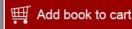
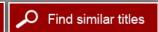


Childhood Obesity Prevention in Texas: Workshop Summary

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CHILDHOOD OBESITY PREVENTION IN TEXAS

Workshop Summary

Kara Nyberg, Annina Catherine Burns, and Lynn Parker, Rapporteurs

Food and Nutrition Board

INSTITUTE OF MEDICINE
OF THE NATIONAL ACADEMIES

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The serpent has been a symbol of long life, healing, and knowledge among almost all cultures and religions since the beginning of recorded history. The serpent adopted as a logotype by the Institute of Medicine is a relief carving from ancient Greece, now held by the Staatliche Museen in Berlin.

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"Knowing is not enough; we must apply. Willing is not enough; we must do."

—Goethe



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^{*} Institute of Medicine (IOM) planning committees are solely responsible for organizing the workshop, identifying topics, and choosing speakers. The responsibility for the published workshop summary rests with the workshop rapporteur and the institution.



Reviewers

This report has been reviewed in draft form by individuals chosen for their diverse perspectives and technical expertise, in accordance with procedures approved by the National Research Council's Report Review Committee. The purpose of this independent review is to provide candid and critical comments that will assist the institution in making its published report as sound as possible and to ensure that the report meets institutional standards for objectivity, evidence, and responsiveness to the study charge. The review comments and draft manuscript remain confidential to protect the integrity of the process. We wish to thank the following individuals for their review of this report:

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Although the reviewers listed above provided many constructive comments and suggestions, they did not see the final draft of the report before its release. The review of this report was overseen by EILEEN KENNEDY, Dean, Friedman School of Nutrition Science and Policy, Tufts University,

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Boston, MA. Appointed by the Institute of Medicine, she was responsible for making certain that an independent examination of this report was carried out in accordance with institutional procedures and that all review comments were carefully considered. Responsibility for the final content of this report rests entirely with the authoring committee and the institution.

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Summary

The United States is experiencing an epidemic of childhood obesity. Recent national statistics show that almost one-third of U.S. children and adolescents are overweight or obese (Ogden et al., 2008). Approximately one of six U.S. children is classified as obese (\geq 95th percentile for weight), and one of ten is classified as very obese (\geq 97th percentile for weight). Childhood obesity pervades all sectors of society regardless of race, education level, or income. The current trajectory of the problem will affect the health of the U.S. population for decades to come, incurring substantial costs to the nation.

In 2002, Congress charged the Institute of Medicine (IOM) with developing a prevention-focused action plan for decreasing the number of obese children in the United States. In response, the IOM conducted an in-depth review of the literature on obesity prevention and a series of fact-finding workshops. Two reports resulted from these efforts. The first—*Preventing Childhood Obesity: Health in the Balance*, issued in 2004—identifies promising approaches for obesity prevention efforts and presents recommendations for a variety of stakeholders and sectors (IOM, 2005). The second—*Progress in Preventing Childhood Obesity: How Do We Measure Up?*, released in 2007—provides a progress report on efforts undertaken since the 2004 report, with a particular focus on minority and underserved populations, and recommends evaluation of prevention efforts (IOM, 2007). To sustain a nationwide call to action for childhood obesity prevention, the IOM, with support from The Robert Wood Johnson Foundation, maintains a Standing Committee on Childhood Obesity Prevention.

WORKSHOP PURPOSE

The present report summarizes the information gathered at a workshop held February 5–6, 2009, in Austin, Texas. Texas was chosen as a case study because of its childhood obesity statistics, demographics, size, and efforts to prevent and reduce obesity. At this workshop, committee members met with Texas lawmakers, public officials, and community leaders to exchange ideas and to view first-hand strategies that are being implemented effectively at the state and local levels to prevent and reverse childhood obesity.

The focus on obesity efforts in Texas is particularly appropriate given that state's sobering statistics. Texas is home to three of the five cities with the highest obesity rates in the nation. In 2007, two-thirds of Texas adults and one-third of Texas high school students were either overweight or obese. Moreover, information released in January 2009 by the state demographer indicates that, absent preventive measures, the number of obese Texans will triple by 2040 to reach 15 million (Eschbach and Fonseca, 2009).

MAJOR THEMES

Texas leaders at the workshop expressed the strong belief that the state's economic vitality and security depend on the health of its population. Accordingly, the state is no longer simply describing the personal, community, and financial costs of its obesity crisis; it is taking proactive steps to address the problem through strategic initiatives. An overarching strategy is to address obesity by targeting the state's youth, in whom it may be possible to instill healthy behaviors and lifestyles to last a lifetime. A guiding principle of these efforts is that they should be evidence based, community specific, sustainable, cost-effective, and supported by effective partnerships. Moreover, the goal is for the responsibility to be broadly shared by individuals, families, communities, and the public and private sectors. A number of themes emerged from the workshop. These themes are summarized below.

Garnering Support for Childhood Obesity Initiatives

Obtaining Buy-in from the Public

Many individuals fail to understand the threat childhood obesity poses to society. Therefore, it was suggested that organizations targeting childhood obesity should consider including a public education component in their strategic plan.

Also essential is to engage members of the community in obesity prevention initiatives. The Paso del Norte Health Foundation has been highly

SUMMARY 3

successful in implementing several programs in El Paso because it engages and draws support from community members by having business leaders, parents, and educators participate on its committees.

Obtaining Buy-in from Legislators

Childhood obesity does not resonate as a cause with some policy makers, perhaps because they find the idea of addressing the problem unattractive or the consequences too distant. Linking the problem to broader, more familiar issues, such as education and economic development, appears to be an effective approach.

Modeling Healthy Behaviors Throughout the Community

To extend anti-obesity efforts beyond its schools, Texas is offering incentives to businesses to institute workplace wellness programs. Such programs already established in a handful of Texas businesses have realized benefits in the form of fewer inpatient hospital admissions, reduced absenteeism, annual insurance savings, and reductions in health care costs, thus yielding a positive return on the workplace wellness investment. These employers have recognized that having a healthy workforce that is ready and able to work improves the fiscal bottom line. Texas has also implemented programs to encourage healthy behaviors among its state employees.

Leveraging the Power of Partnerships

Collaborative efforts often generate more momentum, resources, and influence than individual efforts. Representatives of nearly all organizations commented that community-based solutions to childhood obesity require a diverse array of partners, including elected officials; state agencies, such as the Department of State Health Services; worksites and schools; institutions of higher education; the food industry; community groups; providers and hospitals; urban planners, developers, and architects; and many other partners, such as city councils, county commissioners, the police, and non-profit organizations. One of the most important partners is parents, since they serve as models for their children.

Implementing Comprehensive Approaches

Previous public health campaigns have demonstrated the need for a comprehensive approach. The Texas Tobacco Prevention Initiative, conducted in Austin/Travis County, taught leaders in the Health and Human Services Department that multicomponent interventions involving schools

and communities, the media, smoking cessation programs, and law enforcement are more effective than single-component interventions in reducing tobacco use.

Using Social Marketing

Speakers emphasized that organizations need to think and act like marketers when trying to promote the anti-obesity cause. Several groups well versed in social marketing stated that promoting healthy lifestyles rather than the prevention of childhood obesity is more powerful in influencing people to change their habits.

Identifying a Champion

During the workshop, it became clear that those programs that developed organically at the local level and were successful had individual champions advocating a specific cause, such as a better park system for the town or a walking marathon geared specifically to children. These champions, who can also be found at the state level, tend to be energizing individuals who lead by action and who spread their enthusiasm by communicating continually with others in the community. Their efforts unite people toward a common goal and leverage resources.

Recognizing the Power of Community Data

In culturally diverse states such as Texas, it is important to collect community data to measure the outcomes of interventions. Efforts that are effective in north Texas may not be influential in border communities in south Texas. The size and cultural diversity of Texas often necessitate customized interventions. Equally important is collecting state-level data that allow a state to compare its performance with that of others. This is one way to mobilize a call to action, particularly among policy makers.

Implementing Federal Policy Change

Representatives of some organizations, particularly those at the state level, advocated policy change at the federal level as a strategy for creating change at the community and state levels. This approach, it was argued, ensures that no communities or schools fall through the cracks with regard to nutrition and physical fitness standards. Moreover, instituting some basic changes at the federal level provides a foundation upon which states and communities can build.

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Securing Funding

Funding is an obvious need of all organizations targeting childhood obesity. Funders are sometimes risk averse, meaning that innovative initiatives can be overlooked for funding. One speaker requested that innovation be placed at the top of funding priorities and that success be redefined. He suggested that funders should also consider financing only projects that are scalable, adaptable, and sustainable so that successful programs can be translated to other locales.

Funding is needed not only to launch programs but also to sustain them, particularly at the local level. Many small organizations are focused so intently on getting their initiatives off the ground that they can lose sight of the resources needed to sustain their efforts.

CLOSING THOUGHTS

Childhood obesity remains a major challenge facing the nation—one that threatens the immediate health of our children; the future stability of our health care system; and ultimately the long-term vitality of local, state, and national economies. Workshop speakers emphasized that the changes needed to reverse the obesity trend must be robust enough to counteract the factors that led to obesity in the first place. Collaborative involvement of multiple sectors and stakeholders at all societal levels is required to alter collective cultural norms that have contributed to the childhood obesity epidemic. The efforts undertaken in Texas serve as a case study of various streams of influence at the state and local levels that are merging to effect the prevention and reversal of childhood obesity across the state. The Standing Committee on Childhood Obesity Prevention can draw on the experiences shared and information gleaned during the Workshop on Childhood Obesity Prevention in Texas to initiate, foster, and sustain other obesity prevention efforts nationwide, with the aim of turning the tide on this public health crisis.

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1

Introduction

The United States is experiencing an epidemic of childhood obesity. Recent national statistics show that almost one-third of U.S. children and adolescents are overweight or obese (Ogden et al., 2008). Approximately one of six U.S. children is classified as obese (≥ 95th percentile for weight), and 1 of 10 is classified as very obese (≥ 97th percentile for weight). Childhood obesity pervades all sectors of society regardless of race, education level, or income. The current trajectory of the problem will affect the health of the U.S. population for decades to come, incurring substantial costs to the nation.

If the growing epidemic of childhood obesity is not addressed, some have suggested the current generation of U.S. children will be the first to have a shorter average lifespan than their parents (Olshansky and Ludwig, 2005). In addition, the nation may miss the opportunity to contain the future costs of preventable chronic diseases linked to obesity, including diabetes, heart disease, and some forms of cancer. Given the scope of the problem, comprehensive change within the social, cultural, and environmental contexts in which children live is needed to achieve a sustainable transformation.

In 2002, Congress charged the Institute of Medicine (IOM) with developing a prevention-focused action plan for decreasing the number of obese children in the United States. In response, the IOM conducted an in-depth review of the literature on obesity prevention and a series of fact-finding workshops and issued two reports. The first report, *Preventing Childhood Obesity: Health in the Balance* (IOM, 2005), identified promising approaches for obesity prevention efforts and a set of recommendations for a variety of stakeholders and sectors. The second report, *Progress in*

Preventing Childhood Obesity: How Do We Measure Up? (IOM, 2007), provides a progress report on efforts undertaken since the 2005 report, with a particular focus on minority and underserved populations, and recommends evaluation of prevention efforts. To sustain a nationwide call to action for childhood obesity prevention, the IOM maintains a Standing Committee on Childhood Obesity.

The present report summarizes the information gathered at a workshop held February 5–6, 2009, in Austin, Texas. Texas was chosen as a case study because of its childhood obesity statistics, demographics, size, and efforts to prevent and reduce obesity. At this workshop, committee members met with Texas lawmakers, public officials, and community leaders to exchange ideas and to view first-hand strategies that are being implemented effectively at the state and local levels to prevent and reverse childhood obesity.

The focus on obesity efforts in Texas is particularly appropriate given that state's sobering statistics. Texas is home to three of the five cities with the highest obesity rates in the nation. In 2007, two-thirds of Texas adults and one-third of Texas high school students were either overweight or obese. Moreover, information released in January 2009 by the state demographer indicates that, absent preventive measures, the number of obese Texans will triple by 2040 to reach 15 million (Eschbach and Fonseca, 2009). According to Texas Governor Rick Perry, "Texas obesity rates are well above the national average, and the negative effects are spreading." Indeed, if the obesity epidemic in Texas is not controlled, particularly among children, one can easily envision a scenario in which the state's children and young adults compete with aging baby boomers for limited health resources. In the face of this prospect, one Texas lawmaker has gone so far as to identify obesity as the state's most serious threat.

Texas leaders at the workshop expressed the strong belief that the state's economic vitality and security depend on the health of its population. Accordingly, the state is no longer simply describing the personal, community, and financial costs of its obesity crisis; it is taking proactive steps to address the problem through strategic initiatives. An overarching strategy is to address obesity by targeting the state's youth, in whom it may be possible to instill healthy behaviors and lifestyles to last a lifetime. A guiding principle of these efforts is that they should be evidence based, community specific, sustainable, cost-effective, and supported by effective partnerships. Moreover, the goal is for the responsibility to be broadly shared by individuals, families, communities, and the public and private sectors.

This report describes a variety of efforts highlighted at the workshop aimed at preventing and reversing childhood obesity in Texas. The report also identifies themes that emerged during the workshop discussions, including common attributes of successful programs and barriers that can impede action.

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2

Opening Session

Jeffrey Koplan, Chair of the IOM Standing Committee on Childhood Obesity Prevention, opened the workshop by providing background information on the IOM's long-standing interest in childhood obesity prevention. Through its nutrition and health-promotion programs, the IOM has long been involved in advancing healthy eating and physical activity in the United States. These efforts include the two reports described in Chapter 1: Preventing Childhood Obesity: Health in the Balance (IOM, 2005) and Progress in Preventing Childhood Obesity: How Do We Measure Up? (IOM, 2007). The research documented in these reports made clear that childhood obesity is not a short-term problem but one that will challenge the nation for decades to come. Although these reports and the efforts of the IOM's Standing Committee on Childhood Obesity Prevention have helped define the scope of the childhood obesity epidemic and various contributing factors, a set of effective, proven strategies for preventing and reversing the growing problem is lacking. The committee chose to hold this workshop in Texas because actions being taken by individuals, community groups, schools, legislators, and government at all levels to combat obesity make the state a valuable case study. Through the workshop, the committee sought to learn about the programs that have been implemented in Texas, their effectiveness, and the potential keys to their success, gathering useful information that could be disseminated to other communities and states.

David Lakey, Commissioner, Texas Department of State Health Services, highlighted the salience of the workshop by noting the point made in Chapter 1 that, according to a report by the Texas state demographer (issued just 1 week before the workshop), the number of obese Texans will

triple by 2040 if the state fails to strengthen preventive efforts in the near future. Lakey provided additional sobering statistics:

- Over the last seven years, the obesity rate for young adults in Texas has increased from 10 to 20 percent.
- As noted in Chapter 1, in 2007, two-thirds of Texas adults and one-third of Texas high school students were either overweight or obese.
- In 2007, more than 20 percent of low-income children aged 2–5 who were enrolled in Texas's Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) were overweight or obese.

Given such statistics, Lakey stated that Texas leaders increasingly understand the severity of the childhood obesity crisis. He reinforced this point by quoting Governor Rick Perry's recent state address:

If we do not tackle this problem, not only will this generation of children be the first to have a shorter average life span than their parents, but we will never get a handle on preventable diseases like diabetes, heart disease, and even some cancers. Let's address obesity where it makes the most difference, most quickly, with our school children.

Austin Mayor Will Wynn explained that when he assumed office in 2003, he learned that the city was ranked 19th or 20th among the fittest cities in the country. Although disappointed that Austin was not ranked higher, he was heartened by the fact that it was the only city south of the Mason-Dixon Line that had made the list. From that point forward, he endeavored to improve Austin's fitness rating through a variety of means.

To reduce the \$100 million the city spends each year on health care for its 12,000 employees—roughly half of which is accounted for by preventable illnesses—Wynn instituted the Mayor's Fitness Council in 2004 to raise awareness of the costs of health care, promote better health and the prevention of chronic disease, and advance the city as a healthy place to live and work. Community stakeholders represented on the council included senior advocates, nutritionists, a behavioral psychologist, major employers, small employers, individuals from the public and private sectors, and children's activity advocates. The council aims to support and inspire people to improve their fitness by encouraging physical activity and improved nutrition. Wynn advocates his own cause by running or walking to work every day.

The City of Austin also seeks to support the health and fitness of its employees by offering flex time, an active physical education program during business hours, showers at all city facilities, and bike racks. In addition,

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Wynn has partnered with the medical community to develop the Austin Fitness Index, which establishes objective, scientific benchmarks for measuring improvements in physical activity, nutrition awareness, and wellness across the city. Using this index, Austin is seeing a positive trend in the cessation of tobacco use, due largely to its stringent antismoking ordinances.

Kenneth Shine, former President of the IOM, currently serves as Executive Vice Chancellor for Health Affairs for the University of Texas System. In this position, he has worked to raise the visibility of public health in the state. Shine began his presentation by referring to his own struggle with obesity and likened it to a chronic form of food addiction that, unlike other forms of addiction involving alcohol, drugs, or cigarettes, cannot be eliminated from daily life. Therefore, it is important to help children at very young ages develop internal control systems through which they can balance food intake and daily activity to maintain an ideal weight.

Shine commented that Texas is a particularly challenging state from a public health perspective given its substantial proportion of individuals with no health insurance. Code Red: The Critical Condition of Health in Texas, a survey of health insurance coverage in the state published in 2008, reports that Texas has the highest percentage of uninsured individuals in the United States. As a result, the state bears an especially high economic burden for the provision of health care. Medicare and Medicaid costs attributable to obese Texans total more than \$5 billion annually, and future health care expenditures are predicted to skyrocket if the statewide surge in obesity is not brought under control. Said Shine, "The future . . . for the state is terrifying, because with our high rates of obesity, associated with diabetes, hypertension, and other chronic illnesses, we are looking at health care expenditures that are going to go through the roof. . . . The economics of access to [health] care in Texas, and the rest of the country, depend critically on whether we get control of obesity." These health care costs threaten to negate the many economic advantages offered by Texas, including its lack of an income tax, its large concentration of Fortune 500 companies, and its popularity for business relocation.

With respect to children, the Code Red report concludes that promoting the health of children and their parents—whether insured or uninsured—requires health care systems built around patient-centered medical homes that provide coordinated, comprehensive care, including medical, dental, mental health, substance abuse, and preventive services. The report also recommends that Texas continue to strengthen efforts to offer integrated approaches to school health that emphasize nutrition, exercise, dental health, and disease management. Shine commented that since Texas is one of six states not facing a budget deficit in 2009, it is arguably well positioned to invest in these and other health care initiatives, which he believes will ultimately allow the state to prosper well into the future.

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3

Childhood Obesity in Texas: An Overview

Eduardo Sanchez, Vice President and Chief Medical Officer, Blue Cross and Blue Shield of Texas, began his presentation by noting that Texas, the second-largest state in the nation, is home to approximately 24 million individuals—roughly 48 percent white, 37 percent Hispanic, 12 percent African American, and 3 percent Asian American. The population is currently growing twice as fast as the U.S. population overall and is projected to increase to 50 million by 2040. With 1,000 babies being born each day, at least half of whom are Hispanic, Hispanics will grow to be the state's dominant racial/ethnic group by 2040. In this respect, Texas reflects a nationwide demographic trend and serves as a model for the projected racial/ethnic mix of the United States. Sanchez suggested that the obesity challenges faced by Texas today may well become the challenges faced by America in the near future if proactive steps are not taken to reverse the problem.

With 75 percent of its population residing in 25 counties and the remaining 25 percent spread across 229 counties, the state understands the challenges of delivering health care services across urban, suburban, rural, and frontier areas. To facilitate health care delivery, the state has been divided into eight health service regions, each roughly the size of a medium-sized U.S. state and each responsible for administering services to its residents (Figure 3-1).

Demographically, Texas falls slightly below the national average for median household income (\$41,645 vs. \$44,334 in 2004), and 16.2 percent of Texans fell below the poverty line in 2004, compared with a rate of 12.7 percent for the nation. Poverty appears to be most concentrated

The State of Texas



FIGURE 3-1 Texas health service regions, as presented by Sanchez.

among Hispanics and African Americans, as is a lack of health insurance (Table 3-1).

Texas ranks sixth among states in rates of childhood obesity. To emphasize the severity of the problem in the state, Sanchez presented national statistics on childhood obesity and noted that the proportions and trends are higher and more pronounced in Texas. Nationwide, nearly 33 percent of children and adolescents are overweight or obese, 16.3 percent (one in six) of children and adolescents are obese, and 11.3 percent are very obese. Obesity in the United States is particularly prevalent among Latino boys and African American girls aged 6–19 (Table 3-2). These statistics imply a growing obesity problem in Texas given that the proportion of Latino and African American students is increasing, while the proportion of white students is decreasing.

To improve health outcomes and contain future health-related costs, Texas initiated policies designed to address the childhood obesity epidemic (Table 3-3). The first comprised a series of three state Senate bills passed over the course of six years. Senate Bill 19 (2001) featured minimum

TABLE 3-1 Income, Poverty, and Lack of Insurance in Texas

Racial/Ethnic Group	Household Income (\$)	Per Capita Income (\$)	Poverty (%)	Uninsured (%)
White	54,920	31,051	8.2	10.4
Hispanic	38,679	15,603	21.5	32.1
African American	33,916	18,428	24.5	19.5
Asian American	66,103	29,901	10.2	16.8

SOURCE: Information from www.census.gov.

TABLE 3-2 Prevalence of Overweight and Obesity (body mass index [BMI] >85%)

	Boys (%)	Girls (%)			
Age, Years	Whites	African Americans	Latinos	Whites	African Americans	Latinos
2-6	25.4	23.2	32.4	20.9	26.4	27.3
6-11	31.7	33.8	47.1	31.5	40.1	38.1
12-19	34.5	32.1	40.5	31.7	44.5	37.1

SOURCE: Ogden et al., 2008.

TABLE 3-3 Obesity Prevention–Related Policies Targeting Schools in Texas, as Presented by Sanchez

Policy	Year	Features
Senate Bill 19	2001	 Minimum physical activity requirements for elementary school students Coordinated school health in all elementary schools School Health Advisory Councils
Texas Public School Nutrition Policy	2004	School nutrition guidelinesVending machine rules
Senate Bill 42	2005	Minimum physical activity requirements for middle school students
Senate Bill 530	2007	 Enhanced physical activity initiatives for youths in grades K-8 Annual testing of physical fitness levels for youths in grades 3-12 (the Fitnessgram)

physical activity requirements for elementary school students, coordinated school health in elementary schools, and instituted School Health Advisory Councils for nutrition and physical activity. Senate Bill 42 (2005) expanded the minimum physical activity requirements to include middle school students. Senate Bill 530 (2007) further enhanced physical activity initiatives for students in grades K–8 and mandated annual testing of physical fitness levels (aerobic capacity, strength, flexibility, body mass index)—known as the Fitnessgram—for youths in grades 3–12 (Box 3-1). This legislation was bolstered by a 2004 mandate of the Texas Department of Agriculture instituting nutrition guidelines and vending machine rules in schools.

Complementing these policy changes, the Texas Department of Health and the Department of State Health Services issued three reports aimed at identifying the scope of and addressing Texas's obesity problem: *Eat Smart Be Active*, a strategic plan focused on preventing obesity from 2005

BOX 3-1 Fitnessgram: An Overview

Fitnessgram was created in 1982 by The Cooper Institute to evaluate children's fitness levels. (The Cooper Institute was founded in Dallas, Texas, in 1970 by Kenneth H. Cooper, MD, MPH, who is recognized as the leader of the international physical fitness movement.) Fitnessgram is used to assess students in several areas of health-related fitness: cardiovascular fitness, muscle strength, muscular endurance, flexibility, and body composition. Scores are evaluated against objective criteria-based standards, called Healthy Fitness Zones, that indicate the level of fitness necessary for health. The Healthy Fitness Zone standards were established by the Fitnessgram Advisory Board, which includes leading scientists and practitioners in fitness and physical activity. Assessment items include the following:

- Aerobic capacity
 - PACER test
 - One-mile run/walk
 - Walk test (ages 13 or older)
- · Body composition
 - Percent body fat (calculated from triceps and calf skinfolds) or
 - Body mass index (calculated from height and weight)
- · Muscular strength, endurance, and flexibility
 - Abdominal strength and endurance (curl-up)
 - Trunk extensor strength and endurance (trunk lift)
 - Upper body strength and endurance (choose from push-up, modified pullup, and flexed arm hang)
 - Flexibility (choose from back-saver sit-and-reach and shoulder stretch)

to 2010; Counting Costs and Calories, (Combs, 2007) a report detailing the financial burden of obesity to Texas employers; and the Texas Obesity Policy Portfolio, (Texas Department of State Health Services, 2006) a document chronicling best health policy knowledge associated with obesity prevention and control to serve as a starting point for policy development and implementation.

Concurrently, there were programs under the auspices of the Paso del Norte Health Foundation in two health service regions located in West Texas, which served to reinforce the policy changes and health initiatives instituted by the Texas Legislature. These programs included the Coordinated Approach to Child Health (CATCH) initiative (see Box 3-2), Qué Sabrosa Vida (a healthy-cooking program), and Walk El Paso. These cumulative efforts had a significant impact: the percentage of overweight 4th graders in these health service regions decreased from 25–30 percent for 2000 to 2002 to 15–20 percent for 2004 to 2005.

Despite these encouraging statistics, it is clear that wide-ranging efforts are still needed in Texas. Recent Fitnessgram data reveal that fewer than

BOX 3-2 CATCH (Coordinated Approach to Child Health)

CATCH is an evidence-based, coordinated school health program designed to promote physical activity and healthy food choices and prevent tobacco use in children from preschool through grade 8. Healthy behaviors are reinforced through a coordinated approach in the classroom, in the cafeteria, in physical education, after school, and at home.

CATCH Reach

- Currently in more than 2,500 schools in Texas, potentially impacting more than 800,000 school children
- In more than 7,000 schools in 22 states in the United States; Washington, DC; and Canada

CATCH Outcomes

- Began as a randomized, controlled community trial evaluated from 1991 to 1994 in 96 schools in four states
- · Received four major National Institutes of Health grants
- Succeeded in producing changes in dietary and physical activity behaviors in the main trial
- Changes in diet and physical activity were maintained 3 years post intervention
- Recently replicated in El Paso, Texas; after 3 years, 11 percent fewer girls and 9 percent fewer boys classified as overweight and obese

9 percent of all 12th-grade boys and girls meet the criteria for fitness on all six Fitnessgram tests used in Texas. In addition, border communities appear to be disproportionately affected by the childhood obesity epidemic.

Sanchez concluded his presentation by postulating two possible extremes for the future of Texas. At one extreme, in the absence of positive change, he envisions overweight or obese young adults competing with elderly baby boomers for limited health resources. At the other extreme, he foresees a healthy Texas in which individuals are active and make smart food choices, leading to reduced demand for expensive health resources by young and old alike.

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4

Texas State Government: Successes to Date

Texas State Senator Jane Nelson, Chair of the Senate's Health and Human Services Committee, and Comptroller Susan Combs each spoke about their successful efforts to pass school-based health initiatives in Texas. Both explained that these successes were hard won, and described the challenges they faced and the strategies they used to overcome them.

Nelson believes that "prevention is the solution." Her involvement in childhood obesity prevention in Texas began several years ago when a concerned parent notified her that schoolchildren were sitting most of the day at their desks except for a short lunch period. Upon investigating the issue, Nelson found that in the prior legislative session, the Texas Education Code had been rewritten to omit physical education requirements. As a result, most schools had eliminated physical education and devoted the time instead to academic instruction. Nelson assumed it would be easy to reinstitute the physical education requirements but found that the process was incredibly difficult. The initial bill put forth mandated physical education instruction for all children in grades K-12. School administrators and educators balked at the bill, arguing that this time was essential for academic achievement. The bill had to be cut back twice—first covering only kindergarten through middle school and then covering only kindergarten through elementary school—before it finally passed the Senate in 2001. Since this early win, Nelson has continued her efforts to increase physical education activities in schools; she succeeded in expanding the requirements in 2005 and 2007.

Nelson noted that incorporating physical education requirements into law is sometimes not enough. Some schools failed to implement physical education programs after the laws were passed, illustrating the need to ensure that such laws are enforced.

Nelson identified helping the public and policy makers understand the significance of the obesity problem as the greatest challenge. A major concern is the cost of physical education programs. One way to address this concern is to present data comparing the cost of such programs with the costs that will be incurred if the childhood obesity trend is not reversed. Nelson and Combs worked together to publish a report on the cost of obesity to Texas businesses. This report, *Counting Costs and Calories* (Combs, 2007), showed that the current direct and indirect costs of obesity to state businesses due to decreased productivity, disability, and absenteeism total \$3.3 billion annually. This number is predicted to surge to \$15.8 billion by 2025 without intervention.

Nelson also stressed the importance of obtaining public support. Some individuals do not understand the threat of childhood obesity, nor do they feel that government should be involved in what their children eat and whether they exercise. Nelson believes government intervention is warranted if it reduces governmental exposure to high health care costs in the future and if it helps enhance academic achievement. Educating the public about the childhood obesity issue and the potential academic, fiscal, and social consequences is an essential element of passing health-promoting legislation. To this end, Nelson and her colleagues are working to link Fitnessgram data to report card marks and test scores, discipline problems, and absenteeism to demonstrate the connection between physical fitness and academic achievement.

Combs has been instrumental in mobilizing schools to eliminate vending machines and improve the quality of food they offer. She explained that before 2003, schools controlled their own nutritional environment, and the Texas Education Agency oversaw the school meals programs. Many schools had exclusive beverage contracts with soft drink companies under which they received higher revenues for selling soft drinks than water. Despite unassailable data showing the negative effects of food of poor nutritional quality and despite testimony to that effect by Combs (then elected as Commissioner of the Texas Department of Agriculture) and Eduardo Sanchez (then Commissioner of the Texas Department of Health), in 2003 the Texas Senate failed to vote out of committee a bill that would have curbed the sale of junk food in schools. "We found it shocking that the facts did not matter. The facts were inconsequential. And so we had to do it by fiat," said Combs.

Undeterred, Combs devised another strategy for tackling the problem, previously used in New Jersey. The Texas Department of Agriculture gained jurisdiction over the nutritional environment within public schools by becoming the designated state agency for federal monies granted by the U.S. Department of Agriculture (USDA) for school meals—funds totaling roughly \$1 billion, as Texas is the largest consumer of school food in the country. This allowed the state in 2003 to issue the Texas Public School Nutrition Policy, which banned foods of minimal nutritional value in elementary schools—a policy that exceeds the standards required by USDA. Combs noted that this is a replicable strategy for other states, particularly those in which the agricultural commissioner is elected rather than appointed.

When Combs became comptroller, she leveraged her position of controlling Texas finances to institute physical education in middle schools attended by at least 75 percent educationally and economically disadvantaged students. To this end, Combs, working with Nelson and the Texas Education Agency, was able to zero out the cost of physical education for schools that applied for grant monies. As a result, 577 schools attended by approximately 250,000 Texas middle school students participated in the program, which provided 30 minutes of physical activity a day or 225 minutes over 2 weeks. Combs noted that 25 percent of the funds were earmarked for nutrition education.

Having made such significant strides in the school setting, Combs is now turning her attention to the adult employment community. She noted that the state cannot afford an unhealthy population of employees, many of whom serve as role models for their children. Several workplace wellness programs have been initiated at various Texas companies; many of these companies are realizing financial savings due to reduced health care expenditures (Table 4-1). "All of these employers are understanding that if

TABLE 4-1 Workplace Wellness Programs Implemented in Texas, as presented by Combs

Company	Program	Return on Investment		
Dell Computers	Well at Dell	Reduced cost increasesFewer inpatient hospital admissions		
United Services Automobile Association (USAA)	Take Care of Your Health	 Reduced employee absenteeism Savings of more than \$105 million to the company's bottom line over 3 years 		
General Motors	Life Steps	 Annual insurance savings of \$42/person Return on investment of \$2-3 for every \$1 spent 		
H-E-B	Various wellness initiatives	• Reductions in the annual increase in health care costs from 25%/year to 2.9%/year		

you have a healthy workforce that is ready to work, it makes good sense to your bottom line," she said.

Like these Texas businesses, state government offices, including Combs's department of 2,800 employees, have instituted wellness policies. These policies include up to 16 hours of time off per year for physical activity, Weight Watchers programs, pedometer contests, and delivery of fresh farm food to the workplace, among other strategies. Combs and Nelson are currently discussing ways to incentivize other businesses in Texas to follow models of worksite wellness.

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5

Texas State Government: What the Future Holds

Recognizing that ongoing efforts are essential for controlling the growing obesity epidemic, Texas state agency officials support the reduction and prevention of childhood obesity through a collaborative effort among the Texas Department of State Health Services, the Texas Education Agency, and the Texas Department of Agriculture to develop strategies that contribute to and enhance student education, nutrition, and health. These agencies seek to work with a broad array of partners, including legislative leadership, other state agencies, and stakeholders, to accomplish their goals.

According to Todd Staples, Commissioner, Texas Department of Agriculture, the consequences of the obesity problem among both children and adults in Texas are three-fold:

- Exorbitant costs imposed on Texas taxpayers and businesses
- Decreased economic competitiveness of the state due to an increasing burden of health care costs on the state's employers
- An increased burden on the health care system

Staples stated that Texas ranks sixth among all states in rates of childhood obesity. This point is underscored by recent data gleaned from Fitnessgram (described in Chapter 3) revealing that only 8 percent of 12th-grade girls and 9 percent of 12th-grade boys in Texas fall within the healthy zone for all six Fitnessgram tests used in Texas (Table 5-1). Conversely, this means that 91 to 92 percent of these youths fail to meet Fitnessgram health standards.

Despite these unsettling data, Staples remarked that Texas is doing one thing right: "We have a strong Texas Public School Nutrition Policy.

Grade	Students Assessed (n)	% Achieving Healthy Fitness Zone on All Six Fitnessgram Tests	
		Girls	Boys
3	102,342	33.25	28.6
7	55,441	21.32	17.26
9	39,456	13.9	15.04
12	13,040	8.18	8.96

TABLE 5-1 Overall Fitness of Texas Schoolchildren According to Fitnessgram, as presented by Staples

It exceeds the standards required by the U.S. Department of Agriculture. We offer fruits and vegetables on all points of service, we restrict fat and sugar content, and we offer dairy and whole grains" (see also Chapter 4). These higher standards have increased participation in the National School Lunch Program, which is driving additional dollars to more Texas schools to enable them to offer healthy meals.

To further advance the progress made in schools, Staples is spearheading an initiative in partnership with the Texas Education Agency and the Department of State Health Services that focuses on the three E's of healthy living: education, exercise, and eating right. To bolster the eating right component of this initiative, the Texas Department of Agriculture is seeking a \$50 million investment from the state legislature to fund healthy food programs in schools, nutrition education curricula, after-school and summer camps, and mentoring programs. The Texas Department of Agriculture is also working with farmers and ranchers at the local level to supply school cafeterias with fresh fruits and vegetables. In addition, Staples has created an advisory committee, Healthy Students = Healthy Families, that brings together educators, food service managers, purchasing agents, and health professionals to serve as a conduit for school districts to communicate on policy.

Commissioner Lakey, speaking on behalf of the Department of State Health Services, emphasized that Texas is at the leading edge of efforts to address the obesity epidemic in the nation. He began by presenting some sobering statistics: the proportion of obese Texans increased from 13 percent in 1990 to 29 percent in 2007 (Figure 5-1), while the proportion of individuals of normal weight decreased from roughly 58 percent in 1990 to only 34 percent in 2007.

The approach adopted by the Department of State Health Services to combat obesity is to (1) serve as a catalyst and a resource for other organizations that can harness the support offered to them to implement policies throughout the state, (2) focus on community wellness, and (3) coordinate

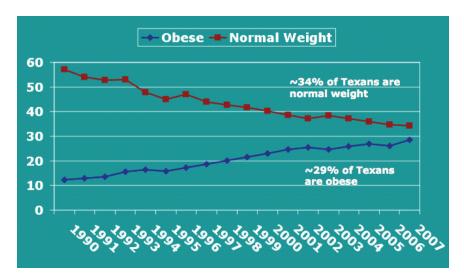


FIGURE 5-1 Obesity prevalence trends in Texas adults, 1990–2007. SOURCE: Information from Texas Comptroller: www.window.state.tx.us/specialrpt/obesitycost/summary/.

activities with other state agencies. The many partners that the Department of State Health Services seeks to engage in realizing community-based solutions to the childhood obesity epidemic are shown in Figure 5-2.

The agency has organized its approach to obesity prevention throughout the state by devising and refining a Strategic Plan for the Prevention of Obesity in Texas that has gone through two iterations since its creation in 2003. The purpose of this plan is to make healthy foods and active lifestyles the easy choice for all Texans. To this end, the plan outlines 19 target objectives that are specific, measurable, attainable, and time based. More than half of these key targets relate to childhood obesity. They include increasing physical activity, increasing the consumption of fruits and vegetables, expanding worksite support for breastfeeding, decreasing television viewing time, instituting a freeze on exclusive vending contracts in school districts, ensuring wellness policies for all Texas school districts, and preventing an increase in childhood obesity rates (Table 5-2).

An Interagency Council on Obesity, created by Senate Bill 556, brings together the Department of State Health Services, the Texas Education Agency, and the Department of Agriculture to enhance communication and coordination of obesity issues among state leaders and guide planning around obesity prevention, health promotion, and improved nutrition. Over the past year since the Interagency Council was formed, it has for-

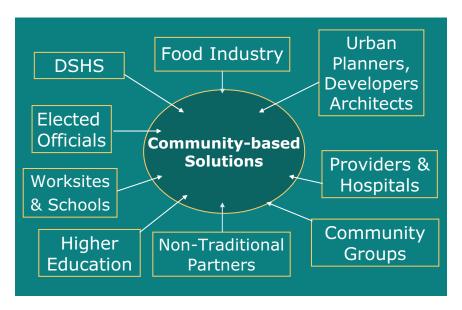


FIGURE 5-2 Partnerships needed to implement childhood obesity prevention, as presented by Lakey.

NOTE: DSHS = Department of State Health Services.

mulated a number of recommendations for moving forward to achieve a healthy Texas:

- Continue collaboration among the three agencies.
- Support social interventions.
- Strengthen K–12 nutrition education.
- Strengthen nutrition education and physical activities in early child-hood and after-school programs.
- Place continued emphasis on worksite wellness.
- Offer tax incentives for Texas employers.
- Examine ways to increase the availability of fresh produce for disadvantaged and/or low-income populations.
- Develop mechanisms or strategies to use the results of Fitnessgram data.
- Involve parents and community members in school-based and/or youth-focused physical activity and nutrition programming, especially through local School Health Advisory Councils.
- Increase the availability of resources, technical assistance, training, and support for schools and community-based organizations to

- enhance the implementation of evidence-based programs to prevent obesity.
- Identify effective programming throughout the state as a means for referrals and modeling, and establish criteria and measurement systems to identify such programs.

TABLE 5-2 Key Child-Specific Targets from the Strategic Plan for the Prevention of Obesity in Texas, as presented by Lakey

Target	Description		
2	Between 2007 and 2012, the prevalence of BMI ≥ 85th percentile among schoolchildren in Texas will not increase from 42% among 4th graders, 39% among 8th graders, 36% among 11th graders, and 31.5% among high school students		
4	By 2012, 80% of mothers will initiate breastfeeding, 30% will exclusively breastfeed at 3 months, 10% will exclusively breastfeed through 6 months, and 25% will be breastfeeding (not necessarily exclusively) at 1 year		
5	By 2012, 15% of school-age children will eat three or more servings of vegetables daily and 65% will eat two or more servings of fruit daily; at least 25% of high school students will eat fruits and vegetables at least five times daily		
6	By 2012, 80% of all eligible school-age children will participate in the National School Lunch Program		
8	Between 2007 and 2012, the percentage of Texas school districts with exclusive vending contracts will not increase		
9	By 2012, increase the number of hospitals that have officially initiated policies and practices to support breastfeeding initiation to at least three Baby-Friendly Hospitals and at least 65 Texas Ten Steps Facilities		
10	By 2012, increase the number of worksites that have initiated policies and practices to support breastfeeding and lactation by at least 25% of baseline		
13	By 2012, 50% of high school children in Texas will accumulate 60 minutes or more of physical activity per day on 5 or more days of the week		
17	By 2012, the percentage of school-age children who view 3 or more hours of television per day will decrease by 5% from 32% among 4th graders, 52% among 8th graders, and 44% among 11th graders		
19	By 2012, 100% of all public school districts will have implemented an approved school wellness policy consistent with the Federal Child Nutrition Act, 100% will have established a School Health Advisory Council, and 100% will have adopted an approved coordinated school health program consistent with state mandates		

Being a large agency, the Department of State Health Services has numerous divisions and programs focused on the prevention of childhood obesity. These include the Health Promotion and Chronic Disease Prevention Section, the Division of Family and Community Health, and the Texas School Health Advisory Council, among many others. Lakey commented that, just as the agency must partner and work with other state agencies, it is critical to ensure that the different divisions within the agency are working together in a coordinated manner.

6

A Look at the Texas Landscape

Individuals representing four organizations across Texas presented their experiences with childhood obesity prevention efforts in the state. These organizations are currently operating within urban (Austin, Houston), rural (Henderson), and border (El Paso) communities that feature populations of diverse socioeconomic strata and racial/ethnic composition.

CITY OF AUSTIN/TRAVIS COUNTY HEALTH AND HUMAN SERVICES DEPARTMENT

Philip Huang, Medical Director for the Austin/Travis County Health and Human Services Department, described health initiatives carried out in Austin and Travis County, Identification of an obesity problem and health disparities among its population enabled the county to compete successfully for a Steps to a Healthier United States grant from the Centers for Disease Control and Prevention to address obesity, asthma, and diabetes. To put this grant to best use, the region drew on its experience with the Texas Tobacco Prevention Initiative in Travis County, which showed that multicomponent interventions involving schools and communities, the media, smoking-cessation programs, and law enforcement were more effective than single-component interventions in reducing tobacco use. Huang commented that successful comprehensive health programs target parents as well as children, since parents are responsible for shaping the home health environment. Although multicomponent interventions require greater investment of resources, these costs are offset by greater benefits in health outcomes. Huang noted, for example, that implementation of the comprehensive Texas Tobacco Prevention Initiative cost approximately \$3 per capita and resulted in a 36 percent reduction in tobacco use among students in grades 6–12 and a 27 percent reduction in tobacco use among adults.

Texas applied these lessons learned in developing Steps to a Healthier Austin, the city's first large-scale, funded, comprehensive chronic disease prevention program. This program targeted 460,000 high-risk, racially diverse residents within areas of Austin identified as having the highest concentrations of obesity (Figure 6-1). The intervention encompassed 20 contiguous zip code areas comprising 412 square miles, covering primarily east Austin. The racial/ethnic make-up of this area included 41 percent Hispanics, 39 percent non-Hispanic whites, and 14 percent African Americans. Compared with the rest of Travis County, twice as many people in this area were living in poverty, the median income was 60 percent lower, and the unemployment rate was 33 percent higher.

The scope of the childhood obesity problem in the intervention area was measured and established:

- 15 percent of high school students were identified as overweight.
- 85 percent of high school students were not meeting recommended nutrition guidelines by eating five or more servings of fruits and vegetables each day.
- 71 percent of high school students had not been physically active for a total of 60 minutes per day for 5 or more of the past 7 days.
- 69 percent of high school students did not attend a daily physical education class.

Additional statistics on the proportion of overweight students in Austin/Travis County according to different demographic categories are shown in Figure 6-2.

"The objectives for Steps to a Healthier Austin were comprehensive from the start," said Huang. The program aimed to reduce adult obesity, increase daily consumption of fruits and vegetables, increase child and adult engagement in physical activity, and increase child engagement in school physical education. The program brought together partners from all sectors—schools, communities, health centers, the media, and academia—and engaged them in working toward a common vision. School activities included enhanced physical education curricula, healthy vending machine policies, increased healthy meal choices, school gardens, and safe routes to school. Community activities included summer playground programs; employee wellness programs; improvements to the built environment; healthy cooking programs; and dissemination of information on community resources, such as faith-based organizations, recreation centers, and trails.

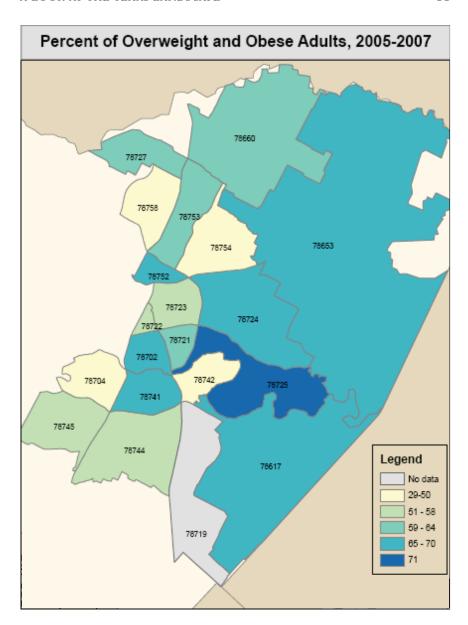


FIGURE 6-1 Concentration of the obesity epidemic in Austin/Travis County, as presented by Huang.

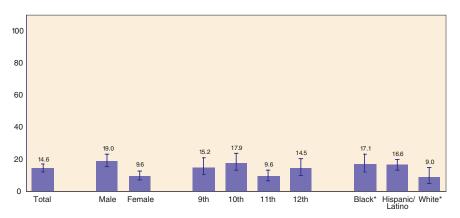


FIGURE 6-2 Percentage of Austin/Travis County high school students who were obese (≥ 95th percentile for BMI), as presented by Huang. NOTE: * = Non-Hispanic.

In addition, federally qualified health centers offered case management and nutrition counseling for obese children, and several surveillance and evaluation tools were implemented to measure change (e.g., Fitnessgram, the Behavioral Risk Factor Surveillance System, the Youth Risk Behavior Surveillance System). Huang indicated that several resources are needed to sustain the Steps to a Healthier Austin program, including continued funding, continued facilitation and coordination of community collaboration, and additional evidence-based practices.

PASO DEL NORTE HEALTH FOUNDATION, EL PASO

The purpose of the Paso del Norte Health Foundation is to promote health and wellness among the 2.2 million people living in El Paso and Hudspeth Counties in west Texas and neighboring regions in southern New Mexico and Chihuahua, Mexico. The foundation carries out its mission through leadership in health education, research, and advocacy.

One of the many initiatives embraced by the foundation is the CATCH initiative (see Box 3-2 in Chapter 3 for an overview of CATCH). The foundation began by implementing the CATCH program in one small school district in El Paso. Through collaboration with teachers and school superintendants, the reach of the CATCH program grew to include more than 108 schools. Enrique Mata, Senior Program Officer with the foundation, commented that the community became so engaged in the CATCH efforts that a synergy began to develop with other Paso del Norte programs. Imple-

mentation of Walk El Paso increased awareness of the need to change the built environment and address safety issues to help people get out of their homes and participate in physical activity. The Qué Sabrosa Vida program empowered primary meal preparers to present meals to their families using the four Cs: cooking, choosing, controlling, and celebrating.

Mata detailed several strategies that have enabled the Paso del Norte Health Foundation to succeed in improving the health of individuals in the communities it serves:

- Because the foundation is a regional organization that is relatively isolated geographically, it has become adept at using resources in a creative way.
- The foundation engages and listens to members of the community to garner their support in a respectful manner.
- The foundation sets aside money to evaluate the effect of initiatives and document outcomes.
- Although the foundation focuses on assisting underserved individuals, it does not restrict its efforts to those census tracts most in need; instead, it implements programs across the board to draw on the collective experience of all societal sectors.
- The foundation looks carefully at all of the support systems in an area to identify appropriate evidence-based interventions that are likely to succeed.

CHILDREN AND NEIGHBORS DEFEAT OBESITY (CAN DO) HOUSTON

Nancy Murray began her presentation on CAN DO Houston by describing the events that led to the formation of the organization. In 2005, Houston was named the fattest city in America. In response, Mayor Bill White started Get Moving Houston, the Mayor's Wellness Council. In 2006, the Houston Wellness Association was formed; its members include businesses interested in promoting wellness, among others. Shortly thereafter, in 2007, the Center for Clinical and Translational Sciences (CCTS), a collaboration among the University of Texas Health Science Center at Houston, the University of Texas M.D. Anderson Cancer Center, and the Memorial Hermann Healthcare System, was formed through an award from the National Institutes of Health. With this grant, CCTS funded a community engagement corps and a dedicated community engagement specialist.

As community engagement specialist, Nancy Correa listened to the community advisory board and identified childhood obesity as the most pressing issue for community members. She subsequently determined that there were more than 60 different programs in Houston focused on child-hood obesity. Instead of developing another such program, she and her colleagues coordinated these many existing efforts under the CAN DO umbrella to create a community-based initiative aimed at preventing and diminishing childhood obesity through local collaborations. CAN DO listens to the needs of the community and then coordinates and leverages existing resources and services to help communities address their health concerns. The organization has partnered with all the major universities in Houston, the private sector, nonprofit organizations, health care organizations, community programs, and local government to help Houstonians gain access to a healthier lifestyle.

CAN DO initiated a pilot project in August 2008 in two Houston communities. Within each community is a CATCH elementary school and a park that serves as the anchor for physical activities. The first community, Magnolia, is a predominantly low-income Hispanic community, while the second, Sunnyside, is a predominantly low-income African American community. As the point of contact for each of these communities, Correa explained that she quickly became aware of the different needs in each setting.

Most stakeholders in Sunnyside were fairly satisfied with the amount of physical activity in which the community's children were engaged, but they identified nutrition and parent education as weak areas within a comprehensive healthy lifestyle. In response, CAN DO now offers after-school nutrition lessons for children; wellness education sessions for parents; and grocery store tours for parents and caregivers, focused on how to read nutrition labels.

In comparison with Sunnyside, the Magnolia landscape looked very different. Parents and stakeholders felt that families had access to fruits and vegetables, nutrition education, and a cooking program through another initiative; however, most children were engaging in little physical activity. Recognizing a lack of funding for physical education equipment, CAN DO immediately provided the school with soccer balls for the children. In addition, CAN DO determined that the park located half a mile from the school had free after-school programming, but this programming was not well promoted or incorporated into the community. In a 7-week pilot program, Parks and Recreation staff brought the programming to the elementary school twice a week to encourage the children's participation. At the end of the pilot, CAN DO promoted a move to the park, emphasizing more days, more resources, and more space. Participation in the after-school program increased following this effort.

LEAN COALITION, HENDERSON

Toinette Ladage prefaced her presentation by explaining that Henderson is a small town of about 12,000 residents in Texas with limited financial resources. Born out of a series of events illuminating the suboptimal health and nutrition of Rusk County residents, particularly schoolchildren (Figure 6-3), the Leadership Encouraging Activity and Nutrition (LEAN) Coalition was formed to lead obesity prevention efforts in the county. As chair of the LEAN Coalition, Ladage stated that its mission is to inform and increase awareness among Rusk County citizens concerning physical activity, nutrition choices, and other behaviors for optimum health.

In response to needs identified through a survey conducted by the City of Henderson Parks and Recreation Department, the LEAN Coalition set its sights on making the entire city a park system by connecting neighborhoods and schools to the parks via sidewalks. Although the coalition secured \$1.2 million in grant monies from the Texas Parks and Wildlife Department to improve existing parks and expand recreational facilities within the town, creative tactics devised by LEAN members have greatly advanced the group's cause while preserving its monetary resources. Mike Barrow, Assistant City Manager, detailed how the coalition managed to acquire a sizable

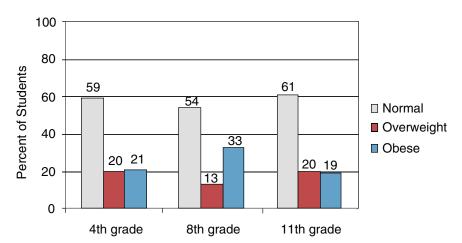


FIGURE 6-3 Overweight and obesity among schoolchildren in public health region 4-5N (including Rusk County), 2004–2005, as presented by Ladage. SOURCE: SPAN III Research Project: 2004–2005 results.

parcel of park land through a land swap with a town resident. The coalition also acquired an unused building overseen by the Historical Society that it plans to convert into a senior citizen center, with access to park trails and an indoor swimming pool for all Henderson residents. Using innovation, creativity, perseverance, and commitment, the LEAN Coalition has slowly grown the acreage of Henderson's system of parks and paved trails.

7

A Look at the Austin Landscape

The second day of the workshop began with a series of presentations given by individuals representing various initiatives operating within Austin to combat childhood obesity.

RUNTEX

Paul Carrozza, owner of RunTex, a store supplying running shoes, gear, apparel, and accessories, described how his personal call to physical fitness blossomed into community action and outreach. As a child, Carrozza suffered from asthma and chemical allergies. He discovered that limiting his time indoors, maintaining an active lifestyle by running, and eating organic foods dramatically improved his symptoms. This way of life segued into a career when he moved to Austin and opened his running supply store with his wife in 1988. Their business is now the nation's largest store devoted exclusively to running. In addition to RunTex, Carrozza founded RunTex University and RunTex Events. RunTex Events produces more than 120 events each year and raises more than \$5 million annually for local charities. Carrozza is also a co-founder and sponsor of the Marathon Kids program, described below.

Carrozza noted that we live today in a still environment with effortless transportation, a constant food supply, and air-conditioned rooms. "In our current lifestyle, most people are motivated to move externally, not internally," he said. As a consequence, it is important to be around people or in programs that motivate one to move. Early on, Carrozza found that he was a natural catalyst for encouraging others to move. He now regularly offers coaching programs to help runners train for an event, and through

these efforts he has identified four elements that make his running programs a success:

- Having an effective leader
- Assembling a team of people with similar athletic abilities to offer each other moral support
- Training for a cause or goal
- Having the proper equipment

MARATHON KIDS

Marathon Kids is a 12-year-old grassroots initiative that has grown to become a national nonprofit organization. The program was the vision of Kay Morris, who came up with the idea for Marathon Kids while participating in one of Carrozza's inspirational running classes. Marathon Kids is a voluntary, free, school- and community-based program in which children in grades K–5 of all physical abilities are engaged to make a pledge to physical activity by running or walking 26.2 miles over 6 months. Children are given a running log in which they tally their miles on one side and record on the other the 26.2 days of every month that they eat five servings of fruits and vegetables a day. Each year, the Marathon Kids program culminates in a final mile medal celebration held at a college or university with Olympians in attendance to sign autographs. Access to the program is promoted through school activities and free transportation to events.

Morris pointed out that the program represents an excellent model of adaptability, particularly in inner cities. Marathon Kids currently registers 60,000 children in grades K–5 in Austin; 41,000 in Dallas; 20,000 in Houston; nearly 20,000 in Los Angeles; and about 5,000 in the Texas Lower Rio Grande Valley. The program recently expanded to include Baltimore and Chicago; another 300 towns and cities are on the waiting list, along with cities in 14 foreign countries. Morris attributes much of the program's success to "the perfect intersection of substance and symbolism." Both children and parents readily understand the concept of the program, and the excitement elicited in the children often is transferred to the parents.

Morris noted that the Michael & Susan Dell Foundation has provided funding to study measurable changes over 2 years of Marathon Kids. Endpoints to be evaluated include changes in BMI, as well as shifts in children's self-perception.

ACTIVE LIFE

ACTIVE Life is a first-of-its-kind social movement launched in Austin to combat the youth obesity epidemic. ACTIVE Life regards obesity as one

symptom of a broken culture. Therefore, it views itself not as an anti-obesity program but as a program to drive greater demand for healthy lifestyles by changing people's culture, targeting children, families, and industry. "We want to inspire people to want to live healthier lives, and then we want to make those lifestyles more accessible," said Baker Harrell, founder and Executive Director of the ACTIVE Life movement. He identified four keys to the success of the ACTIVE Life approach:

- Innovation—focusing on what has not yet been done
- Collaboration—serving as the glue to bind disparate elements
- Inspiration—providing the motivating force for change
- Mobilization—inspiring people to become evangelists for health

The ACTIVE Life recipe for success also includes scalability, sustainability, adaptability, and the ability to be measurable.

ACTIVE Life interprets the word *active* holistically by focusing on physical fitness, nutrition, and the environment. The 5-year-old organization provides health- and fitness-based programs, products, media, and events to 400,000–500,000 youths and their family members throughout Texas. One of ACTIVE Life's many innovative approaches to preventing childhood obesity is to work with corporations, such as soft drink companies, to show them how they can generate more revenue by increasing the demand for healthier products. Through these efforts, corporations are enlisted to become part of the solution.

CAPITAL AREA FOOD BANK

David Davenport, President and CEO of the Capital Area Food Bank, began his presentation by highlighting the following information:

- One in five Texas children is obese.
- One in four Texas children lives in poverty.
- High-carbohydrate junk food costs \$1.76 per 1,000 calories.
- Healthy produce and protein foods cost \$18.46 per 1,000 calories.

According to Davenport, people often associate food banks with unwanted, unhealthy surplus food that is redistributed to low-income families. At the Capital Area Food Bank, however, 80 percent of the food provided to low-income areas is rated 1 or 2 on a scale of nutritional quality (with 1 representing most nutritious and 4 representing least nutritious).

As a whole, the Texas Food Bank Network consists of 19 member food banks that provide emergency food assistance to all Texas counties. The network encompasses 3,600 partner nonprofit organizations that in 2006

provided food for 681,000 children. Flowing through the Texas Food Bank is the Texans Feeding Texans Surplus Agriculture Program, a collaboration between all of the food banks in Texas and the Department of Agriculture. The program captures surplus agricultural products in the fields that farmers and ranchers do not take to market because they want to maintain certain price levels.

Davenport explained that the Capital Area Food Bank is a member of Feeding America and the Texas Food Bank Network. It provides emergency food assistance to 21 central Texas counties through a network of 355 partner nonprofit organizations. Recognizing that children living in poverty lack access to high-quality, nutritious foods, the food bank endeavors to increase access to such foods for low-income children and families through several locally based programs (Box 7-1). Through its nonprofit partners

BOX 7-1 Local Programs Supported by the Capital Area Food Bank of Texas

CHOICES—Nutrition Education Program

- Funded in part by USDA's Food Stamp Nutrition Education Program
- · Helps individuals and families make smart choices at mealtime
- · All classes are free and open to qualified individuals

Wheels of Sharing Mobile Food Pantry

 Staple foods, fresh produce, and meats delivered to remote communities in Central Texas where no pantry is available

Fresh Food for Families

- Eighteen distribution sites across central Texas provide families with quality fruits and vegetables
- An average of more than 100,000 pounds of produce distributed to more than 3,600 families each month

Kids Café

- Thirty-one sites
- More than 35,000 meals per month provided to more than 2,800 children in need

Capital Area Food Bank East Austin Service Center

- Direct service to clients (primarily single-parent families)
- High-need area
- Clients participate in "client choice" food selection, allowing them to choose the healthy food most needed by their family

and local programs, the Capital Area Food Bank collected and distributed 17.5 million pounds of surplus fruits, vegetables, and meats produced by farms and ranches in 2008, and it anticipates distributing 22 million pounds of healthy foods in 2009.

ENVIROMEDIA SOCIAL MARKETING

Katie Deinhammer of EnviroMedia, a public relations and advertising agency dedicated solely to improving public health and the environment, defined social marketing as a mechanism to achieve behavior change. The prelude to such change is usually a period of social unrest, which can be leveraged to encourage different behaviors. Deinhammer suggested that the tipping point for childhood obesity prevention may be the projection of the Texas state demographer, noted in Chapter 1, that nearly 15 million Texans will be obese by 2040 without more aggressive prevention efforts.

EnviroMedia has found that comprehensive social marketing campaigns successfully incorporate six critical factors: (1) science-based research, (2) messaging, (3) creative advertising, (4) outreach, (5) media relations, and (6) evaluation of results. This approach has achieved significant results for many of EnviroMedia's clients, including enrollment of 94 percent of eligible children in a children's health insurance program with Insure a Kid and a nearly 40 percent reduction in teen smoking through messaging carried out under the Texas Tobacco Prevention Initiative.

Deinhammer noted that, in addition to efforts to promote physical activity and access to nutritious foods, stakeholders seeking to prevent childhood obesity need to fund and advertise the right messages to children through television ads. "Today ... a typical child sees 40,000 commercials a year, and more than half of those are for fast food, candy, soft drinks, and sweetened breakfast cereals," she stated. She noted that the deceptive use of communication to hide unpleasant facts has been applied in many contexts. In politics, this tactic is called *whitewashing*; in the environmental context, it is called *greenwashing*; in public health, it is called *leanwashing*, and it is becoming increasingly prevalent in the advertising world.

SUSTAINABLE FOOD CENTER

According to Executive Director Ronda Rutledge, the Sustainable Food Center is a little-known organization that has existed for about 30 years. The center seeks to cultivate a healthy community by strengthening the local food system and improving access to nutritious, affordable food. The various programs supported by the Sustainable Food Center follow a *grow-share-prepare* continuum (Box 7-2). The center wants to teach people to grow their own food in whatever space they can find—their back-

BOX 7-2 Local Programs Supported by the Sustainable Food Center

Grow Local

- · Community and school food gardening
- · Educational workshops
- · Provides resources such as vegetable seeds, transplants, and compost

Farm Direct

- · Farmers' markets
- WIC Farmers' Market Nutrition Program and Food Stamp Electronic Benefit Transfer programs
- · Farm-direct deliveries to hospitals, universities, and worksites

The Happy Kitchen/La Cocina Alegre

- Peer-facilitated cooking classes
- · Interactive nutrition demonstrations
- · Food and nutrition resources

Sprouting Healthy Kids

- · Local foods in school cafeterias
 - Farmers have access to additional marketing outlets with standard menus and known volume
 - Students get access to fresh, nutritious fruits and vegetables and are introduced to the benefits of local foods
 - School districts contribute to local economies, cultures, and environments
- In-class lessons in core curriculum classes
 - School gardens, local farmers, favorite recipes, and other components of the food system are used as teaching tools
 - Learning a local and sustainable food system with a focus on fresh, seasonal, nutritious fruits and vegetables
 - Educators develop and deliver lessons
- After-school activities
 - Hands-on gardening and cooking
 - Trips to farms, markets, restaurants, and community centers, and visits from farmers and chefs
 - Assistance from Sustainable Food Center staff and volunteers

yard, containers on the front porch, a community garden—because doing so provides affordable access to healthy food. To this end, the Grow Local program addresses the *grow* portion of the continuum. The *share* portion of the continuum is represented by the Farm Direct program, which provides farmers with numerous outlets for partnering with organizations and distributing fresh, healthy food to various venues in the community. The

Happy Kitchen program deals with the *prepare* portion of the continuum by offering a 6-week cooking class that addresses every element of the Food Guide Pyramid.

Rutledge explained that the Sprouting Healthy Kids program combines the best aspects of all three of the above programs in the school setting to tackle the issue of childhood obesity. Sprouting Healthy Kids broadly addresses children's relationship to food through farm-to-school initiatives, nutrition education, and community/youth gardening. According to Rutledge, students who gain knowledge of food systems and have access to high-quality foods are more likely to make positive dietary choices, as are their families. Through additional funding, the Sustainable Food Center is conducting a pilot project aimed at accomplishing a comprehensive community intervention by implementing all of its programs in specific communities near Sprouting Healthy Kids schools.



8

Live Smart Texas Panel Presentation

Deanna Hoelscher, Director of the Michael & Susan Dell Center for Advancement of Healthy Living and Co-chair of the Live Smart Texas Coalition, described the structure and functions of the Live Smart Texas Coalition. Live Smart Texas was initiated in an effort to bring funding from The Robert Wood Johnson Foundation to the state of Texas. Today, Live Smart Texas is a coalition of more than 80 statewide partners, including state agencies, policy institutes, community organizations, and advocacy groups, with a shared policy agenda of preventing obesity throughout the life cycle. At its inception, the partners defined a collaborative research agenda centered on obesity prevention efforts and the development of resources to build infrastructure and capacity within all communities.

The full Live Smart Texas Coalition is overseen by a 15-member steering committee, with six ancillary working committees covering obesity leadership, policy and environmental change, programs and interventions, prevention research, instruments and protocols, and data (Figure 8-1). Each of the partners serves a unique function for the group, including providing resources, advocacy, and research. In addition to the working committees, the collaborative has a communications committee and a special projects arm. Box 8-1 lists the current projects of Live Smart Texas.

Hoelscher explained that advocacy within Live Smart Texas is carried out by Partnership for a Healthy Texas. This partnership was formed in 2006 when more than 20 organizations banded together with the common goal of working with the Texas legislature to develop and promote policies that would prevent obesity in the state. The partnership has grown to include roughly 60 organizations and advisors with a common voice. The

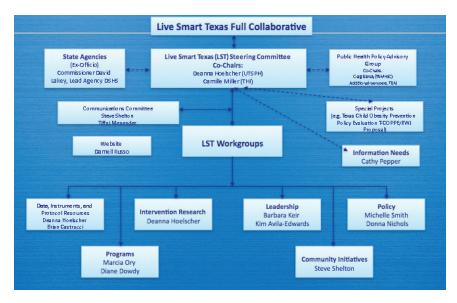


FIGURE 8-1 Live Smart Texas organizational chart, as presented by Hoelscher

BOX 8-1 Current Projects of the Live Smart Texas Coalition

Texas Childhood Obesity Prevention Policy Evaluation (T-COPPE)

- A \$2 million grant awarded to the Michael & Susan Dell Center for Advancement of Healthy Living and the University of Texas School of Public Health and Texas A&M School of Rural Public Health by The Robert Wood Johnson Foundation to evaluate the effectiveness of childhood obesity prevention policies; Marcia Ory was a co-principal investigator of this grant
- Two key childhood obesity prevention policies will be evaluated:
 - Texas Safe Routes to School Program—a program encouraging students to be more physically active by walking to school
 - Food allocation package revisions administered through the WIC Nutrition Program

Obesity Surveys

 Collection of information about childhood obesity, nutrition, and physical activity programs and activities in Texas to help coordinate health efforts

Live Smart Texas Website

- A venue providing members with resources related to obesity prevention, including links to funding opportunities, community initiatives, and publications
- Also provided: general information about the initiative, announcements on obesity-related news, and communication tools

guiding principles of Partnership for a Healthy Texas are similar to those of Live Smart Texas:

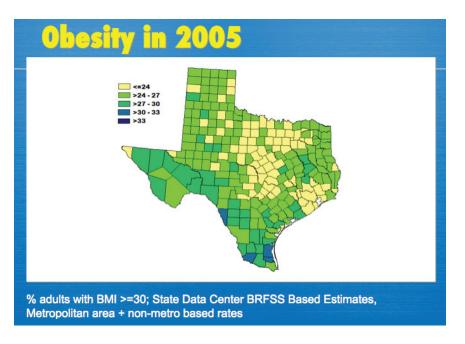
- Encourage collaboration among all interested parties in reducing obesity.
- Inform policy makers about the consequences of obesity.
- Promote evidence-based strategies at multiple levels: individual, family, community, and policy.
- Serve as a resource for people interested in addressing obesity prevention and treatment.

In 2007, the Partnership succeeded in getting the legislature to pass five of six priority initiatives. The Partnership has identified six priorities for the 2009 legislative session:

- Support implementation of coordinated school health.
- Improve nutrition education and access to healthy foods.
- Strengthen physical education in schools and communities to reflect best practice.
- Promote worksite wellness programs.
- Support comprehensive evidence-based programs at the community level that will have an impact on obesity.
- Monitor the Texas Department of Agriculture's Sunset Review Process to strengthen implementation of nutrition policy.

The research component of Live Smart Texas is currently fulfilled by the Texas Childhood Obesity Prevention Policy Evaluation (T-COPPE) and the Texas obesity projections made by State Epidemiologist Vincent Fonseca, data that were released in January 2009 by the Office of the State Demographer, the Office of the State Epidemiologist, Methodist Healthcare Ministries, and the Texas Health Institute. These projections were developed through a collaborative effort between the state epidemiologist and the Office of the State Demographer, using a conservative methodology to predict increasing obesity rates in the state. These predictions used actual data from the Behavioral Risk Factor Surveillance System for 2005-2007 as a baseline, taking into account demographic changes, recent patterns of observed weight change due to aging, and recent patterns of increasing obesity among younger adults to project future obesity rates. As discussed previously, the resulting projections show that, unless preventive measures are taken, the number of obese Texans will surge to 15 million by 2040, representing 43 percent of the state's adult population (Figure 8-2).

Fonseca stressed that very conservative data and methods were used to generate these projections so as to err on the low side. He also noted that



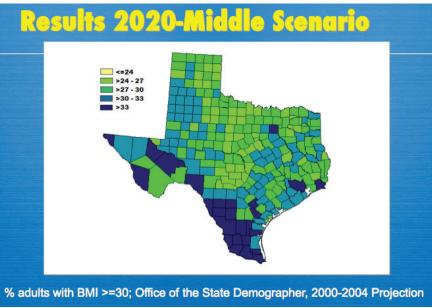


FIGURE 8-2 Texas obesity projections, 2005–2040, as presented by Hoelscher. (continues next page)

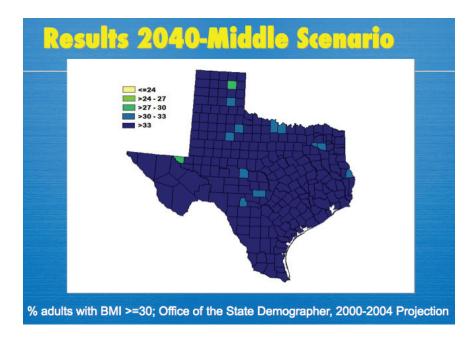


FIGURE 8-2 Continued.

he and his colleagues had oversampled the border communities that face greater health risks due to poor nutrition, as well as major metropolitan areas with dense populations.

Discussions with the panel revealed several challenges faced by the Live Smart Texas Coalition. According to Donna Nichols, "To have a coalition this size takes a lot of feeding and watering.... When it gets really tough and there is gnashing of teeth and pulling of hair, you have to rely back on your guiding principles to say, 'Yes, this is what we believe in.'" Klaus Madsen, Vice President of Programs, Texas Health Institute, noted that the coalition went through a phase in which it was closely allied with the State Health Officer, but this relationship changed following governmental reorganization. He stated, "One of the lessons learned is that sometimes, it is important to have people outside of governmental public health to drive a public health coalition, because [of the] ebbs and flows" that can occur with such changes in governmental leadership.

Michelle Smith, Chair, Partnership for a Healthy Texas, suggested that when working with policy makers, it is important to present statistics illustrating the scope of the problem of interest and how those statistics pertain to constituents. She also stressed how narrow the policy window can be and therefore how important it is to move quickly to advance an agenda with policy makers.

Fonseca followed up on Smith's points by noting that it is difficult to achieve health initiatives for children in all communities through state efforts alone. His perspective suggests that obesity prevention might be more successful in a state if the federal government instituted national mandates, such as nutritional updates to the National School Lunch and Breakfast Programs, improvements to the Food Stamp and WIC Programs, and better food and menu labels. He added that this approach might also be a more cost-effective way of reducing obesity than implementing interventions that require local financial or human resources. For example, mandating that schools offer nonfat or 1 percent milk instead of 2 percent milk would shave roughly 20 calories off of every carton of milk children drink at no cost to schools.

9

Major Themes

A number of major themes emerged during the workshop's public forum, which also included reports from individual meetings with speakers from the community, the state, and the legislature and from field trips made by several committee members to CATCH schools. This section uses information provided by the workshop speakers and does not report consensus findings or conclusions.

GARNERING SUPPORT FOR CHILDHOOD OBESITY INITIATIVES

Obesity prevention initiatives are destined to fail without support from the public at large and from legislators. Achieving traction for healthpromoting initiatives requires buy-in on both fronts.

Obtaining Buy-in from the Public

Many individuals fail to understand the threat childhood obesity poses to society. Therefore, it was suggested that organizations targeting childhood obesity should consider including a public education component in their strategic plan.

Also essential is to engage members of the community in obesity prevention initiatives. The Paso del Norte Health Foundation has been highly successful in implementing several programs in El Paso because it engages and draws support from community members by having business leaders, parents, and educators participate on its committees.

Obtaining Buy-in from Legislators

As some legislators in Texas have learned, presenting unassailable data on childhood obesity and the need to change state law may not hold sway without buy-in from colleagues. Legislators often balk at the cost of health initiatives and physical fitness programs for schools and communities, even though the cost of these programs is insignificant compared with the costs that will be incurred if the trend of childhood obesity is not reversed.

Childhood obesity does not resonate as a cause with some policy makers, perhaps because they find the idea of addressing the problem unattractive or the consequences too distant. Linking the problem to broader, more familiar issues, such as education and economic development, appears to be an effective approach. For example, Comptroller Combs's efforts to quantify the cost of obesity to Texas businesses have been highly influential in bringing about policy change. Focusing on short-term versus long-term outcomes also appears to be more persuasive among legislators given the nature of political cycles and the desire to influence constituents.

Policy makers who spoke with the committee stressed the importance of placing childhood obesity prevention within the framework of education. Whereas a number of policy makers view health as an expenditure, they view education as an investment. Indeed, many legislators strongly believe in the need to invest in education, so forging a link between education and obesity prevention could help in securing funding for the anti-obesity cause. Such a link also facilitates a systematic approach to change by involving all public schools, which in turn allows for sustainability.

MODELING HEALTHY BEHAVIORS THROUGHOUT THE COMMUNITY

To extend anti-obesity efforts beyond its schools, Texas is offering incentives to businesses to institute workplace wellness centers. Such programs already established in a handful of Texas businesses have realized benefits in the form of fewer inpatient hospital admissions, reduced absenteeism, annual insurance savings, and reductions in health care costs, thus yielding a positive return on the workplace wellness investment. These employers have recognized that having a healthy workforce that is ready and able to work improves the fiscal bottom line.

Texas has also implemented programs to encourage healthy behaviors among its state employees. These programs include time off for physical activity, physical education programs that occur during business hours, and delivery of farm-fresh food on site. In addition, state employees can obtain discounts for walking and running shoes at certain stores, and all city facilities offer showers and bike racks. Leaders within the state legisla-

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ture are visible with respect to their own physical fitness routines, leading runs and walks around the city and exemplifying healthy behaviors to their employees and constituents.

LEVERAGING THE POWER OF PARTNERSHIPS

Collaborative efforts often generate more momentum, resources, and influence than individual efforts. Representatives of nearly all organizations commented that community-based solutions to childhood obesity require a diverse array of partners, including elected officials; state agencies, such as the Department of State Health Services; worksites and schools; institutions of higher education; the food industry; community groups; providers and hospitals; urban planners, developers, and architects; and many other partners, such as city councils, county commissioners, the police, and non-profit organizations. One of the most important partners is parents, since they serve as models for their children.

Large collaboratives, such as CAN DO Houston and Live Smart Texas, appear to be particularly effective at the city and state levels. Several key strategies enable such collaboratives to function effectively in bringing many partners together. One such strategy is to identify the mission of the partnering organizations and to maintain unwavering focus on that mission. Partnership for a Healthy Texas clearly defined its mission as focusing solely on policy change, rather than the implementation of that change, so as to concentrate its efforts for optimal impact. Since its inception in 2006, the Partnership has succeeded in filing more than 20 bills with the state, emphasizing coordinated school health. Another important strategy for achieving an effective partnership is to ensure open communication and transparency so that all groups feel equally informed and invested in advancing the partnership's strategic goals.

The workshop speakers also stressed the importance of inclusiveness in building partnerships at the local level. Having a diversity of stakeholders represented in a partnership can lead to innovative solutions to strategic problems. This point is exemplified by the LEAN Coalition in Henderson, which was able to obtain additional park lands through a land swap with a town resident and an unused historic building that it plans to convert into a senior citizen center.

IMPLEMENTING COMPREHENSIVE APPROACHES

Previous public health campaigns have demonstrated the need for a comprehensive approach. The Texas Tobacco Prevention Initiative, conducted in Austin/Travis County, taught leaders in the Health and Human Services Department that multicomponent interventions involving schools

and communities, the media, smoking cessation programs, and law enforcement are more effective than single-component interventions in reducing tobacco use.

One multicomponent intervention that has been successful in Texas is the CATCH initiative. CATCH is an evidence-based, coordinated school health program that promotes physical activity and healthy food choices. More than 2,500 schools in Texas offer the CATCH program, potentially affecting more than 800,000 schoolchildren. CATCH's many programmatic components are well organized and integrated within the school system. A visit to two schools with CATCH programs revealed nutrition messaging during school announcements, enthusiastic children participating in physical education classes, healthy foods offered in the cafeteria (fruits, vegetables, reduced-sugar cereals, and reduced-fat pizza), a math lesson using nutrition labels to teach children how to calculate fractions, and wellness programs for teachers. A study conducted in CATCH schools in El Paso found that 11 percent fewer girls and 9 percent fewer boys were overweight after 3 years of the program.

USING SOCIAL MARKETING

Speakers emphasized that organizations need to think and act like marketers when trying to promote the anti-obesity cause. Several groups well versed in social marketing stated that promoting healthy lifestyles, as opposed to the prevention of childhood obesity, is more powerful in influencing people to change their habits. According to these groups, the future of social marketing with respect to childhood obesity prevention lies in lifestyle marketing: the issue is not about losing weight, but about gaining access to a better world. The goal of such groups is to help change people's mindsets, empower individuals to make changes on their own, and create a tipping point for sustainable change. Moreover, ingraining healthy behaviors early in childhood increases the likelihood that these behaviors will be maintained into adulthood.

IDENTIFYING A CHAMPION

During the workshop, it became clear that those programs that developed organically at the local level and were successful had individual champions advocating a specific cause, such as a better park system for the town or a walking marathon geared specifically to children. These champions, who can also be found at the state level, tend to be energizing individuals who lead by action and who spread their enthusiasm by communicating continually with others in the community. Their efforts unite people toward a common goal and leverage resources.

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RECOGNIZING THE POWER OF COMMUNITY DATA

In culturally diverse states such as Texas, it is important to collect community data to measure the outcomes of interventions. Efforts that are effective in north Texas may not be influential in border communities in south Texas. The size and cultural diversity of Texas often necessitate customized interventions. Equally important is collecting state-level data that allow a state to compare its performance with that of others. This is one way to mobilize a call to action, particularly among policy makers.

IMPLEMENTING FEDERAL POLICY CHANGE

Representatives of some organizations, particularly those at the state level, advocated policy change at the federal level as a strategy for creating change at the community and state levels. This approach, it was argued, ensures that no communities or schools fall through the cracks with regard to nutrition and physical fitness standards. Moreover, instituting some basic changes at the federal level provides a foundation upon which states and communities can build.

SECURING FUNDING

Funding is an obvious need of all organizations targeting childhood obesity. Funders are sometimes risk averse, meaning that innovative initiatives can be overlooked for funding. One speaker requested that innovation be placed at the top of funding priorities and that success be redefined. He suggested that funders should also consider financing only projects that are scalable, adaptable, and sustainable so that successful programs can be translated to other locales. Marathon Kids and CATCH are two examples of programs that are adaptable and have been implemented in other cities around the country.

Funding is needed not only to launch programs but also to sustain them, particularly at the local level. Many small organizations are focused so intently on getting their initiatives off the ground that they can lose sight of the resources needed to sustain their efforts.

CLOSING THOUGHTS

Childhood obesity remains a major challenge facing the nation—one that threatens the immediate health of our children; the future stability of our health care system; and ultimately the long-term vitality of local, state, and national economies. A number of workshop speakers emphasized that the changes needed to reverse the obesity trend must be robust enough to

counteract the factors that led to obesity in the first place. Collaborative involvement of multiple sectors and stakeholders at all societal levels is important to alter collective cultural norms that have contributed to the childhood obesity epidemic. The efforts undertaken in Texas serve as a case study of various streams of influence at the state and local levels that are merging to effect the prevention and reversal of childhood obesity across the state.

Appendix A

Workshop Agenda

Thursday, February 5, 2009 Texas Capitol Auditorium

8:00 am Welcome

Jeffrey Koplan, Chair, IOM Standing Committee on Childhood Obesity Prevention

Eduardo Sanchez, Member, IOM Standing Committee on

Childhood Obesity Prevention Mayor Will Wynn, Austin, Texas

Commissioner David Lakey, Texas Department of State

Health Services

Kenneth Shine, Executive Vice Chancellor for Health Affairs, University of Texas System

9:00 Overview: Childhood Obesity in Texas

Eduardo Sanchez

State Government—Past Successes Panel:

Senator Jane Nelson

State Comptroller Susan Combs

10:00 State Government—What the Future Holds Panel:

Commissioner Todd Staples, Texas Department of Agriculture

Commissioner David Lakey, Texas Department of State

Health Services

Adjourn

2:00

60	
60	CHILDHOOD OBESITY PREVENTION IN TEXAS
11:00	Texas Landscape Panel: Philip Huang, City of Austin/Travis County Health and Human Services Department Enrique Mata, Paso del Norte Health Foundation, El Paso, Texas Nancy Correa and Nancy Murray, CAN DO Houston Mike Barrow and Toinette Ladage, Henderson, Texas
12:00 pm	Adjourn
•	ruary 6, 2009
Doubletree	Hotel/Hill Country Room
8:00 am	Austin Landscape
	Paul Carrozza, RunTex Baker Harrell, ACTIVE Life Kay Morris, Marathon Kids
	Ronda Rutledge, Sustainable Food Center David Davenport, Capital Area Food Bank Katie Deinhammer, EnviroMedia
10:00	Break
10:30	Live Smart Texas Coalition Panel Presentation Deanna Hoelscher, Moderator Selected coalition members
12:00 pm	Working lunch
12:30	Discussion: Lessons Learned

Appendix B

Biographical Sketches

Mike Barrow is the Assistant City Manager for the City of Henderson Texas. He has worked with the City of Henderson for 8 years, most of that time as the Director of Utilities. He has 13 years of experience in municipal government and 7 years of experience working in an environmental laboratory prior to making the transition to municipal government. He is a member of the Texas City Managers Association, American Society of Civil Engineers, American Water Works Association, Water Environmental Association of Texas, Water Environmental Federation, Henderson Lion's Club, and Keep Henderson Beautiful. Mr. Barrow is also in the Texas Certified Public Manager Program.

Paul Carrozza is the co-founder, along with his wife Sheila, of RunTex, now the nation's largest store devoted exclusively to running. In addition to RunTex, Mr. Carrozza founded RunTex University and RunTex Events. He is co-founder and sponsor of the RunTex Marathon Kids Program, which has successfully helped over 100,000 children achieve endurance and learn to enjoy running. Since 1997 Mr. Carrozza has been *Runner's World* magazine's Footwear Editor. Mr. Carrozza is the Co-Chair for the Governor's Fitness Council and currently serves on the President's Council on Physical Fitness and Sports, the Board for the Texas Department of Aging, and the Greater Austin Sports Association. He also sits on the Board for Shoes for America, the Austin Parks Foundation, and The Star of Texas Rodeo.

Susan Combs is Comptroller of the State of Texas. Prior to assuming this position, she served as Agriculture Commissioner, building a strong record

of fiscal conservatism as an innovator in public policy. She lowered her agency's budget by 18 percent without reducing essential services and trimmed staff while taking on more responsibility. Ms. Combs is focused on providing better access to government services, minimizing costs, and justly applying tax and fiscal laws as Comptroller of Public Accounts. She has received numerous awards, such as Leader of the Year in Texas Agriculture for 2002, from *The Progressive Farmer*. The Governor's Commission for Women inducted her into the Texas Women's Hall of Fame in 2004, and in March 2006, the American Medical Association presented her with the Dr. Nathan Davis Award for Outstanding Government Service.

Nancy Correa is the Community Engagement Specialist for the Center for Clinical and Translational Sciences (CCTS) at the University of Texas Health Science Center at Houston. She strives to ensure that evidence-based practices and health information are being translated to the Houston community, and that community health needs are being addressed in research at CCTS. Ms. Correa also serves as Director of CAN DO Houston, a community-based initiative to prevent and diminish childhood obesity through the promotion of nutrition, physical activity, and healthy minds in Houston communities. Ms. Correa received a bachelor of arts degree in chemistry and policy studies from Rice University and a master's degree in public health from Boston University.

David Davenport is President and CEO of the Capital Area Food Bank in Austin, Texas. He joined the Food Bank in March 2008. Mr. Davenport earned his bachelor of science degree from Texas A&M University, where he currently serves as a member of the Former Students Advisory Board for the Department of Political Science. Soon after graduating from college, he began a successful career with the YMCA, serving communities in Texas as well as internationally in Japan, Mexico, and Brazil. In 2004, Mr. Davenport became Executive Director of End Hunger Network—then a small food rescue organization. Since 2004, End Hunger Network has received national acclaim as one of the most effective and innovative organizations of its type in the United States. Growing from 7 employees in 2004 to 36 in 2007, End Hunger Network serves as a national model for food rescue and human services, serving the most vulnerable members of the greater Houston community. Mr. Davenport has been an active Rotarian for more than a decade and is a Paul Harris Fellow. A bilateral lung transplant survivor, he is an advocate for organ donation and for removing barriers to participation in organ donor programs.

Katie Deinhammer serves as Director of Accounts for EnviroMedia Social Marketing. She has 10 years of advertising and marketing experience and

oversees campaign development for all of EnviroMedia's clients. Prior to working for EnviroMedia, she managed comprehensive marketing campaigns for major university alumni association programs and developed multimedia advertising plans for some of the most prominent brands in the automotive and beverage industries. At EnviroMedia, Ms. Deinhammer led award-winning work for the Texas Department of State Health Services. Her passion for public health began when she was a pre-med student in college. She personally raised more than \$20,000 for the Leukemia and Lymphoma Society's Team-in-Training while completing an Ironman triathlon with the group.

Vince Fonseca is the Texas State Epidemiologist. Before coming to the Department of State Health Services, he spent 9 years at the Headquarters of the Air Force Medical Service and 8 years in the Army. His expertise is in epidemiology, worksite wellness, medical informatics, and clinical quality improvement. He also serves on the Texas Medical Association's Council on Scientific Affairs and Physician Oncology Education Program steering committee. Dr. Fonseca is board-certified in public health and general preventive medicine. He received his medical degree from Boston University, a master of public health degree in quantitative methods from Harvard University, and a bachelor of arts degree in psychology from Rice University.

Baker Harrell is founder and Executive Director of ACTIVE Life, formerly Youth InterACTIVE. His background and expertise in youth culture and lifestyle marketing drive the initiatives of this nonprofit youth social marketing organization. Prior to founding the organization, Mr. Harrell completed a master's degree in health education with a specialization in childhood obesity. His philosophy of empowering youth to initiate social change is demonstrated throughout Youth InterACTIVE's efforts and supported by Mr. Harrell's interdisciplinary work as a Ph.D. candidate in youth culture, media, and marketing. Since founding Youth InterACTIVE in May 2004, Mr. Harrell has led the organization's team of youth experts in serving more than 400,000 youth and families with cutting-edge programs, products, media, and events. He is currently transitioning the Youth InterACTIVE organization to its new name—ACTIVE Life. He envisions ACTIVE Life playing a lead role in driving and sustaining a national health movement by becoming a premiere source for healthy, active lifestyles. Using a lifestyle/ social marketing approach, Mr. Harrell's team seeks to generate greater demand for healthy lifestyles and to work with corporations, government, schools, and organizations to make these lifestyles more accessible.

Deanna M. Hoelscher is a Professor at The University of Texas School of Public Health, Austin Regional Campus. She is Director of the Michael &

Susan Dell Center for Advancement of Healthy Living. She is also Principal Investigator of the School Physical Activity and Nutrition (SPAN) study, aimed at determining the prevalence of childhood overweight in Texas, as well as grants to revise the nutrition component of the Coordinated Approach to Child Health (CATCH) and to develop school-based evaluation tools. She has been Principal Investigator of the Texas site CATCH grants, as well as the Incorporation of More Physical Activity and Nutrition (IMPACT) grant, a study supported by the National Institutes of Health to examine the effects of a behaviorally based school health program on osteoporosis risk factors in children, and the School-Based Nutrition Monitoring Project, a study funded by the Centers for Disease Control and Prevention and the U.S. Department of Agriculture to develop surveillance tools for schools and schoolchildren. Ms. Hoelscher is currently working on projects to document the dissemination of the CATCH program across Texas, to evaluate the effects of nutrition and physical activity policies on child health, to demonstrate the interactions between genetic factors and dietary behaviors, and to study the interrelationships among dietary and physical activity behaviors and biological and psychosocial factors in children (Healthy Passages). Ms. Hoelscher is past Chair of the Texas Council on Cardiovascular Disease and Stroke, as well as former Chair of the Research Dietetic Practice Group of the American Dietetic Association. She is currently Secretary of the International Society of Behavioral Nutrition and Physical Activity and Chair of the Program Planning Advisory Committee for the 2007 annual meeting of the American Dietetic Association. Ms. Hoelscher received her bachelor of science degree in food science and technology from Texas A&M University, and her master of arts degree in nutrition and Ph.D. in biological sciences from The University of Texas at Austin. She is also a registered and licensed dietitian and a certified nutrition specialist.

Philip Huang is Medical Director and Health Authority for the Austin/ Travis County Health Department. Prior to this, he served as Medical Director for Chronic Disease Prevention at the Texas Department of State Health Services and Chief of the Bureau of Chronic Disease and Tobacco Prevention at the former Texas Department of Health for more than 15 years, where his responsibilities included oversight of state activities related to cardiovascular disease, diabetes, cancer, Alzheimer's disease, asthma, and tobacco use prevention. Dr. Huang received his undergraduate degree in civil engineering from Rice University, his medical degree from the University of Texas Southwestern Medical School, and his master's degree in public health from Harvard with a concentration in health policy and management. He completed his residency training in Family Medicine at Brackenridge Hospital in Austin, and he was Chief Resident during his final

year. He served 2 years as an Epidemic Intelligence Service officer with the Centers for Disease Control and Prevention, assigned to the Illinois Department of Public Health, where he conducted epidemiologic studies in chronic disease and infectious disease outbreak investigations. He is author or coauthor of numerous publications related to chronic disease and tobacco use prevention, including publications examining the economic effect of smoking ordinances in West Lake Hills and El Paso, Texas. Dr. Huang is board certified in family medicine.

Jeffrey P. Koplan is the Vice President for Global Health and Director of the Global Health Institute at Emory University in Atlanta. He received a B.A. from Yale College, an M.D. from the Mt. Sinai School of Medicine, and an M.P.H. from the Harvard School of Public Health. He is board certified in internal and preventive medicine. From 1998 to 2002, Dr. Koplan served as Director of the Centers for Disease Control and Prevention. He worked in the area of enhancing the interactions between clinical medicine and public health by leading the Prudential Center for Health Care Research, a nationally recognized health services research organization. Dr. Koplan has worked on a broad range of major public health issues, including infectious diseases, such as smallpox and HIV/AIDS; environmental issues, such as the chemical disaster in Bhopal, India; and the health toll of tobacco and chronic diseases, both in the United States and globally. He is a Master of the American College of Physicians, an Honorary Fellow of the Society of Public Health Educators, and a Public Health Hero of the American Public Health Association. He was elected to the Institute of Medicine (IOM) in 1999 and serves on the IOM Governing Council. Dr. Koplan has served on many advisory groups and consultancies on public health issues in the United States and overseas and has authored more than 200 scientific papers. He chairs the IOM Committee on Childhood Obesity Prevention.

Toinette Ladage is a Diabetic Educator in the Patient Education Department of Henderson Memorial Hospital in Henderson, Texas. Recently she obtained her Certification in Diabetic Education. In 2007 she was chosen to participate in the American Association of Diabetic Educators' Delegation to China. Currently, Ms. Ladage is Chairman of the Henderson LEAN (Leadership Encouraging Activity and Nutrition) Committee, and serves on the boards of the Boys and Girls Club of Rusk County and the Good Samaritan Charitable Health Clinic of Rusk County. In Henderson, where she has lived since 1980, Ms. Ladage is a member of the Keep Henderson Beautiful Committee, and she was a member of the Master Parks Planning Committee in 2007. She earned a bachelor of science degree in nursing from the University of Arkansas School of Nursing in 1974.

David Lakey is Commissioner of the Texas Department of State Health Services. Previously, he served as an Associate Professor of Medicine, Chief of the Division of Clinical Infectious Disease, and Medical Director of the Center for Pulmonary and Infectious Disease Control at the University of Texas Health Center in Tyler, where he had been a faculty member since 1998. At the University of Texas Center for Biosecurity and Public Health Preparedness, Dr. Lakey served as Associate Director for Infectious Disease and Biosecurity. He also chaired a bioterrorism preparedness committee for 34 hospitals in East Texas and led the development of the Public Health Laboratory of East Texas in 2002.

Klaus Kroyer Madsen is Vice President of Programs for the Texas Health Institute. He is also Project Director for the Landscape Project, a webbased community health data system. In addition, he serves as the sustainability consultant to eight projects in East Texas funded by The Robert Wood Johnson Foundation under the Southern Rural Access Program, a major effort to improve access to care in medically underserved rural communities. Mr. Madsen serves, by Health Research and Educational Trust appointment, on the National Steering Committee to Understand and Advance the Role of Hospitals in Improving the Public's Health, sponsored by the Centers for Disease Control and Prevention.

Enrique Mata is Senior Program Officer for Paso del Norte Health Foundation. A practicing registered nurse, Mr. Mata was directly involved with the development of two major community health promotion initiatives: Qué Sabrosa Vida and Ageless Health. Qué Sabrosa Vida worked to promote healthier eating habits for families, while Ageless Health addressed the changing demands of the aging population in the Paso del Norte region. Mr. Mata is a graduate of the University of Texas at El Paso with a bachelor of science in nursing, and of Walden University with a master's degree in public health. Prior to his work with the foundation, he was an independent local businessman and consultant. He developed several successful companies, all of which continue to prosper today.

Kay Morris is founder and Executive Director of Marathon Kids, a nonprofit, grassroots initiative that encourages basic athletics among schoolchildren. Marathon Kids began in Austin, Texas, and is now in place nationwide, with programs in Baltimore, Los Angeles, Chicago, Austin, Dallas, Houston, and the Texas Rio Grande Valley. Ms. Morris has appeared on CNN and the CBS Evening News, and has been a "Fit Nation" summit panelist with President Bill Clinton and Dr. Sanjay Gupta of CNN. She actively advocates for increased physical activity time for elementary children and improved nutritional choices for children. With support from physical educators, class-

room teachers, principals, community runners, and health organizations, Marathon Kids helps elevate a child's athletic self-perception, as well as sense of himself or herself as a person who can complete a difficult and long-term project. There are currently almost 150,000 registered Marathon Kids in the program's seven "marquee cities." The average completion rate for the elegantly simple, free 6-month running/walking, nutrition, and schoolyard gardening program is 83 percent. Ms. Morris has received awards from local community health organizations and was honored with *Runner's World* magazine's "Hero of the Year" Award. She earned a bachelor of arts degree in government and journalism from The University of Texas at Austin.

Nancy G. Murray is Assistant Professor of Behavioral Sciences and Health Promotion with the Michael & Susan Dell Center for Advancement of Health Living at the University of Texas School of Public Health. She currently serves as Director of Community Engagement for the Center for Clinical and Translational Sciences at the University of Texas Health Science Center at Houston, and was formerly Deputy Director of the University of Texas Prevention Research Center program. She received her Dr.P.H. in health promotion/health education at the University of Texas, Houston School of Public Health; earned her master's degree in developmental psychology from the University of Southern California; and completed a postdoctoral fellowship at the Center for Health Promotion Research and Development. She has published on coordinated school health, physical activity, parent interventions for adolescent health promotion, violence prevention, and tobacco prevention and cessation. She is currently involved in a project funded by the Centers for Disease Control and Prevention titled Investigation of the Role of School-Based Physical Activity on Indicators of Academic Performance among Elementary School Children, and a Science Education Partnership Award, Health, Education, and Discovering Science and Careers, funded by the National Institutes of Health. Additional projects on school health for which she serves as co-investigator include the CATCH dissemination project, a project designed to reduce television viewing, and a school-community partnership project based in the Rio Grande Valley. Dr. Murray was lead author for the "Education and Health" chapter of Code Red: The Critical Condition of Health Care in Texas, produced by the Task Force on Access to Health Care in Texas.

Jane Nelson is State Senator representing Texas Senate District 12, which comprises Tarrant and Denton Counties. Sen. Nelson serves as Chairman of the Health and Human Services Committee and as a member of the Senate Committees on Finance, Government Organization, and Nominations and the Texas Legislative Council. In 2001, Sen. Nelson authored SB 19, legislation that requires every school district to implement a coordinated school

health program that addresses childhood obesity. In 2003, Sen. Nelson authored SB 1357, which relates to local school health advisory councils, health education instruction, and coordinated health programs for elementary school students. In 2005, SB 42 extended the physical activity requirement to middle schools and junior high schools and expanded the focus on health curriculum in public schools. Last session, Sen. Nelson authored SB 530, which expanded physical activity even further in schools.

Donna C. Nichols is Health Policy and Partnership Manager for the Directors of Health Promotion and Education, a Washington, DC-based nonprofit organization aimed at providing proven policies and programs to state health agency leaders. She also serves as a Faculty Associate with the University of Texas School of Public Health, Austin Regional Campus, and the Michael & Susan Dell Center for Advancement of Healthy Living. She retired from the Texas Department of State Health Services in 2007, serving most recently as Senior Prevention Policy Analyst under former Commissioner of Health Eduardo I. Sanchez. While at the Texas Department of State Health Services, Ms. Nichols was responsible for the Texas Strategic Health Partnership, which represented more than 200 state agencies and organizations, and co-authored the Texas Obesity Policy Portfolio, which serves to inform advocates and direct options for evidence-based policy approaches to obesity prevention and control. Ms. Nichols has worked for more than 30 years in public health in various health promotion and education capacities within three states.

Marcia G. Ory is Regent Professor, Department of Social and Behavioral Health, School of Rural Public Health at The Texas A&M Health Science Center in College Station, Texas. In her role as Director of The Robert Wood Johnson Foundation (RWJF)-sponsored Active for Life® National Program Office, she is examining how evidence-based programs can be translated to community settings, expanding program research and sustainability. Under this RWJF initiative, she has also been working with a panel of national experts to develop Exercise Assessment and Screening for You, a new screening tool for helping to identify a safe and effective physical activity program. With colleagues, she has established a Learning Network to serve as the communications hub for a Building Healthy Communities Initiative. Finally, she is exploring intergenerational approaches to obesity prevention through co-leadership of the RWJF Texas Childhood Obesity Prevention Policy Evaluation. Locally, Ms. Ory is involved in the Brazos Valley Obesity Prevention Network. Additionally, she is Principal Investigator for a 5-year Health Maintenance Resource Center, sponsored by the National Institutes of Health, charged with serving as the coordinating hub for a 21-grant consor-

tium designed to improve research on long-term behavioral change associated with healthy living.

Ronda Rutledge is Executive Director of the Sustainable Food Center (SFC) in Austin, Texas. She currently co-chairs the Basic Needs Coalition food security committee and was appointed by the city council to the Sustainable Food Policy Board of Austin/Travis County. She was introduced to SFC as an affiliate consultant with Greenlights for NonProfit Success. Prior to joining SFC, Ms. Rutledge served as Executive Director of the American Indian Child Resource Center in Oakland, California, for nearly 10 years. She was a LeaderSpring fellow in the Bay Area, participating in a leadership program for executive directors of nonprofit organizations. Ms. Rutledge holds a master's degree in counseling psychology. Over the course of her professional career, she has served as a licensed professional counselor and marriage and family therapist in addition to her many years of clinical work and nonprofit administration.

Kenneth I. Shine is Executive Vice Chancellor for Health Affairs for The University of Texas System. Previously, he served as President of the IOM, from 1992 to 2002. Under his leadership, the IOM played an important and visible role in addressing key issues in medicine and health care. Dr. Shine also focused attention on meeting the health care needs of all Americans: he organized symposia to underscore the importance of cultural sensitivity in health care and supported programs to increase immunization rates, decrease use of tobacco among adolescents, and improve care of the dying. He also emphasized communication of scientific findings and recommendations. Dr. Shine was founding Director of the RAND Center for Domestic and International Health Security. He led the Center's efforts to make health a central component of U.S. foreign policy and guided the Center's evolving research agenda. Dr. Shine brought to this new role decades-long experience in working with international health experts on global issues such as emerging infectious illnesses, bioethics, and access to care.

Michelle Smith is a marketing and research consultant who became active in social marketing for school health when she became a parent. She coordinated a national-level community awareness project promoting coordinated school health for the American Cancer Society. She was also project coordinator and helped design and implement www.schoolhealth.info, a comprehensive website for individuals, schools, and communities interested in developing coordinated school health programs. She is past Chair of the Texas State School Health Advisory Committee, served on a work group for the Texas State Strategic Health Partnership, and served on Texas Agri-

culture Commissioner Comb's Obesity Task Force and other youth-related committees with the Parent-Teacher Association and the St. David's Foundation. In 2007, Ms. Smith received the John P. McGovern Award from the Texas School Health Association and the Distinguished Service Award from the Texas Association of Health, PE, Recreation, and Dance. She was named a Healthy School Hero by Action for Healthy Kids in 2004 and 2006.

Todd Staples is Commisioner of Agriculture for the State of Texas. While serving first in the Texas House of Representatives and later as a state senator, he was a recognized leader on such critical issues as workers' compensation reform, private property owners' rights, natural resources, school finance, and education. As Agriculture Commissioner, Mr. Staples continues to pursue policies that enable economic strength, youth development, healthy lifestyles, and consumer protection. He is charting a course to bring job creation to rural Texas, further the promotion of Texas products around the world, and help farmers and ranchers face tomorrow's challenges and increase profit margins through the use of new technologies and value-added processing.

Will Wynn served as Mayor of the City of Austin, Texas, from 2003 to 2009. He established the Mayor's Fitness Council in October 2004 to raise awareness of the cost of health care; to foster prevention of chronic diseases and better health in Austin; and to promote the city of Austin as a healthy place to live and work, with the primary goal of becoming "The Fittest City in the U.S." The Mayor's Fitness Council works toward increasing physical activity and improving nutrition throughout the Austin community with the involvement of citizen advocates, businesses, community organizations, churches, schools, and health leaders.

STUDY STAFF

Annina Catherine Burns is a Program Officer and Study Director with the Food and Nutrition Board. She serves as Study Director for Community Perspectives on Childhood Obesity Prevention and Perspectives from United Kingdom and United States Policymakers on Obesity Prevention. She is also a Program Officer for Childhood Obesity Prevention: Austin, Texas. Ms. Burns previously worked for the United Nations World Health Organization (WHO) in Geneva, Switzerland, on the Global Strategy on Diet, Physical Activity, and Health. At WHO, she led the development of a report titled *Interventions on Diet and Physical Activity: What Works*. Ms. Burns was a Marshall Scholar at Oxford University, United Kingdom, where she pursued her master of science in economic and social history;

her thesis was on *The Emergence of Obesity in Scotland: Historical and Contemporary Dietary Intakes*. She is currently completing a Ph.D. from Oxford University, with a focus on nutrition policy, obesity, and economics. Ms. Burns holds a B.S. in nutritional sciences and a B.A. in media studies from Penn State University.

Nicole Ferring is a Research Associate with the Food and Nutrition Board. She works with the Standing Committee on Childhood Obesity Prevention and the Committee on Childhood Obesity Prevention Actions for Local Governments. Ms. Ferring previously worked for the Center for Science in the Public Interest on the *Nutrition Action Healthletter*. She recently finished a year-long dietetic internship through Virginia Tech to obtain the registered dietitian credential. The internship allowed her to rotate through different types of nutrition settings in the Washington, DC, area, including hospitals, community nonprofits, policy organizations, and even a farm. She holds a B.S. in magazine journalism with a minor in nutrition from Syracuse University and an M.S. in nutrition communication from Tufts University.

Lynn Parker is a Scholar and Study Director for the IOM's Standing Committee on Childhood Obesity Prevention, Committee on Childhood Obesity Prevention Actions for Local Governments, and Committee on an Evidence Framework for Obesity Prevention Decision Making. She received a B.A. in anthropology from the University of Michigan and an M.S. in human nutrition from Cornell University. Before joining the IOM, she was a nutritionist at the Food Research and Action Center (FRAC), a national organization working to end hunger and undernutrition in the United States, serving most recently as Director of Child Nutrition Programs and Nutrition Policy, directing FRAC's work on child nutrition programs, research, and nutrition policy. She also led FRAC's initiative on understanding and responding to the paradox of hunger, poverty, and obesity. Ms. Parker served on the Technical Advisory Group to America's Second Harvest 2001 and 2005 National Hunger Surveys, on the National Nutrition Monitoring Advisory Council (appointed by then Senate Majority Leader George Mitchell), and as President of the Society for Nutrition Education. She also served two terms as a member of the Food and Nutrition Board and was a member of its Committee on Nutrition Standards for Foods in Schools. Before joining FRAC, Ms. Parker worked with New York State's Expanded Food and Nutrition Education Program at Cornell University.

Matthew Spear is a Senior Program Assistant with the Food and Nutrition Board. He works with the Standing Committee on Childhood Obesity Prevention, the Committee on Childhood Obesity Prevention Actions for

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Local Governments, and the Committee on an Evidence Framework for Obesity Prevention Decision Making. Mr. Spear holds a B.A. in economics from Boston College. He recently completed a year-long course and internship studying culinary arts in Florence, Italy, and working as a private chef. International travel and interest in languages drew him out of the kitchen and formed his interest in public policy, leading him to the IOM.

Appendix C

Workshop Participants

Robert Alexander, T.U.R.N. Elvia M. Andarza, Texas Department of Agriculture **Iudith Anderson**, Houston ISD Melissa Anderson-Cramer, EnviroMedia Prerna Arora, University of Texas, Austin Heather Atteberry, Michael & Susan Dell Center for Healthy Living Kimberly Avila Edwards, Austin Regional Clinic/Texas Pediatric Society Brooks Ballard, University of Texas School of Public Health Darlene Berghammer, City of Austin, Texas Sandy Bristow, Oliver Foundation Jill Bunting, University of Texas School of Public Health Elie Camp, Michael & Susan Dell Center for Healthy Living Isabel Clark, Michael & Susan Dell Center for Healthy Living Megan Conklin, Michael & Susan Dell Center for Healthy Living Nancy Correa, University of Texas Health Science Center at Houston Peter Cribb, Michael & Susan Dell Center for Healthy Living Carey Dabney, Texas PTA Katie Deinhammer, EnviroMedia Diane Dowdy, Active for Life National Program Office Kelli Drenner, University of Texas School of Public Health Ronald Dutton, Texas Department of State Health Services Lou Earle, Austin Fit Magazine Susan Emery, City of Austin, Texas Alexandra Evans, Michael & Susan Dell Center for Healthy Living Maria Eva Fernandez, University of Texas School of Public Health

Kipling Gallion, University of Texas Health Science Center at San Antonio

Kathy Golson, Texas Department of Agriculture

Alejandra Gonzalez, Michael & Susan Dell Center for Healthy Living

Erika Gonzalez, PODER

Jane Gray, Texas Child Study Center

Mary Guzman, Texas Department of State Health Services

Matt Harrington, Texas Department of State Health Services

Erica Harris, Texas Department of State Health Services

Ronald Harrist, University of Texas School of Public Health

Deanna Hoelscher, Michael & Susan Dell Center for Healthy Living

Courtney Hoffman, CRH Capitol Communications

Amy Hoskins, University of Texas School of Public Health

Amanda Hovis, Texas Department of State Health Services

Phil Huang, Austin/Travis County Health and Human Services Department

Lovell Jones, University of Texas M.D. Anderson Cancer Center

Barbara Keir, Texas Department of State Health Services

Steve Kelder, Michael & Susan Dell Center for Healthy Living

Harold Kohl, Michael & Susan Dell Center for Healthy Living

Carrie Kroll, Texas Pediatric Society

Sanford Ladage, Henderson Delegation Panel

Lee Lane, TALHO

Rhonda Lane, Private Nutrition Consultant

Ronnie Laurance, West Texas AHAC

Tracy Lunoff, Austin ISD

Klaus Madsen, Texas Health Institute

Katie Mahoney, North East ISD

Mimi McKay, Texas Department of State Health Services

Techksell McKnight, University of Texas MB Medical School

Tiffni Menendez, Michael & Susan Dell Center for Healthy Living

Kay Morris, Marathon Kids

Peter Murano, Texas A&M University System

Rachel Naylor, North East ISD

Donna Nichols, Michael & Susan Dell Center for Healthy Living

Cynthia Ochoa, Michael & Susan Dell Center for Healthy Living

Marcia Ory, Texas A&M University

Herminia Palacio, Harris County Public Health and Environmental Services

Guy Parcel, University of Texas School of Public Health

Vicki Perkins, CHRISTUS Santa Rosa Health Care

Cheryl Perry, University of Texas School of Public Health

Kimberly Petrilli, Texas Department of State Health Services

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Stephen Pont, University of Texas Medical Branch, Austin Programs Nalini Ranjit, Michael & Susan Dell Center for Healthy Living Becky Rendon, North East ISD Michele Rusnak, Austin ISD

Rick Schwertfeger, Austin/Travis County Health and Human Services Department

Amy Silvey, Capital Area Food Bank of Texas
Carolyn Smith, Michael & Susan Dell Center for Healthy Living
Michelle Smith, Partnership for a Healthy Texas—Conquering Obesity
Andrew Springer, Michael & Susan Dell Center for Healthy Living
Melissa Stigler, Michael & Susan Dell Center for Healthy Living
Marion Stoutner, Texas Department of State Health Services
Gretchen Stryker, Texas Department of State Health Services
Ximena Urrutia-Rojas, University of Texas School of Public Health
Adolfo Valadez, Texas Department of State Health Services
Kathy Wagner, Texas A&M University
Joey Walker, Michael & Susan Dell Center for Healthy Living
Judy Warren, TALHO

