standard Deviation Value	Awardee Disparity Index	Standard Deviation Value
SIC 15	6.3%	2.87	13.8%	1.64
SIC 16	57.3%	1.05	91.4%	--
SIC 17	257.8%	--	169.1%	--

Defendants' Exhibit N.

In the absence of further refinement, the foregoing statistics would indicate statistically significant underutilization of BBEs in County construction contracting. With the exception of SIC 17 for 1993, there are substantial and statistically significant

unfavorable disparities for County contract dollars -- in terms of bidder participation, awardee participation, or both. For SIC 17 in 1993, there is a substantial unfavorable disparity with respect to both bidder and awardee participation, but neither figure is statistically significant.

With HBEs, the results are less dramatic. For 1989-91, there are substantial and statistically significant unfavorable disparities for County contract dollars in all three SIC categories. However, by 1993, there are no statistically significant unfavorable disparities, and in SIC 17 the disparity (albeit statistically insignificant) is favorable toward Hispanics.

For WBEs, the picture is mixed. For 1989-91, there is a substantial and statistically significant unfavorable disparity only in SIC 15. However, with standard deviation values of 1.9 for both bidder and awardee participation, the substantial unfavorable disparity in SIC 17 very closely approaches statistical significance. On the other hand, the disparities for SIC 16 in 1989-91 during the same time frame are favorable to WBEs. Turning to 1993, the only category with a statistically significant unfavorable disparity is SIC 15. For SIC 16, the disparity for awardee participation is insubstantial, and for bidder participation is substantial but statistically insignificant. For SIC 17, the disparities (though statistically insignificant) are favorable toward WBEs.

As this circuit and others have recognized, when the proponent of an affirmative action plan produces sufficient evidence to

support an inference of discrimination, the plaintiff must rebut that inference in order to prevail. See Concrete Works, 36 F.3d at 1522 (10th Cir. 1994); Contractors Ass'n, 6 F.3d at 1006 (3d Cir. 1993); Howard v. McLucas, 871 F.2d 1000, 1007 (11th Cir. 1989). As we explained in Howard, which involved public employment, once the proponent of affirmative action:

introduces its statistical proof as evidence of its remedial purpose, thereby supplying the [district] court with the means for determining that [it] had a firm basis for concluding that remedial action was appropriate, it is incumbent upon the nonminority [employees] to prove their case; they continue to bear the ultimate burden of persuading the [district] court that the [public employer's] evidence did not support an inference of prior discrimination and thus a remedial purpose, or that the plan instituted on the basis of this evidence was not sufficiently "narrowly tailored."

Id. at 1007 (quoting Wygant v. Jackson Bd. of Educ., 476 U.S. 267, 293, 106 S. Ct. 1842, 1856 (O'Connor, J., concurring in part and concurring in the judgment)).

Typically, when statistical evidence is sufficient to support an inference of discrimination, plaintiffs have at their disposal at least three methods of rebutting that inference with a "neutral explanation." Contractors Ass'n, 6 F.3d at 1007. Plaintiffs may do so by: "(1) showing that the statistics are flawed; (2) demonstrating that the disparities shown by the statistics are not significant or actionable; or (3) presenting contrasting statistical data." Coral Constr., 941 F.2d at 921 (citation omitted); Contractors Ass'n, 6 F.3d at 1007 (listing same methods). We need not decide whether the foregoing statistical analysis was sufficient to support an inference of discrimination such that the

plaintiffs were required to rebut that inference, because the plaintiffs did produce sufficient evidence to establish a neutral explanation for the disparities, whether they were required to or not.

The plaintiffs have contended throughout this litigation that the disparities illustrated by the County's statistical analysis, which we have set out, are better explained by firm size than by discrimination. The plaintiffs point out that minority and female-owned firms tend to be smaller, and that it stands to reason smaller firms will win smaller contracts. The plaintiffs produced evidence based on 1987 Census data, which indicates that, on average, minority and female-owned construction firms in Dade County compare to non-MWBE firms as follows:

Category	Employees	Payroll	Sales
Black	3.1	\$45,238	\$162,867
Hispanic	4.3	\$70,893	\$427,032
Women	6.6	\$113,761	\$632,500
Non-MWBE	14.1	\$272,839	\$1,268,29
			1

Plaintiffs' Exhibit 54 at 39.

The plaintiffs' explanation for the disparities in County contract dollar awards is a plausible one, in light of the uncontroverted evidence that MWBE construction firms tend to be substantially smaller than non-MWBE firms. Of course, it is hardly surprising that MWBE firms bidding on or performing County contracts are smaller than non-MWBE firms, because the County

requires them to be small in order to be counted as MWBE firms. The Dade County Code requires that, absent a special exemption, firms participating in the MWBE programs may not exceed the size limits for "small business concerns" as defined by the Small Business Administration. See Metropolitan Dade County Code § 2-3.2(3). Thus, the relative smallness of the MWBE firms is a matter of definition imposed by the County on the programs. Moreover, as the County's own expert, Dr. Manuel Carvajal admitted, firm size plays a significant role in determining which firms win contracts. According to Dr. Carvajal:

The size of the firm has got to be a major determinant because of course some firms are going to be larger, are going to be better prepared, are going to be in a greater natural capacity to be able to work on some of the contracts while others simply by virtue of their small size simply would not be able to do it.

More simply put: Because they are bigger, bigger firms have a bigger chance to win bigger contracts. It follows that, all other factors being equal and in a perfectly nondiscriminatory market, one would expect the bigger (on average) non-MWBE firms to get a disproportionately higher percentage of total construction dollars awarded than the smaller MWBE firms. The County's own expert admitted as much.

Anticipating the plaintiffs' neutral explanation for the identified contract dollar disparities, the County's study conducted regression analyses to control for firm size. As explained in greater detail in the district court's opinion, regression analysis is a statistical procedure for determining the relationship between a dependent and independent variable, e.g.,

the dollar value of a contract award and firm size. See 943 F. Supp. at 1564-65. The point of a regression analysis is to determine whether the relationship between the two variables is statistically meaningful. Here, the County's regression analyses were directed toward identifying those disparities that were unexplained by firm size, the theory being that those unexplained disparities are necessarily the result of some other factor, such as discrimination. The statistical significance of the calculated results is once again expressed by standard deviation analysis. The district court did not consider unexplained disparities that corresponded to standard deviation values of less than two to be probative of discrimination, and based on our Peightel decision, that view of the evidence is not clearly erroneous. See Peightel, 26 F.3d at 1556 n.16 (recognizing that relationships corresponding to a standard deviation of two or more are generally considered significant).

The County's regression analyses were conducted twice, using two different proxies for firm size: (1) total awarded value of all contracts bid on; and (2) largest single contract awarded. The regression analyses "explained" most of the unfavorable disparities respecting MWBE participation in County contracting expenditures, meaning that after the analysis was performed, most of the unfavorable disparities became statistically insignificant, i.e., corresponded to standard deviation values of less than two. The results of the regression analyses can be summarized as follows:

- The BBE regression analyses for firm size, based on total value of all contracts bid on, served to explain all the disparities except SIC 15 for 1989-91, and explained all the disparities for 1993.
- The BBE regression analysis for firm size, based on the largest contract awarded, served to explain all the disparities except SIC 15 for 1989-91, and explained all the disparities for 1993.

Defendants' Exhibit L.

- The HBE regression analyses for firm size, based on total value of all contracts bid on, served to explain all the disparities except SIC 17 for 1989-91, and all the unfavorable disparities in 1993.
- The HBE regression analyses for firm size, based on the largest contract awarded, failed to explain the disparities for SIC 15 and SIC 17 for 1989-91. However, for 1993, the regression explained all the unfavorable disparities.

Defendants' Exhibit M.

- The WBE regression analyses for firm size, based on total value of all contracts bid on, explained all the unfavorable disparities for 1989-91. For 1993, the regression explained all the disparities except for SIC 15.
- The WBE regression analyses for firm size, based on the largest contract awarded, explained all of the

unfavorable disparities for 1989-91, and all the disparities except for SIC 15 for 1993.

Defendants' Exhibit N.

Based on the foregoing, the district court concluded that the demonstrated disparities were better explained by firm size than by discrimination. In the district court's view, the few unexplained disparities that remained after regressing for firm size did not provide a strong basis in evidence of discrimination for BBEs and HBEs, and did not sufficiently demonstrate the existence of discrimination against WBEs in the relevant economic sector. We do not consider that view of the evidence to be an implausible one in light of the entire record, which is to say we do not find it to be clearly erroneous.

Turning first to the BBE statistics, the firm-size regression analyses explained all but one of the negative disparities in the BBE study. The only unexplained negative disparity remaining after regressing for firm size was the disparity for SIC 15 for 1989-91. However, even the disparity for SIC 15 was explained by the 1993 regressions for firm size. The district court did not view an unfavorable disparity for a single SIC code during 1989-91 to form a strong basis in evidence for implementing a racial preference, particularly when even that one unfavorable disparity was explained by the firm-size regressions for 1993. The district court's view does not leave us "with the definite and firm conviction that a mistake has been committed." United States v. United States Gypsum Co., 333 U.S. 364, 395, 68 S. Ct. 525, 542 (1948).

Regarding the HBE statistics, both of the regression methods failed to explain the unfavorable disparity in 1989-91 for SIC 17, and one of the methods failed to explain the unfavorable disparity for SIC 15 during the same time period. However, in 1993, both regression methods explained all the unfavorable disparities. Moreover, as illustrated by the foregoing tables, the 1993 disparities for SIC 17 were favorable to HBEs. The district court did not consider those results to constitute a strong basis in evidence of discrimination against HBE contractors, and we cannot conclude that the district court's evaluation of the evidence is clearly erroneous.

Finally, turning to the WBE statistics, the only unfavorable disparity left unexplained by the firm-size regression analyses was the 1993 disparity for SIC 15. All of the other unfavorable disparities were explained by the firm-size regressions, and as illustrated by the foregoing tables, the 1993 disparities for SIC 17 were favorable to WBEs. The district court did not consider one unexplained disparity for a single SIC code in a single year to be sufficiently probative of discrimination to support the County's stated rationale for implementing a gender preference. Even bearing in mind that the County's evidentiary burden is lower for the WBE program than for the BBE or HBE programs, we believe the district court's view of the evidence is a permissible one.

The County contends that the district court's evaluation of the foregoing evidence was flawed, because the district court focused its attention on the disaggregated data -- that is, data

broken down by SIC code. Even though the County's expert, Dr. Carvajal, indicated that there were valid reasons for disaggregating the data by SIC code "insofar as they reflect different kinds of work, different bidding practices, perhaps a variety of other factors that could make them heterogenous with one another," the County maintains that the district court should have given more weight to the statistics that were consolidated for all three SIC codes. According to the County, the district court's approach caused it to disregard substantial and statistically significant unfavorable disparities that exist in the aggregate for BBEs, even after regressing for firm size. **[County Br. at 21-26]** Notably, the County makes no parallel argument for the HBE and WBE statistics, the apparent reason being that the aggregated data for those programs yielded no statistically significant unfavorable disparities after regressing for firm size.

The implicit reasoning underlying the County's aggregated data argument seems to be that the district court erred by holding, in effect, that aggregated data cannot form a strong basis in evidence to support a racial preference. However, that is not what the district court did. Instead, the district court declined to assign dispositive weight to the BBE aggregated data for 1989-91 when: (1) the BBE aggregated data for 1993 showed no statistically significant unfavorable disparities after regressing for firm size; (2) the BBE disaggregated data left only the disparity for SIC 15 in 1989-91 unexplained after the firm-size regressions were applied; and (3) the County's own expert testified as to the

utility of examining the disaggregated data "insofar as they reflect different kinds of work, different bidding practices, perhaps a variety of other factors that could make them heterogenous with one another."⁴

Under those circumstances, we cannot conclude that the district court clearly erred in assigning less weight to the aggregated data when it decided whether the County had a strong basis in evidence for implementing a racial preference. Even if we were convinced that we would have weighed the evidence differently, had we been sitting as the trier of fact, that alone is not a basis for concluding that the district court's account of the evidence is implausible. See Anderson, 470 U.S. at 573-74, 105 S. Ct. at 1511. We conclude that the district court did not clearly err in finding that a strong basis in evidence of discrimination against BBEs was not shown by the 1989-91 aggregated data. Similarly, we conclude that the district court did not clearly err in finding that the evidentiary foundation formed by the disaggregated County contracting statistics was too weak to support the weight of any of the MWBE programs in view of the constitutional requirements applicable to them. We turn now to the second category of statistical evidence that the County presented to the district court.

⁴As noted by the district court, the aggregation of disparity statistics for nonheterogenous data populations can give rise to a statistical phenomenon known as "Simpson's Paradox," which leads to illusory disparities in improperly aggregated data that disappear when the data are disaggregated. See 943 F. Supp. at 1560 n.16; see also Plaintiffs' Exhibit 55 at 3-6 (discussing and illustrating Simpson's Paradox).

2. County Subcontracting Statistics

The County performed a subcontracting study as part of its statistical case. The object of the subcontracting study was to measure the participation of each MWBE group in the County's subcontracting business. For each MWBE category, the study compared the proportion of the designated group that filed a subcontractor's release of lien on a County construction project between 1991 and 1994 with the proportion of sales and receipts dollars that the same group received during the same time period.

For example, between 1991 and 1994, 11.5% of all firms that filed a subcontractor's release of lien for SIC 17 County construction projects were BBEs, while the sales and receipts of those BBEs comprised only 6.3% of the total sales and receipts claimed by all firms that filed a subcontractor's release of lien with the County. According to the study's calculations, this leads to a disparity index of 54.9%,⁵ which corresponds to a standard deviation value of 1.37 (not statistically significant). Although the disparity index in this example is not statistically significant, some of the indices for some of the MWBE groups and SIC codes were. Nevertheless, the district court found the County's subcontracting study "insufficiently probative to support the use of race and ethnicity conscious measures," 943 F. Supp. at 1567, and an inadequate evidentiary foundation for use of a gender preference, id. at 1572.

⁵(6.3% ÷ 11.5%) x 100% = 54.8% ≈ 54.9% (difference apparently due to rounding in the study's calculations).

As noted, the objective of the subcontracting study was to estimate the participation of each MWBE group in the County's subcontracting business. However, the district court pointed out serious methodological problems with the study's approach to achieving that objective. Most notably, the denominator used in the calculation of the MWBE sales and receipts percentages is based upon the total sales and receipts from all sources for the firm filing a subcontractor's release of lien with the County. That means, for instance, that if a nationwide non-MWBE construction company performing 99% of its business outside of Dade County filed a single subcontractor's release of lien with the County during the relevant time frame, all of its sales and receipts for that time frame would be counted in the denominator against which MWBE sales and receipts are compared. As the district court pointed out, see 943 F. Supp. at 1567, that is not a reasonable way to measure Dade County subcontracting participation.

The County responds to the foregoing criticism by pointing out that a strong majority (72%) of the subcontractors included in the study are "located in" Dade County. We do not believe the district court was required to view that as a satisfactory resolution of the identified methodological problem. Twenty-eight percent of the subcontractors included in the study are not "located in" Dade County. Even as to the seventy-two percent, the County did not put on evidence sufficient to prove that the nominal "location" of a subcontractor serves as an acceptable proxy for that subcontractor's source of revenue. We conclude that the district

court did not clearly err by declining to credit the County's subcontracting statistics because "the data underlying the defendants' subcontracting analysis are inappropriate," 943 F. Supp. at 1567. We turn now to the third category of statistical evidence that the County presented to the district court.

3. Marketplace Data Statistics

The County's statistical case included a study that its expert, Dr. Carvajal, described as designed "to see what the differences are in the marketplace and what the relationships are in the marketplace." That study was based on a sample of 586 contractors that had filed a "certificate of competency" with Dade County as of January 1995, drawn from a population of 10,462 firms that had filed such a certificate. For the selected firms, a telephone survey was conducted. That survey inquired about the race, ethnicity, and gender of the firm's owner and asked for information on the firm's total sales and receipts from all sources (both public and private, within Dade County and without).

After the results of the telephone interviews were compiled, Dr. Carvajal examined the data to determine whether meaningful relationships existed between (1) the race, ethnicity, and gender of the surveyed firm owners, and (2) the reported sales and receipts of those firms. His hypothesis, of course, is that "marketplace" discrimination may be responsible for unfavorable disparities that exist when the sales and receipts of MWBE firms are compared to those of non-MWBE firms. Dr. Carvajal performed a regression analysis on the data, which was designed to filter out

the portion of identified disparities that may be attributable to firm size, using the number of employees as a proxy for size.

Before discussing the results of the marketplace study, it bears emphasis that the study's statistical universe is larger than the number of firms that are willing, able, or qualified to perform work on County construction contracts. Filing a "certificate of competency" with the County means simply that a firm is a licensed construction contractor, nothing more. Therefore, the parameters of the study's statistical universe necessarily includes firms that are unwilling, unable, or unqualified to perform County construction contracts. We do not view that weakness in the methodology as rendering the marketplace study meaningless, particularly in the gender context where "the government interest prong of the inquiry can be satisfied by a showing of societal discrimination in the relevant economic sector," Ensley Branch, 31 F.3d at 1580 (citations omitted). Indeed, we appreciate the difficulty that would accompany an effort to identify the statistical pool of contractors willing, able, and qualified to perform on County contracts. Nevertheless, we believe this problem is a factor that the district court was permitted to take into account when evaluating the weight of the statistical results, particularly insofar as the race- and ethnicity-conscious programs are concerned. As the Supreme Court has recognized, "[w]hen special qualifications are required to fill particular jobs, comparisons to the general population (rather than to the smaller group of individuals who possess the necessary qualifications) may

have little probative value." Croson, 488 U.S. at 501, 109 S. Ct. at 726 (quoting Hazelwood Sch. Dist. v. United States, 433 U.S. 299, 308 n.13, 97 S. Ct. 2736, 2742 n.13 (1977)).

Turning now to the results of the marketplace analysis, we need not dwell long on the data for BBEs or WBEs. After regressing for firm size, neither the BBE nor WBE data contained any statistically significant unfavorable disparities -- either in the aggregate or broken down by SIC code. Therefore, we cannot hold that the district court clearly erred in finding that the marketplace data survey was not probative of discrimination against BBEs or WBEs.

By contrast, the marketplace data for HBEs revealed unfavorable disparities in SIC 15, SIC 17, and in the aggregate, that were statistically significant even after the firm-size regressions were conducted. We think the district court was certainly permitted to consider those unexplained disparities as some evidence of discrimination against HBEs in the marketplace. However, the district court was not required to assign those disparities controlling weight in its evaluation of whether, in view of all the evidence, the County had a strong basis in evidence for implementing an ethnic preference for Hispanics. As previously explained, the study's statistical pool is not limited to "the number of minorities qualified to undertake the particular task." Croson, 488 U.S. at 502, 109 S. Ct. at 726. Moreover, we believe the district court was well within permissible bounds in viewing the marketplace data results as undermined by the dissimilar

results of the previously-discussed County contracting statistics. See supra Part VI.A.1. We turn now to the fourth category of statistical evidence that the County presented.

4. The Wainwright Study

At trial, the County introduced a statistical analysis prepared by Mr. Jon Wainwright. The Wainwright study analyzed the personal and financial characteristics of self-employed persons working full-time in the Dade County construction industry, based on data drawn from the 1990 Public Use Microdata Sample database, which is derived from the decennial census. More specifically, the study: (1) compared construction business ownership rates of MWBEs to those of non-MWBEs and (2) analyzed disparities in personal income between MWBE and non-MWBE business owners. The study concluded that blacks, Hispanics, and women are less likely to own construction businesses than similarly situated white males, and MWBEs that do enter the construction business earn less money than similarly situated white males. We will consider each of those conclusions in turn.

The business ownership analysis of the Wainwright study attempted to discern whether blacks, Hispanics, and women enter the construction business at lower rates than similarly situated white males. In determining whether persons were "similarly situated," the study considered "human capital" variables such as years of education, years of labor market experience, marital status, and English proficiency. Also considered were "financial capital" variables such as interest and dividend income, and home ownership.

The analysis indicates that blacks, Hispanics, and women enter the construction business at rates lower than would be expected if the numerosity of those groups, together with the identified human and financial capital variables, were the only factors affecting entry into the construction business. For blacks and women (but not Hispanics), the identified disparities are substantial and statistically significant.

The theory underlying the business ownership component of the Wainwright study is that any significant disparities that exist after accounting for the identified human and financial capital variables must be due to the ongoing effects of current and past discrimination. In light of Croson, the district court was certainly not required to accept that theory. In Croson, the local government took a similar approach when it sought to carry its evidentiary burden by relying on evidence that minority membership in local contractors' associations was too low. The Supreme Court rejected that attempt, reasoning as follows:

There are numerous explanations for this dearth of minority participation, including past societal discrimination in education and economic opportunities as well as both black and white career and entrepreneurial choices. Blacks may be disproportionately attracted to industries other than construction. See The State of Small Business: a Report of the President 201 (1986) ("Relative to the distribution of all business, black-owned businesses are more than proportionately represented in the transportation industry, but considerably less than proportionately represented in the wholesale trade, manufacturing, and finance industries").

...

For low minority membership in these associations to be relevant, the city would have to link it to the number of MBE's eligible for membership.

488 U.S. at 503, 109 S. Ct. at 727 (emphasis added).

In a pluralistic and diverse society, it is unreasonable to assume that equality of opportunity will inevitably lead different groups with similar human and financial capital characteristics to make similar career choices. See Local 28 of Sheet Metal Workers Int'l Ass'n v. EEOC, 478 U.S. 421, 494, 106 S. Ct. 3019, 3059 (1986) (O'Connor, J., concurring in part and dissenting in part) ("[I]t is completely unrealistic to assume that individuals of each race will gravitate with mathematical exactitude to each employer or union absent unlawful discrimination."). "Similarly situated" women, men, blacks, whites, Native Americans, Italian-Americans, and every other group that might be listed all bring their own values and traditions to the socio-economic table, and may reasonably be expected to make voluntary choices that give effect to those values and traditions. As the Supreme Court recognized in Croson, the disproportionate attraction of a minority group to non-construction industries does not mean that discrimination in the construction industry is the reason. See 488 U.S. at 503, 109 S. Ct. at 727.

Moreover, the district court had before it other evidence tending to show that disparities in construction business ownership are not attributable to discriminatory barriers to entry. At trial, there was evidence that between 1982 and 1987, the growth rate of MWBE firms was considerably more robust than that of non-MWBE firms. That data showed the following:

Ownership	Growth Rate in Number of Firms 1982-87
Black	250%
Hispanic	289%
Women	121%
non-MWBE	-26%

Plaintiffs' Exhibit 54 at 39. If the construction market itself were discriminatory, it is difficult to understand how the 1982-87 growth rate of MWBE firms in that market accelerated so much compared to that of non-MWBE firms. The answer, at least for Hispanics and women, cannot be the Dade County MWBE programs, because the HBE and WBE programs were not enacted until 1994. For all of the foregoing reasons, we cannot conclude that the district court clearly erred in assigning little or no weight to the business ownership portion of the Wainwright study.

We turn now to the personal income component of the Wainwright study. That analysis compared the personal incomes of MWBE construction business owners to non-MWBE construction business owners. As with the business ownership component of the study, regression analyses were performed on the identified disparities to filter out a litany of human capital and financial capital variables, on the theory that the remaining disparities reflect the effects of discrimination. After those regressions were performed, the disparities for Hispanic and women owners were not substantial, i.e., they resulted in disparity indices of 80% or more.

For the black owners, however, the income disparity ratio was 72.2%, which was statistically significant at two standard

deviations. While that disparity is some evidence of discrimination against BBEs in the marketplace, there are at least two reasons why the district court was not required to assign the disparity controlling weight in evaluating whether, in view of all the evidence, the County had a strong basis in evidence for implementing a racial preference.

First, the business owner income component of the Wainwright study fails to take account of firm size in its regression analysis, because the Public Use Microdata Sample database contains data on business owners, not their businesses. Recognizing that weakness in the database, Dr. Wainwright testified that "I tried to approach the size and capacity issue from an individual [business owner] standpoint as best we could," by including in his "financial capital" variables the interest and dividend income earned by the owner, as well as whether the business was incorporated. We do not believe the district court was required to give regressions based on those types of variables the same weight as regressions based on more direct measures of firm size, which brings us to our second point.

The district court was not required to consider the Wainwright study in isolation from the other statistical evidence, including the County Contracting Statistics and Marketplace Data Statistics. In those other two statistical analyses, regressions conducted for more direct measures of firm size successfully explained virtually all of the identified disparities. Accordingly, the district court was permitted to take account of the fact that "[t]he regression

analyses are ... conflicting," 943 F. Supp. at 1575, and to assign less weight to the disparity identified by the personal income component of the Wainwright study, which was based on a more indirect proxy for firm size. After all, we are required to review the district court's findings in light of the entire record. We turn now to the fifth and final category of statistical evidence the County presented.

5. The Brimmer Study

The final component of the County's statistical presentation was a study conducted under the supervision of Dr. Andrew F. Brimmer. The Brimmer study concerns only black-owned construction firms. The key component of the study is an analysis of the business receipts of black-owned construction firms for the years 1977, 1982, and 1987, based on the Census Bureau's Survey of Minority and Women Owned Businesses ("SMOBE"), which is produced every five years. The analysis was designed to determine whether disparities existed when the sales and receipts of black-owned construction firms in Dade County were compared with the sales and receipts of all Dade County construction firms.

The Brimmer study demonstrated the existence of substantial disparities for black-owned construction business receipts for 1977 and 1987, but not 1982. For 1977 and 1987, the disparity indices never exceeded 58% in any of the construction SIC codes. In 1982, however, the disparity index for SIC 15 was 94%, or almost at parity, and the disparity indices for SIC 16 and 17 were substantially above parity, at 141% and 169%, respectively.

According to the County, however, the favorable results in 1982 were the result of heavy spending related to a federally funded Metrorail project that required the use of race-conscious measures, not to a lack of discrimination in the industry. However, the Brimmer study made no attempt to filter out the effect of the Metrorail project in calculating the disparity indices, apparently because that information is not available from the SMOBE data.

The district court discounted the significance of the unfavorable disparities identified in the Brimmer study for 1977 and 1987, primarily due to the study's complete failure to take firm size into account. See 943 F. Supp. at 1573. Even assuming that without the effect of the Metrorail project, the disparities for 1982 would have been comparable to the unfavorable disparities for 1977 and 1987, we cannot say that the district court's treatment is an impermissible way to view the Brimmer study. Because firm-size regression analyses were successful in explaining most of the unfavorable disparities identified by other statistical studies that the County introduced into evidence, we cannot hold that the district court's evaluation of the Brimmer study was an implausible view of the evidence in light of the entire record.

6. Summary

To summarize, the County's statistical evidence is subject to more than one interpretation. The factfinder in this case examined the statistical data, and found that it was insufficient to form the requisite strong basis in evidence for implementing a racial or ethnic preference, and that it was insufficiently probative to

support the County's stated rationale for implementing a gender preference. For the reasons we have explained previously, we cannot hold that the district court's view of the statistical evidence is an impermissible one. As the Supreme Court has explained, "Where there are two permissible views of the evidence, the factfinder's choice between them cannot be clearly erroneous." Anderson, 470 U.S. at 574, 105 S. Ct. at 1512. Therefore, we cannot hold that the district court clearly erred in finding that the statistical evidence was too weak an evidentiary foundation to bear the weight of any of the MWBE programs under the standards of review applicable to them.

B. THE ANECDOTAL EVIDENCE

In addition to the statistical evidence, the County and the intervenors introduced a great deal of anecdotal evidence about discrimination in the County construction market. Most of that anecdotal evidence was concerned with perceived discrimination against BBEs, although a much smaller fraction of it was concerned with discrimination against WBEs. No anecdotal evidence at all was presented about discrimination against HBEs. The anecdotal evidence took three basic forms: (1) the testimony of two County employees responsible for administering the MWBE programs; (2) the testimony, primarily by affidavit, of twenty-three MWBE contractors and subcontractors; and (3) a survey of black-owned construction firms. The district court's opinion contains a detailed description of all three forms of the anecdotal evidence, see 943 F. Supp. at 1577-79. Therefore, we will keep our description of

that evidence to the minimum necessary to an understanding of its substance.

The two County employees who presented anecdotal testimony were Herbert Johnson and Gregory Owens. At the time of trial, Johnson had worked for the County for over 15 years and he was then in charge of the Dade County Performing Arts Center construction project, which was projected to cost approximately \$170 Million. Owens is the former director of the County's Department of Business and Economic Development, which implements the County's MWBE programs. He served in that capacity from 1991 to 1995.

Both Johnson and Owens testified that the decentralized structure of the County construction contracting system affords great discretion to the numerous County employees that are involved in the process. According to their testimony, that discretion creates the opportunity for discrimination to infect the system. Additionally, both employees (but primarily Owens) gave examples of incidents of discrimination that they believed had occurred in County contracting. For instance, Owens testified that MWBEs often complain about getting lengthy "punch lists" -- lists of work that must be redone -- when non-MWBEs on the same project did not receive lengthy punch lists. Both witnesses testified about the difficulty that MWBEs encounter in obtaining bonding and financing.

Additionally, the County and the intervenors introduced the testimony of twenty-three MWBE contractors, all but seven of whom testified solely by sworn declaration at the suggestion of the district court. Those witnesses described numerous incidents in

which they believe they have encountered discrimination in the Dade County construction market, which included: situations in which a project supervisor or foreman would refuse to deal directly with a black or female firm owner, instead preferring to deal with a white male employee; instances in which an MWBE owner knew itself to be the low bidder on a subcontracting project, but was not awarded the job; instances in which a low bid by an MWBE owner was "shopped" to solicit even lower bids from non-MWBE firms; instances in which an MWBE owner received an invitation to bid on a subcontract within a day of the bid due date, together with a "letter of unavailability" for the MWBE owner to sign in order to obtain a waiver from the County; and instances in which an MWBE subcontractor was hired by a prime contractor, but subsequently was replaced with a non-MWBE subcontractor within days of starting work on the project.

Finally, the County and the intervenors introduced a study based on anecdotal accounts of discrimination. That study was prepared by Dr. Joe R. Feagin, who chairs the Department of Sociology at the University of Florida. In conducting his study, Dr. Feagin interviewed persons at 78 construction firms that had been certified by the County as black-owned businesses. According to Dr. Feagin's report, those interviewees reported difficulties and unfavorable experiences consistent with the ones described by the individual witnesses, including: difficulty in securing bonding and financing; slow payment by general contractors; unfair performance evaluations that were tainted by racial stereotypes;

difficulty in obtaining information from the County on contracting processes; and higher prices on equipment and supplies than were being charged to non-MWBE firms.

The picture painted by the anecdotal evidence is not a good one. Clearly, numerous black (and some female) construction firm owners in Dade County perceive that they have been the victims of discrimination. Additionally, at least two County employees who are intimately familiar with the County's procedures believe that the County's decentralized contracting system affords enough discretion to County employees to let discrimination taint the process. The question is whether such evidence is sufficient to overcome the weaknesses found by the district court in the County's statistical data and to make the district court's findings clearly erroneous in light of the entire record.

Several circuits, including this one, have discussed the value and significance of anecdotal evidence in evaluating whether the government has established a sufficient factual predicate to justify a race-conscious or gender-conscious affirmative action program. We have found that kind of evidence to be helpful in the past, but only when it was combined with and reinforced by sufficiently probative statistical evidence. In Cone Corp., we held that anecdotal testimony "combined with the gross statistical disparities uncovered by the County studies, provides more than enough evidence on the question of prior discrimination and the need for racial classification to justify the denial of a motion for summary judgment," 908 F.2d at 916 (emphasis added).

Similarly, in Ensley Branch, we recognized that “[a]necdotal evidence may also be used to document discrimination, especially if buttressed by relevant statistical evidence,” 31 F.3d at 1565 (citation omitted). In that case, we held that a city had a sufficient basis in evidence to support the existence of a gender-conscious affirmative action program when “[t]he record before us contains substantial anecdotal and statistical evidence of past discrimination against women.” Id. at 1581 (emphasis added).

Our treatment of anecdotal evidence in Cone Corp. and Ensley Branch is consistent with the formulation in Justice O'Connor's Croson plurality opinion that “evidence of a pattern of individual discriminatory acts can, if supported by appropriate statistical proof, lend support to a local government's determination that broader remedial relief is justified,” 488 U.S. at 509, 109 S. Ct. at 730 (citation omitted) (emphasis added). In light of Croson's guidance on the point, and our decisions in Cone Corp. and Ensley Branch, we believe that anecdotal evidence can play an important role in bolstering statistical evidence, but that only in the rare case will anecdotal evidence suffice standing alone. While such evidence can doubtless show the perception and, on occasion, the existence of discrimination, it needs statistical underpinnings or comparable proof to show that substantial amounts of business were actually lost to minority or female contractors as the result of the discrimination. Other circuits share this view as to the limitations of anecdotal evidence. See Concrete Works, 36 F.3d at 1520 (10th Cir. 1994) (deeming “anecdotal evidence of public and

private race and gender discrimination appropriate supplementary evidence") (emphasis added); Contractors Ass'n, 6 F.3d at 1003 (3d Cir. 1993) (recognizing that the "combination of anecdotal and statistical evidence is potent" and that anecdotal evidence, taken alone, could satisfy Croson only in the "exceptional" case, if at all) (emphasis added) (citation and internal quotation marks omitted); Coral Constr., 941 F.2d at 919 (9th Cir. 1991) (recognizing the value of anecdotal evidence when combined with a "proper statistical foundation," but stating that anecdotal evidence alone "rarely, if ever, can ... show a systematic pattern of discrimination necessary for the adoption of an affirmative action plan").

As we have explained, the district court's assessment of the statistical evidence in this case is not clearly erroneous. Without the requisite statistical foundation for the anecdotal evidence to reinforce, supplement, support, and bolster, we cannot say on the facts and circumstances of this case that the district court clearly erred by failing to find that the anecdotal evidence formed a sufficient evidentiary basis to support any of the MWBE programs -- either taken alone or in combination with the statistics that the district court found to be ambiguous at best. By so holding, we do not set out a categorical rule that every case must rise or fall entirely on the sufficiency of the numbers. To the contrary, anecdotal evidence might make the pivotal difference in some cases; indeed, in an exceptional case, we do not rule out

the possibility that evidence not reinforced by statistical evidence, as such, will be enough.

In this case, however, the district court did not find a sufficient evidentiary foundation to support the MWBE programs in the statistical evidence, in the anecdotal evidence, or in the combination of the two. We may or may not have made that same finding had we been in the district court's position, but we cannot say that the district court's account of the evidence is implausible in light of the entire record. Therefore, the district court's judgment enjoining the continued operation of the MWBE programs is due to be affirmed on that ground, i.e., because of the County's failure to satisfy the factfinder that the programs rested on a constitutionally sufficient evidentiary foundation. For the sake of completeness, however, we will continue our review to the next step of the analysis.

VII. NARROW TAILORING AND SUBSTANTIAL RELATIONSHIP

We turn now to the "narrow tailoring" prong of our strict scrutiny review of the BBE and HBE programs, and then to the "substantial relationship" prong of our intermediate scrutiny review of the WBE program. Our discussion in this section requires us to assume, contrary to our previous holding, that the County did have a sufficient evidentiary foundation for enacting the MWBE programs in the first place. By making that assumption, we can address whether the programs are sufficiently linked to the legitimate government purpose they are purported to serve, which is remedying the effects of present and past discrimination against

blacks, Hispanics, and women in the Dade County construction market.

A. "NARROW TAILORING" AND THE BBE AND HBE PROGRAMS

As the Fourth Circuit has recognized, "The essence of the 'narrowly tailored' inquiry is the notion that explicitly racial preferences ... must be only a 'last resort' option." Hayes v. North State Law Enforcement Officers Ass'n, 10 F.3d 207, 217 (4th Cir. 1993); see also Croson, 488 U.S. at 519, 109 S. Ct. at 735 (Kennedy, J., concurring in part and concurring in the judgment) ("[T]he strict scrutiny standard ... forbids the use even of narrowly drawn racial classifications except as a last resort."). Even though, under a carefully tailored affirmative action program, "innocent persons may be called upon to bear some of the burden of the remedy," Metro Broadcasting, Inc. v. Federal Communications Comm'n, 497 U.S. 547, 596, 110 S. Ct. 2997, 3025-26 (1990) (citation and internal quotation marks omitted), such programs must be vigorously scrutinized to ensure that they do not go too far. That is so, because "even in the pursuit of remedial objectives, an explicit policy of assignment by race may serve to stimulate our society's latent race consciousness, suggesting the utility and propriety of basing decisions on a factor that ideally bears no relationship to an individual's worth or needs." United Jewish Orgs. v. Carey, 430 U.S. 144, 173, 97 S. Ct. 96, 1014 (1977) (Brennan, J., concurring in part).

In this circuit, we have identified four factors that should be taken into account when evaluating whether a race- or ethnicity-conscious affirmative action program is narrowly tailored:

In making this evaluation, we consider: (1) the necessity for the relief and the efficacy of alternative remedies; (2) the flexibility and duration of the relief, including the availability of waiver provisions; (3) the relationship of numerical goals to the relevant labor market; and (4) the impact of the relief on the rights of innocent third parties.

Ensley Branch, 31 F.3d at 1569 (citations and internal quotation marks omitted). The preceding four factors are not a mechanical formula for determining whether an affirmative action program is narrowly tailored, but they do provide a useful analytical structure. Here, we will concentrate on the first factor, because that is where the County's MWBE programs are most problematic.⁶

Turning now to the necessity for the relief and the efficacy of alternative remedies, we flatly reject the County's assertion that "given a strong basis in evidence of a race-based problem, a race-based remedy is necessary." That simply is not the law. If a race-neutral remedy is sufficient to cure a race-based problem, then a race-conscious remedy can never be narrowly tailored to that problem. See Croson, 488 U.S. at 507, 109 S. Ct. at 729 (holding

⁶However, we do note that we agree with the district court's analysis of the remaining factors with respect to the BBE and HBE programs, see 943 F. Supp. at 1582-83, with one exception. That one exception is that we do not agree with the district court that it was "irrational" for the County to set a goal of 19% HBE participation when Hispanics make up more than 22% of the relevant contracting pool in every SIC category, and more than 30% for SIC 15. We see nothing impermissible about setting numerical goals at something less than absolute parity. Stated somewhat differently, a local government need not choose between a program that aims at parity and no program at all.

that affirmative action program was not narrowly tailored where "there does not appear to have been any consideration of the use of race-neutral means to increase minority business participation in city contracting"); id. at 509, 109 S. Ct. at 730 (plurality opinion) (reserving race-conscious remedies for the "extreme case" when "necessary to break down patterns of deliberate exclusion"); see also, e.g., United States v. Paradise, 480 U.S. 149, 171, 107 S. Ct. 1053, 1066 (1987) ("In determining whether race-conscious remedies are appropriate, we look to several factors, including ... the efficacy of alternative remedies"). Supreme Court decisions teach that a race-conscious remedy is not merely one of many equally acceptable medications the government may use to treat a race-based problem. Instead, it is the strongest of medicines, with many potentially harmful side-effects, and must be reserved for those severe cases that are highly resistant to conventional treatment.

Here, the County has clearly failed to give serious and good-faith consideration to the use of race and ethnicity-neutral measures to increase BBE and HBE participation in the County construction market. The legislative findings accompanying the BBE ordinance merely contain the conclusory statement that "race neutral programs cannot address the above problems and do not focus limited County money, efforts and personnel on the problems caused by racial discrimination." That conclusion was based on an equally conclusory analysis contained in the Brimmer study, and a report that the Small Business Administration was able to direct only five

percent of SBA financing to black businesses from 1968 to 1980. In view of that perfunctory analysis, the County's conclusion that race-neutral solutions are ineffective is "entitled to little or no weight," Croson, 488 U.S. at 500, 109 S. Ct. at 725, which is what the district court gave it.

Insofar as the HBE program is concerned, the County conceded, with admirable candor, that "the record is bare of any county consideration of alternatives to an ethnic-conscious measures [sic] or any experiences upon which to support its recital in the ordinance of their ineffectiveness." Having reviewed the record in toto, we agree. It is clear as window glass that the County gave not the slightest consideration to any alternative to a Hispanic affirmative action program. Awarding construction contracts based upon ethnicity is what the County wanted to do, and all it considered doing, insofar as Hispanics were concerned.

The testimony of the County's own witnesses indicates that many of the problems that face Black and Hispanic construction firms could be addressed without the imposition of a race or ethnicity-conscious remedy. As noted by the district court, 943 F. Supp. at 1581, both Johnson and Owens testified as witnesses for the County that the following factors cause problems for MWBE contractors: the decentralized County contracting system, which affords a high level of discretion to County employees; the complexity of County contract specifications; difficulty in obtaining bonding; difficulty in obtaining financing; unnecessary bid restrictions; inefficient payment procedures; and insufficient

or inefficient exchange of information. Virtually all of these problems are problems caused by County processes and procedures, which the County could change. Primarily, these problems facing MWBE contractors are institutional barriers to entry that affect any new entrant into the County construction market. If the relative institutional youth of Black and Hispanic-owned construction firms causes those barriers to have a disproportionate impact on BBEs and HBEs, it follows that those firms should be helped the most by dismantling those barriers, something the County could do at least in substantial part.

The similarities between the race- and ethnicity-neutral options available to the County, and those available to the City of Richmond in Croson are striking. Writing for the plurality, Justice O'Connor explained:

[T]he city has at its disposal a whole array of race-neutral devices to increase the accessibility of city contracting opportunities to small entrepreneurs of all races. Simplification of bidding procedures, relaxation of bonding requirements, and training and financial aid for disadvantaged entrepreneurs of all races would open the public contracting market to all those who have suffered the effects of past societal discrimination or neglect. Many of the formal barriers to new entrants may be the product of bureaucratic inertia more than actual necessity, and may have a disproportionate effect on the opportunities open to new minority firms. Their elimination or modification would have little detrimental effect on the city's interests and would serve to increase the opportunities available to minority business without classifying individuals on the basis of race. The city may also act to prohibit discrimination in the provision of credit or bonding by local suppliers and banks. Business as usual should not mean business pursuant to the unthinking exclusion of certain members of our society from its rewards.

488 U.S. at 509-10, 109 S. Ct. at 730.

Despite that clear admonition in Croson, the record in this case does not indicate that the County has even seriously considered, and certainly has not tried, most of the race- and ethnicity-neutral alternatives available to it for increasing black and Hispanic participation in County contracting and for eliminating discrimination that may be occurring in that marketplace. Although the County does offer some limited technical and financial aid that might benefit BBEs and HBEs, even those half-hearted programs have not been evaluated for their effectiveness.

Most notably, the record indicates that the County has not taken any action whatsoever to ferret out and respond to instances of discrimination if and when they have occurred in the County's own contracting process. If such conduct has occurred -- and the County's own anecdotal evidence suggests that it has on at least some occasions -- the County has taken no steps to inform, educate, discipline, or penalize its own officials and employees responsible for the misconduct. The first measure every government ought to undertake to eradicate discrimination is to clean its own house and to ensure that its own operations are run on a strictly race- and ethnicity-neutral basis. The County has made no effort to do that. Nor has the County passed local ordinances to outlaw discrimination by local contractors, subcontractors, suppliers, bankers, or insurers. Instead of turning to race- and ethnicity-conscious remedies as a last resort, the County has turned to them as a first resort. Because the County's BBE and HBE programs are not narrowly

tailored, those programs would violate the Equal Protection Clause even if they were supported by a sufficient evidentiary foundation.

B. "SUBSTANTIAL RELATIONSHIP" AND THE WBE PROGRAM

When a gender-conscious affirmative action program rests on a sufficient evidentiary foundation, the government is not required to implement the program only as a last resort. Under intermediate scrutiny, the government may implement a gender preference so long as it can show that the program is substantially related to an important government interest. See supra Part V.B. Additionally, under intermediate scrutiny, a gender-conscious program need not closely tie its numerical goals to the proportion of qualified women in the market. See Ensley Branch, 31 F.3d at 1582.

The district court drew no distinction between its analysis of whether the County's BBE and HBE programs were narrowly tailored and whether the WBE program bore a substantial relationship to the County's stated rationale for implementing gender-conscious affirmative action, in response to perceived discrimination against women-owned contractors. That approach was error. Although the County has set a participation goal for WBEs of 11%, when the availability of WBE bidders ranges across SIC codes from 3.2% to 13.3%, the waiver provisions included in the WBE program make that numerical target sufficiently flexible to withstand intermediate scrutiny. If the WBE program rested on a sufficient evidentiary foundation, we could not conclude that it would fail the substantial relationship prong of the intermediate scrutiny analysis. However, because the district court did not clearly err

in finding that the County had failed to present sufficient probative evidence in support of its stated rationale for implementing a gender preference, the district court's error in applying the substantial relationship test does not change the result.

VIII. CONCLUSION

Sitting as the trier of fact, the district court found that the County lacked a strong basis in evidence to justify race- or ethnicity-conscious affirmative action. Likewise, the district court found that the County had failed to present sufficient probative evidence in support of its stated rationale for implementing a gender preference. Having reviewed the evidence, we conclude that neither of those findings is clearly erroneous. We also conclude that the County's race- and ethnicity-conscious programs are not narrowly tailored to serve a compelling governmental interest. The County's gender-conscious program is sufficiently flexible to satisfy the substantial relationship prong of intermediate scrutiny, but that is not enough in view of the County's failure to present sufficient probative evidence of discrimination against women in the relevant parts of the local construction industry.

For the foregoing reasons, the district court's judgment declaring unconstitutional Metropolitan Dade County's usage of race-, ethnicity-, and gender-conscious measures in connection with County construction projects and enjoining the County from using those measures is AFFIRMED.