Increase the percent of 5th Grade Public School Students who are Physically Fit

The above chart shows the percentage of 5th grade students in public schools in San Francisco that were within the Healthy Fitness Zone for aerobic capacity (a proxy for physical fitness) by race/ethnicity between 2011 and 2017. The line “All California” offers a State comparison.

Data Definition & the San Francisco Trend line
The FITNESSGRAM is a physical health assessment tool that is used across schools in California to help students start the life-long habits of regular physical activity. Students in grades 5, 7, and 9 take a six-part test that includes Aerobic Capacity, Body Composition, Muscular Strength, Muscular Endurance, Flexibility, and Activity Assessments. For each test, student results are compared against statewide standards by gender and age to determine whether the student falls in the Healthy Fitness Zone. DCYF is focusing on two of these components, Aerobic Capacity in this scorecard, and Body Composition in an accompanying Healthy Body Weight scorecard. In 2010, new standards were incorporated into the testing structures for these two components, which is why only data from the 2010-11 school year forward is considered for both this and the Healthy Body Weight indicators.

Aerobic capacity is evaluated by measures of VO2max (also known as maximal oxygen uptake), which can be estimated through one of three tests: PACER (a multistage aerobic capacity test), one-mile run and walk test. VO2max reflects the maximum rate that the respiratory, cardiovascular, and muscular systems can take in, transport, and use oxygen during exercise. Good aerobic capacity has been shown to reduce the risk of high blood pressure, coronary heart disease, obesity, diabetes, the metabolic syndrome, and some forms of cancer.
In the 2016-17 school year 74% of 5th grade, 73% of 7th grade, and 62% of 9th grade public school students tested in San Francisco were considered physically fit. The percent of physically fit 5th grade students has generally risen from 64% in 2010-11 to 74% in 2016-17, while the percent of physically fit 7th and 9th graders has only varied slightly over time, hovering at about 68% and 63%, respectively. Across the past five years, a greater percentage of San Francisco 5th graders than overall California 5th graders were considered physically fit, with gains increasing over time. The percentage of San Francisco 7th graders who are physically fit is only slightly higher than the percentage for California 7th graders overall, while the trend line for San Francisco 9th graders mirrors the state trend line and has not seen any consistent gains over the past six years. It is important to note that consistently across years for San Francisco and the State as a whole, the percent of students who are physically fit decreases between 5th and 9th grade.

Racial/ethnic, economic and gender disparities exist. Since 2010-11, Hispanic or Latino and African American students have had the lowest rate of physical fitness across all grades. The total number of American Indian or Alaska Native and Hawaiian Islander/Pacific Islander students in San Francisco is too small to report FITNESSGRAM data by grade level, but State trends suggest that these groups tend to have lower rates of physical fitness as well.

The percent of students who are physically fit also varies by economic status and gender. On average, across all three grades for the past five years, economically disadvantaged students (defined as qualifying for free and reduced lunch), are less likely to be physically fit than students who are not economically disadvantaged. Finally, since 2010-11, a higher percentage of boys have been physically fit (6-10 percentage points higher) than girls. It is important to note that there are inverse gender disparities when it comes to healthy body weight, with a higher percentage of girls being at a healthy body weight as compared to their male counterparts.

**Story Behind the Curve**

**Access, Wealth Inequality and Additional Risk Factors for Lack of Physical Fitness**

Although we have seen an overall improvement of 10% between 2010-11 and 2016-17 for 5th grade physical fitness, when the data is disaggregated by race and ethnicity the gains are not as pronounced for African American youth. Additionally, students who qualify for free and reduced lunch have consistently had lower rates of physical fitness, lagging an average of 12 percentage points behind their peers. We know that communities of color face significant health challenges in the San Francisco Bay Area, with over 68% of the region’s African American and Latino residents identified as obese or overweight. This preventable health risk is exacerbated by poor access to healthy foods (more information available in "healthy body weight" scorecard), disparities in quality of and access to safe and affordable recreation spaces, and limited “walkability” of lower-income minority-majority neighborhoods.

Despite efforts happening around the city, barriers to increasing physical activity persist. Community input has highlighted that there are few opportunities to access after school sports teams, parks, transportation, and safe community spaces for youth to spend structured and unstructured time exercising (indoor and outdoor). Indeed, a recent San Francisco Municipal Transportation Agency survey found that 46% of respondents identified lack of transportation as a barrier to their children participating in sports activities. Further, we know that the Recreation and Parks Department continues
to experience wait-lists for some of its afterschool programs.

Additionally, we have heard from some community members that lack of gender-specific spaces for physical activity and turf-related issues around public recreation spaces limits access to physical activity for certain populations, which may explain some of the gender and racial/ethnic disparities observed in the data. National research supports the link between access to safe spaces for physical activity and physical fitness outcomes. vi

Policy and Practice Shifts in San Francisco

As a city, San Francisco has undertaken a series of efforts to improve physical fitness outcomes for children and youth. Locally, significant efforts have been made to improve the physical fitness outcomes of children and youth: Shape Up SF, policy changes within the San Francisco Unified School District (SFUSD), and access and improvement efforts by the Recreation and Parks Department.

The Mayor’s Challenge: Shape Up San Francisco was created in 2006 to respond to growing levels of chronic disease, especially in San Francisco’s low-income communities and communities of color. Unlike generations of previous work aimed primarily at educating San Francisco residents, the Shape Up SF (SUSF) Initiative adopted far-reaching environmental strategies in partnership with local neighborhoods and communities to create a city with healthy opportunities and choices. The initiative has focused on three priority areas: Healthy Food Access, Physical Activity Opportunities and Sugary Drinks/Water Access. Over the past few years SUSF, the Bayview HEAL Zone (a Kaiser Permanente program to help make healthy choices more accessible to people in underserved communities), and many other organizations have focused their efforts on high-need communities by collaboratively working with neighborhoods and agencies. They have collaborated to provide nutrition and physical education to families and youth, engage community advocates to work with their own communities, develop wellness policies, create walking school buses and work with the Recreation and Parks Department to ensure that local parks are accessible. vii

Policy changes within the San Francisco Unified School District. In looking more closely at the trend lines for 5th, 7th, and 9th graders, we see a gradual increase in physically fit 5th graders, which may be partially driven by an increase in the number of elementary school physical education specialists (from 15 to 30) starting in 2010. Additional efforts that may have impacted the physical fitness include the expansion of 'Safe Routes to School', an initiative to increase walking and biking to school. viii Further, we know that SFUSD undertook changes in its wellness policies in 2015 that includes increased recess and physical activity for students. ix For the 2016-17 school year, the Physical Education section of the student report card was revamped to include additional items and achieve better alignment with state and national standards. x

Improvement efforts by the Recreation and Parks Department. In 2001, the San Francisco Recreation and Parks Department created a Capital Division. The Capital Division began the renewal and revitalization of San Francisco’s extensive and diverse parks and open space system. With passage of the 2008 Clean and Safe Neighborhood Parks Bond, the department was able to renew and renovate 12 neighborhood parks, playgrounds, and recreation facilities and begin addressing the infrastructure needs in the City’s urban forest, trail network, playfields, and restrooms. In November 2012, voters
approved an additional $195 million in Bonds to improve 15 more neighborhood parks. Despite large investments in this area, needs far outweigh the available resources.\textsuperscript{xi}

**What Works: A Selection of Best Practices in Increasing Physical Activity**

The U.S. Department of Health and Human Services Centers for Disease Control (CDC) has developed a set of recommendations rooted in research that outline best practices for increasing physical activity in communities. Below is a brief overview of the ten strategies the CDC highlights as effective in increasing physical activity. Please see the full report for a more thorough review of these practices.\textsuperscript{xii}

**Community-wide Campaigns** are large-scale, multi-component media campaigns characterized by a consistent “brand” message or “tag line” that include other on-the-ground components, such as support and self-help groups; physical activity counseling; risk-factor screening and education at work sites, schools, and community health fairs; and community events. They also include policy and environmental changes, such as opening school facilities to public use and creating walking trails.

**Point-of-Decision Prompts to encourage use of Stairs.** For programs that promote physical activity, point-of-decision prompts include signs posted by elevators and escalators to encourage people to choose to use nearby stairs instead.

**Individually Adapted Health Behavior Change Programs.** This approach uses strategies that are tailored to an individual’s specific interests, preferences, and readiness for change. One strategy is to teach behavioral skills to help participants incorporate physical activity into their daily routines.

**Enhanced School and Community-based Physical Education.** These interventions are characterized by key strategies that encourage youth to engage in enjoyable physical activity that is moderate to vigorous intensity. These strategies are implemented within physical education (PE) classes, but also can be applied in different youth-oriented settings, such as community and recreation centers and afterschool programs.

**Social Support Interventions in Community Settings.** Social support interventions in community settings focus on building, strengthening, and maintaining social networks that provide supportive relationships for physical activity behavior change. Participants can be connected with other participants and program staff members to monitor progress and encourage continuation of activities.

**Creation of Enhanced Access to Places for Physical Activity combined with Informational Outreach Activities.** Interventions that create or enhance access to places for physical activity and provide informational outreach activities may involve representatives from work sites, coalitions, government agencies, and communities who are working to change the local environment to create opportunities for physical activity. These efforts usually combine both individual and environmental components and are long-term interventions.

**Street-scale and Community-scale Urban Design and Land-use Policies.** Street-scale urban design and land-use policies and practices support physical activity in small geographic areas, generally limited to a few blocks. These interventions use policies and practices such as improving street lighting, increasing ease and safety of street crossings, introducing or enhancing traffic calming, enhancing the aesthetics of
the streetscape, and ensuring sidewalk continuity. Community-scale urban design and land-use policies and practices support physical activity in larger geographic areas, generally several square kilometers. These interventions use policies and practices to develop and implement infrastructure projects to improve continuity and connectivity of streets, sidewalks, and bicycle lanes.

**Active Transport to School.** Active transport to school interventions are designed to encourage and support youth to engage in active transportation (e.g., walking, bicycling, skating) to school. These interventions take several forms across various cities, including KidsWalk, Walk to School, Walking School Bus, and Safe Routes to School.

**Transportation and Travel Policies and Practices.** Transportation and travel policies and practices can encourage active transport by facilitating walking, bicycling, and public transportation use; increasing the safety of walking and bicycling; reducing car use; and improving air quality. Environmental changes that support these goals and increase physical activity can be achieved by using strategies such as changing roadway design standards; creating or enhancing bicycle lanes; expanding, subsidizing, or otherwise increasing the availability of and access to public transportation; providing bicycle racks on buses; providing incentives to car or van pool; and increasing parking costs.

Please see the following selected references for more information on the ‘Story Behind the Curve’ and highlighted ‘Best Practices’

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i FITNESSGRAM. The Cooper Institute. [http://www.cooperinstitute.org/fitnessgram/components](http://www.cooperinstitute.org/fitnessgram/components)


San Francisco Department of Parks and Recreation. Park Improvements.
http://sfrecpark.org/parkimprovements/