



Youth from Mixed Persuasion performing at the 5-Year Soda Tax Community Celebration at the Florence Fang Community Farm.



San Francisco Sugary Drinks Distributor Tax Advisory Committee

March 2024 Annual Report and Recommendations

www.sf.gov/sddtac | www.sodatax-sf.org



Sugary Drinks Distributor Tax Advisory Committee

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March 1, 2024

The Sugary Drinks Distributor Tax Advisory Committee (SDDTAC) remains committed to its mission of making community-driven funding recommendations that support services and other innovative, community-led work to decrease the consumption of sugary beverages, increase access to water and support healthy eating and active living (HEAL).

We are proud to celebrate the 5-year anniversary of the Sugary Drinks Distributor Tax (SDDT) in San Francisco, which has provided funding for priority populations and places targeted by the sugary drinks industry. Revenue from the tax has resulted in collaboration between community members, the San Francisco Department of Public Health, academic researchers, and policy leaders embedded in the SDDTAC's structure with seats dedicated to community leaders, community members, public health experts, subject matter experts and researchers. The role of the SDDTAC has been critical in informing funding priorities and ensuring that the SDDT funding is accountable and aligned with key values for decreasing sugary drink consumption and increasing healthy eating and active living. The SDDTAC will continue to make funding recommendations that benefit our community and honor the intent of the tax set forth by voters of Proposition V.

In Fiscal Year 2023–2024, the SDDTAC prioritized SDDT revenue to the issues our communities care most about, including:

- Identifying Community-Based Grants as the most important and impactful funding category
- Considering opportunities to incorporate more youth involvement by potentially increasing youth seats on SDDTAC
- Expanding access to healthy food, water, and oral health services
- Equitable access to healthy food for low-income people and students
- Ensuring continued access to safe and affordable physical activity

More details of the committee's recommendations and supporting evidence can be found in the annual report attached to this letter. There is evidence that the soda tax is working here in San Francisco – especially for communities most impacted and at risk for chronic disease. We strongly encourage the Mayor and Board of Supervisors to follow the annual budget recommendations from the Sugary Drinks Distributor Tax Advisory Committee.

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I. BACKGROUND

A. Sugary Drinks Distributor Tax Legislation

In November 2016, San Francisco voters passed Proposition V. Proposition V established a one penny per ounce fee on the initial distribution of a bottled sugar-sweetened beverage, syrup, or powder, within the City and County of San Francisco. The Sugary Drinks Distributor Tax (SDDT) is a general excise tax on the privilege of conducting business within the City and County of San Francisco. It is not a sales tax or use tax or other excise tax on the sale, consumption, or use of sugar-sweetened beverages. The funds collected from this tax are to be deposited in the General Fund.

The legislation defines a sugary drink, or sugary-sweetened beverage (SSB), as follows:

A sugar-sweetened beverage (SSB) means any non-alcoholic beverage intended for human consumption that contains caloric sweetener and contains 25 or more calories per 12 fluid ounces of beverage, including but not limited to all drinks and beverages commonly referred to "soda," "pop," "cola," soft drinks" "sports drinks," "energy drinks" "sweetened iced teas" or any other similar names.

The passage of Proposition V established two pieces of law: [the Sugary Drinks Distributor Tax](#) (also referred to as soda tax) in Business and Tax Regulations Code and the [Sugary Drinks Distributor Tax Advisory Committee \(referred to in this report as "Committee"\)](#) in the City's Administrative Code. The ordinance stated that the Committee shall consist of 16 voting members, who are appointed by either the Board of Supervisors or certain City departments. The powers and duties of the Committee are to make recommendations to the Mayor and the Board of Supervisors on the effectiveness of the Sugary Drinks Distributor Tax and to submit a report that evaluates the impact of the Sugary Drinks Distributor Tax on beverage prices, consumer purchasing behavior, and public health. The Committee is to also provide recommendations regarding the potential establishment and/or funding of programs to reduce the consumption of sugar-sweetened beverages in San Francisco.

In May 2018, the SF Department of Public Health was requested to assume staffing of the Committee. The Mayor's Office formalized the change in administrative oversight of the Committee from the City Administrator's Office to Department of Public Health through a transfer of function of the Executive Branch pursuant to [Sec. 4.132 of the City Charter](#).

Unless the Board of Supervisors by ordinance extends the term of the Committee, it shall expire by operation of law, and the Committee shall terminate, on December 31, 2028.





Sugary Drinks Distributor Tax (SDDT): How it Works

In November 2016, San Francisco voters passed the Sugary Drinks Distributor Tax (SDDT) - more commonly known as the SF Soda Tax, which established a 1 cent per ounce fee on the initial distribution of drinks with added sugar. This chart shows how the tax revenue flows into the city and to the communities most targeted by the sugary drinks industry marketing and advertising tactics.

Learn more at
www.SodaTax-SF.org



1. Sugary Drink Distributors are Taxed

The SF Soda Tax is not a sales tax. Distributors are responsible for paying the tax. Merchants may choose to pass the cost of the tax along to consumers.

2. Revenue is Collected

The SF Soda Tax collects about \$15-16 million each year. The revenue goes into the City's General Fund. About 22% is set aside for specific, voter-approved projects. The Tax Advisory Committee makes recommendations to the mayor on how to spend the remaining 78%.

3. Tax Committee Recommends Investments

The Committee talks to community members to learn about how the tax revenue could benefit people, especially low-income people and people of color who are most targeted by the beverage industry's advertising. The Committee then submits their funding recommendations to the Mayor.

4. City Budget Process Finalizes Investments

The Mayor submits a budget proposal to the Board of Supervisors, including recommendations for the SF Soda Tax funds. The Board of Supervisors votes on the budget and the Mayor signs it.

5. SF Soda Tax Funds Programs!

SF Soda Tax funds go to City departments who either implement programs and services directly or issue grants to community-based organizations to fund their important work.



B. Report Requirements and Process

Starting in 2018, by March 1, of each year, the Committee shall submit to the Board of Supervisors and the Mayor a report that evaluates the impact of the Sugary Drinks Distributor Tax on beverage prices, consumer purchasing behavior, and public health. The Committee in their report shall make recommendations regarding the potential establishment and/or funding of programs to reduce the consumption of sugary drinks in San Francisco.

Within 10 days after the submission of the report, the Department of Public Health (per change referenced above) shall submit to the Board of Supervisors a proposed resolution for the Board to receive the report.

C. Relationship Between Sugary Drink Consumption, Health, Health Equity and Taxes

A large body of evidence exists indicating that sugary drink consumption increases risk for cavities, overweight/obesity, type 2 diabetes, hypertension and heart disease.¹⁻⁵ Although sugary drinks can contain hundreds of calories in a serving, they do not signal “fullness” to the brain and thus facilitate overconsumption.⁶ Sugary drinks account for



nearly half of the total added sugars in a typical American diet. About half of adults and over 60% of kids consume a sugary drink on any given day.⁷⁻¹⁰ Sugary drinks are the leading source of sugar in the American diet, contributing 36% of the added sugar Americans consume.¹¹

Numerous organizations and agencies, including the American Heart Association, American Diabetes Association, American Academy of Pediatrics, Institute of Medicine of the National Academies, American Medical Association, and the Centers for Disease Control, recommend limiting intake of added sugar and sugary drinks to improve health. Studies show that sugary drinks flood the liver with high amounts of sugar in a short amount of time and that this “sugar rush” over time leads to fat deposits and metabolic disturbances that are associated with the development of type 2 diabetes, cardiovascular disease, and other serious health problems.¹² Every additional sugary drink consumed daily can increase the risk of developing type 2 diabetes by 26%.¹³

Diseases connected to sugary drinks are also found to disproportionately impact ethnic minority and low-income communities – the very communities that are found to consume higher amounts of sugary drinks. Diabetes hospitalizations are approximately three times as high in low-income communities as compared with higher income communities. African American death rates from diabetes are two times higher than San Francisco’s overall rate. With respect to oral health, the data indicate that Asian and Pacific Islander children suffer from cavities at a higher rate than other populations; but Latinx and African American children also have a higher prevalence than the average for cavities.

While many factors contribute to sugary drink consumption, including wide availability/access and affordability, the role of industry is relevant as well. A [study by Rudd](#)¹⁴ documents that food and beverage companies continue to disproportionately target Black and Hispanic consumers with TV advertising for almost exclusively unhealthy packaged food and beverage

A note regarding use of obesity as a measure of health.

Evolving research indicates that focusing on overweight/ obesity furthers stigma and can exacerbate or contribute to poor health. Whereas the Healthy Eating Active Living Team in San Francisco Department of Public Health (SFDPH)’s Community Health Equity and Promotion Branch have focused on preventing chronic disease and promoting nutrition and physical activity as opposed to obesity prevention; their recommendation is to shift from using obesity as a measure in this work and focus instead on other health conditions impacted by SSB consumption. The Canadian Medical Association Journal provides additional context to this recommendation: “Although obesity has been shown to contribute to certain types of health problems, anti-fat stigma is also a threat to health. Anti-fat stigma adds both psychological and physiologic stress to people who are considered excessively fat, which some experts argue partially accounts for health disparities by weight.^{15,16} Anti-fat stigma is underpinned by common assumptions that fatness is highly malleable and under individual control, implying that people who are visibly fat have poor self-control, are unknowledgeable or are not invested in their health. Puhl and Heuer’s 2009 review of over 200 studies (with experimental, survey, population based and qualitative designs) highlighted how common such stigmatizing assumptions are and the discrimination that follows in multiple sectors.¹⁷ In a 2016 systematic review and meta analysis, Spahlholz and colleagues confirmed high rates of perceived weight-based discrimination in many life domains.¹⁸ Stigmatization can be a daily occurrence; an analysis involving 50 overweight or obese women in the United States who filled out the Stigmatizing Situations Inventory over 298 days reported more than 1000 weight-stigmatizing events. Body mass index (BMI) was the strongest predictor.¹⁹



categories. Most companies in this analysis have healthier brands in their portfolios, including plain water, low-sugar cereals, yogurt, plain dairy, fruits, and vegetables that could be promoted but they disproportionately advertise their least nutritious brands, including sugary drinks, candy, chips, and high-sugar cereals, to Black and Latinx consumers, and we see the health costs to those communities. The study specifically found the following:

- Food and beverage TV advertising targets Black and Latinx consumers.
 - In 2021, Black youth and adults viewed 9% to 21% more food and beverage TV ads compared to their White peers.
 - Companies increased their focus on advertising to Spanish-speaking TV viewers, evidenced by an increase in the proportion of TV ad dollars companies dedicated to Spanish-language TV from 2017 to 2021 (7.8% vs. 8.5%).
- Targeted TV ads primarily promote unhealthy food and beverages.
 - Candy, sugary drinks, snacks and cereal made up 73% of food and beverage ad spending on Black-targeted and Spanish-language TV in 2021.
 - This advertising contributes to inequities in diet-related diseases heavily affecting communities of color, including heart disease and diabetes.
 - **There was no advertising fruits or vegetables on Spanish-language or Black-targeted TV in 2021.**
 - Most U.S. food companies have healthier brands in their portfolios, including plain water, low-sugar cereals, yogurt and plain dairy, fruits and vegetables that could be promoted.
- Numerous marketing campaigns, including in social media, target youth and communities of color:
 - Many marketing campaigns incorporated hip-hop and Latino music celebrities and other youth-oriented themes, as well as cause-related marketing with donations and collaborations with non-profits to benefit communities of color and foster goodwill for food and beverage brands.
 - Major brands were responsible for the majority of marketing campaigns that targeted youth and communities of color.
 - Racially and ethnically targeted marketing campaigns almost exclusively promoted unhealthy products.

Other research studies bolster the Rudd finding with respect to beverage companies focusing advertising²⁰ and retail marketing²¹ efforts on Black/African Americans and Latinx Americans, as well as on children.²²

It's no wonder then, that Black/African Americans and Latinx Americans drink more sugary drinks compared to non-Latinx White Americans.^{23, 24} Among households with young children, those with lower incomes purchased more sweetened fruit drinks compared to households with higher incomes.²⁵

The Sugary Drinks Distributor Tax is intended to discourage the distribution and consumption of sugary drinks in San Francisco by taxing their distribution. A recent study conducted in San Francisco by the Public Health Institute's Prevention Policy Group



showed the tax is working as intended: consumption of SSBs declined markedly (34%) in San Francisco in the first two years after implementation of the tax.²⁶ Key findings from the study note a 34.1% drop in consumption of sugary drinks in the San Francisco sample at two years post-tax, versus a 16.5% drop in San José, which did not institute a tax.

- In San Francisco, the probability of consuming more than 6 ounces per day decreased by 4.3% in the first year and by 13.6% in the two years post-tax. In San José, this decrease was 1% in the first year and less than 1% at two years post-tax.
- There was a significant difference in change over time (13.2%) in high consumption of SSBs between the two cities two years after the tax started.
- High SSB consumption decreased 23.6% among San Francisco respondents who were living below 200% of the federal poverty level, while increasing in San José, yielding another significant difference in change over time between the cities.

The study sampled different racial and ethnic groups from zip codes in San Jose and San Francisco, with a higher density of Black and Latino residents and racial/ethnic groups with higher SSB consumption in California. This analysis paints a robust picture of the positive health impact of soda tax policies and suggests that even a modest size tax can be effective in reducing high SSB consumption and mitigating the risk of harm. These findings support the preliminary analysis of sales data which indicated that the soda tax is successful in decreasing consumption: purchases of sugar-sweetened beverages at supermarkets in San Francisco decreased by more than 50% in the two years following the implementation of the tax.²⁷

Mexico, where an average of 163 liters of sugary drinks are consumed per person each year, enacted an excise tax on sugary drinks in January 2014, resulting in a decline in the purchase of taxed sugary drinks by 12% generally and by 17% among low-income Mexicans by December 2014. The Mexico data indicate that, when people cut back on sugary drinks, to a significant extent they choose lower-caloric or non-caloric alternatives. Studies have projected that a 10% reduction in sugary drink consumption in Mexico would result in about 189,300 fewer incident type 2 diabetes cases, 20,400 fewer incident strokes and myocardial infarctions, and 18,900 fewer deaths occurring from 2013 to 2022. This modeling predicts the sugary drinks tax could save Mexico \$983 million international dollars.²⁸

Following the implementation of Berkeley, California's sugary drink tax, the first in the nation, there was a 50% decline in sugary drink consumption among diverse adults over the first 3 years of the tax.²⁹ Modeling suggests that a national sugary drink tax that reduced consumption by just 20% would avert 101,000 disability-adjusted life-years; gain 871,000 quality-adjusted life-years; and result in \$23.6 billion in healthcare cost savings over just 5 years. The tax is further estimated to generate \$12.5 billion in annual revenue. This body of research supports the notion that taxation provides a powerful incentive for individuals to reduce their consumption of sugary drinks, which in turn can reduce the burden of chronic disease.



D. Sugary Drinks Distributor Tax Advisory Committee

Per the legislation, the Committee shall consist of the following 16 voting members:

Seats 1, 2, and 3 shall be held by representatives of nonprofit organizations that advocate for health equity in communities that are disproportionately impacted by diseases related to the consumption of Sugar-Sweetened Beverages, as defined in Business and Tax Regulations Code Section 552, appointed by Board of Supervisors.

Seats 4 and 5 shall be held by individuals who are employed at medical institutions in San Francisco and who have experience in the diagnosis or treatment of, or in research or education about, chronic, and other diseases linked to the consumption of Sugar-Sweetened Beverages, appointed by Board of Supervisors.

Seat 6 shall be held by a person who is under 19 years old at the time of appointment and who may be a member of the Youth Commission, nominated by the Youth Commission and appointed by Board of Supervisors. If the person is under legal voting age and unable to be an elector for that reason, the person may hold this seat, but upon reaching legal voting age, the person shall relinquish the seat unless he or she becomes an elector, in which case the person shall retain the seat.

Seat 7 shall be held by a person appointed by the Director of the Office of Economic and Workforce Development or any successor office.

Seats 8 and 9 shall be held by persons appointed by the Board of Education of the San Francisco Unified School District. If at any time the Board of Education declines to appoint a member to Seat 8 or 9 and leaves the seat vacant for 60 days or longer, the Board of Supervisors may appoint a member of the public to fill the seat until such time as the Board of Education appoints a member.

Seat 10 shall be held by an employee of the Department of Public Health who has experience or expertise in the field of chronic disease prevention or treatment, appointed by the Director of Health.

Seat 11 shall be held by a person with experience or expertise in the field of oral health, appointed by the Director of Health.

Seat 12 shall be held by a person with experience or expertise in the field of food security or access, appointed by the Director of Health.

Seat 13 shall be held by an employee of the Department of Children, Youth & Their Families, appointed by the Director of that Department.

Seat 14 shall be held by an employee of the Recreation and Park Department, appointed by the General Manager of that Department.



Seat 15 shall be held by a parent or guardian of a student enrolled in the San Francisco Unified School District at the time of appointment, nominated by the San Francisco Unified School District’s Parent Advisory Council, and appointed by the Board of Supervisors. If at any time the Parent Advisory Council declines to nominate a member to a vacant seat for 60 days or longer, the Board of Supervisors may appoint a member of the public to fill the seat until the seat becomes vacant again.

Seat 16 shall be held by a person with experience or expertise in services and programs for children ages five and under, appointed by Board of Supervisors.

Sugary Drinks Distributor Tax Advisory Committee 2023-2024

Seat 1	BOS Appointment - Health Equity	Chester Williams
Seat 2	BOS Appointment - Health Equity	John Ilesha Ena
Seat 3	BOS Appointment - Health Equity	Marna Armstead*
Seat 4	BOS Appointment - Research/Medical Institutions	Frances Abby Cabrera*
Seat 5	BOS Appointment - Research/Medical Institutions	Jamey Schmidt
Seat 6	BOS Appointment - Youth Seat	Linda Ye
Seat 7	Office of Economic and Workforce Development Appointment	Alesandra Lozano
Seat 8	Board of Education Appointment - SF Unified School District	Saeeda Hafiz
Seat 9	Board of Education Appointment - SF Unified School District	Jennifer Lebarre
Seat 10	Department of Public Health Appointment - Chronic Disease	Tiffany Kenison
Seat 11	Department of Public Health Appointment - Oral Health	Irene Hilton
Seat 12	Department of Public Health Appointment – Food Access/Security	Veronica Shepard
Seat 13	Department of Children Youth and Their Families Appointment	Michelle Kim
Seat 14	Recreation and Parks Department - Appointment	Linda Barnard
Seat 15	BOS Appointment - SFUSD Parent Advisory Council	Eva Holman
Seat 16	BOS Appointment - Children 0-5 Years Old	Laura Urban

*SDDTAC Co-Chair



E. Sugary Drinks Distributor Tax Revenue & Revenue Projections

The City and County of San Francisco operates on a July-June fiscal year (FY). Each year the Mayor and Board of Supervisors pass a rolling, two-year budget, with the second year becoming the first year of the next budget cycle; similarly, the Committee makes rolling, two-year recommendations.

SDDT Revenues

The Treasurer and Tax Collector collects the revenue and the Controller’s office reports the revenues as indicated in the “Actual” column below (to [track revenues](#)). The Controller’s office projects expected revenue, shown in the “Projected” column in the table below.

Tax collection began January 1, 2018. Between January 2018 – February 26, 2023, a total of \$78,817,218 has been collected.

SDDT Revenue	Projected	Actual
FY 2017- 2018 Actual figure represents 6 months: Jan-Jun 2018	\$8,000,000	\$7,911,731
FY 2018-2019	\$16,000,000	\$16,097,908
FY 2019 – 2020	\$16,000,000	\$13,181,608
FY 2020- 2021	\$16,000,000	\$10,435,241
FY 2021 – 2022	\$12,200,000	\$11,973,028
FY 2022-2023	\$13,700,000	\$12,870,055
FY 2023-2024 *This figure represents 8 months: July 2023 - Feb 2024	\$13,700,000	\$6,347,647
FY 2024-2025	\$13,700,000	--
FY 2025-2026	\$13,700,000	--
FY 2026-2027	\$13,700,000	--
TOTAL		\$78,817,218

The amount available to the SDDTAC to recommend is determined after voter-mandated set asides (about 22%). Additionally, the Board of Supervisors appropriated \$1.2 million of the \$11.6 million in ongoing “Healthy Addbacks” during the FY2017-18 budget process. In November 2023, the Controller’s Office projected revenue for SDDTAC to make recommendations at \$10,900,000 for both FY2024-25 and FY2025-26.



II. Sugary Drinks Distributor Tax Advisory Committee Recommendations

A. SDDT Advisory Committee Process

The Committee meets monthly with the Department of Public Health (DPH) serving as backbone staff. In addition to the full monthly Committee meetings, many Committee members participated in one or two subcommittees. The three subcommittees are: Data and Evidence, Community Input, and Infrastructure. The full Committee also heard community input at meetings and each subcommittee was encouraged to incorporate public feedback in its recommendations.

Last year, the Committee adopted the AliahThink Tool for Strategic Planning. This tool was used to support values-based, collaborative decision making, building on the knowledge of the Committee and community. Last year's prioritizations guided the Committee again this year as it made its budget recommendations. As with all Committee meetings, the budgeting process was documented in the Committee and Sub-Committee meeting notes.

Each year, the Committee is tasked with making two-year budget recommendations to coincide with the City's two-year budget cycle. The Committee expects new information will emerge during the course of the year from funded organizations, ongoing community input, new data and evidence, etc. that will inform potential changes to its second-year budget recommendations. For example, this year the Committee is making recommendations for expenditures in FY24-25 and FY25-26. The Committee will re-evaluate its FY25-26 recommendations at the end of 2024 and may make changes, if deemed appropriate, for its final FY25-26 recommendations in early 2025.

Given the Committee's legislative mandate to evaluate the impact of the SDDT and Mayor London Breed's commitment to accountability ("Make every dollar count") of public dollars, the Committee continues to recommend that revenue generated from the SDDT be indicated in such a way that City Departments know that they have received funding that was generated from SDDT revenue. Such notation makes it possible for the committee to fulfill its legislative mandate with respect to documenting the impact the SDDT is having in San Francisco.

The Committee voted on January 17, 2024, to make the funding recommendations for FY2024-25 and FY2025-26 as described in the recommendations section.



B. Subcommittee Reports

Data and Evidence Subcommittee

The mission of the Data and Evidence Subcommittee is to review, analyze and share research within the context of our San Francisco communities to help inform and support the work of the Sugary Drinks Distributor Tax Advisory Committee (SDDTAC).

The Data and Evidence subcommittee supported broadening the scope of funded activities to support economic development and improving health outcomes.

The Subcommittee worked to enable further collaborative learning by:

- Hosting subject matter experts, i.e., sales data, sugary history; and
- Ensuring that soda tax efforts create healthier communities for low-income and populations of color, who are hardest hit by COVID and soda industry marketing and the health impacts of their products.

The duties of the Data and Evidence subcommittee are to:

- Collect and review research and data that would be helpful to the work of the Committee;
- Help inform and support efforts to analyze the impact of the SDDT on sugary drink pricing, public health, and consumer purchasing behavior;
- Help inform efforts to evaluate programs and work funded by SDDT.

The Data and Evidence Subcommittee accomplishments include:

1. Supported, celebrated and participated in the 5 year sugary drinks distributor tax anniversary events.
2. Updated a work plan that identifies subcommittee tasks in alignment with the goals of the SDDTAC.
3. Provided critical feedback on SDDT Evaluation Review – Raimi & Associates shared logic model: goals, strategies, outcomes, impact and metrics regarding the evaluation plan.
4. Approved Raimi & Associates evaluation report FY 2022-2023
5. Reviewing/highlighting current and relevant evidence-based literature including blogs, op eds, etc.
6. Reviewed and provided feedback on SDDT 2023 Data Report.
7. Reviewed and commented on the subcommittee section of the 2024 annual report.
8. Reviewed and commented on FY 24-25 & FY 25-26 budget and made recommendations for the SDDTAC.



Future Considerations for the Data & Evidence Subcommittee:

- Continuation of SDDTAC
 - o Engage support of community and policymakers to continue the SDDTAC beyond 2028
- Track and communicate longitudinal data
 - o Continue to collaborate with SFDPH data analysts and others to provide input and suggestions on analyzing and disseminating longitudinal data describing impact of the soda tax.
- Alignment and synergy with public health focused committees/coalitions
 - o Work collaboratively with community and colleagues to create programmatic synergy for healthy eating and active living
 - o Align with community to advocate for policy to advance healthy eating and active living

In addition, the Data and Evidence Subcommittee will continue to update research/evidence database with respect to the economic impact of the sugar sweetened beverage tax, racism and health disparities research, mental health, social determinants of health and the impact of COVID 19 on priority populations.

The Data and Evidence Subcommittee remains committed to helping inform the Committee recommendations guided by data and evidence, relying on DPH staff for latest data and relying on the network of scientific community for the latest evidence in the context of community through the remaining time of the SDDTAC on behalf of all the residents of the City and County of San Francisco.

The following members of the SDDTAC were active members of the Data and Evidence Subcommittee during the development of this report:

- o Saeeda Hafiz (Seat 8: San Francisco Unified School District) *Data & Evidence Former Subcommittee Chair*
- o Abby Cabrera (Seat 4: research/medical institution) SDDTAC Co-Chair
- o Marna Armstead (Seat 3: Health equity Black/African American) SDDTAC Co-Chair
- o Jamey Schmidt (Seat 5: research/medical institution)
- o Irene Hilton (Seat 11: DPH oral health) Data & Evidence Subcommittee Chair
- o Laura Urban (Seat 16: Children 0-5 Years Old) Data & Evidence Subcommittee Chair

The Data and Evidence Subcommittee met monthly with a total of 10 meetings between April 2023 – February 2024:

April 12, 2023

May 10, 2023

June 14, 2023

July 2023 –*Cancelled*

August 2, 2023

September 13, 2023

October 11, 2023

November 8, 2023

December 6, 2023

January 10, 2024

February 14, 2024



Community Input Subcommittee

The mission of the Community Input Subcommittee is to ensure that meaningful community engagement opportunities are fully integrated throughout the work of the Committee, so that impacted populations can inform the decisions of the full committee.

This Subcommittee recognizes the disproportionate health burdens felt by communities of color and low-income communities and the need to have members of these communities actively participate in shaping funding recommendations for strategies, approaches and services that contribute to decreasing the consumption of sugary drinks for those most impacted, as well as all San Franciscans.

This Subcommittee also recognizes the necessity for the Committee to create mechanisms by which information about the recommendation process and the implementation of the SDDT can be communicated to members of the public, including disproportionately impacted communities. With this as our guiding perspective, the Community Input Subcommittee worked in partnership with the Department of Public Health (DPH), who provided backbone staffing for the Subcommittee, to support and give feedback related to community engagement and outreach efforts.

The Subcommittee continued to emphasize the importance of making all meetings accessible and open to the public and to developing meaningful and creative mechanisms to communicating how SDDT funds are being utilized to support those communities most targeted by the beverage industry. These items can be uplifted into agenda items as they have each been discussed at this year's meetings.

The duties of the Community Input subcommittee are to:

- Evaluate the funding process and extent to which the intent of the original recommendations is implemented through community input;
- Make recommendations to full committee for any needed improvements to next round of recommendations/funding process based on community input;
- Solicit input from the community about SDDTAC recommendations and related processes;
- Advocate for community engagement activities such as Town Hall meetings, be present at such events, and report back to the committee;
- Recommend the addition of public engagement component be a part of the funding process; solicit feedback from community and attend meetings; and
- Oversee strategic outreach to communities.

Community Input Subcommittee accomplishments include:

1. Developed recommendations to the full committee on utilization of this year's funds for community engagement;
2. Reviewed legislation amendments and identify community outreach/input strategy;
3. Researched to amend current SDDTAC process to define community seat representation and increase youth seats;



4. Reviewed subcommittee workplan: quarterly cadence to ensure alignment and assess impact;
5. Provided input to Raimi & Associates for the evaluation plan reporting;
6. Initiated partnership with SFUSD Student Health Advisory Board to allow for more youth engagement with the SDDTAC;
7. Reviewed and discussed subcommittee FY 23-24 and FY 24-25 funding recommendations; and
8. Discussed and reviewed subcommittee’s report for Committee’s 2024 Annual Report.

Considerations for Future Community Input Opportunities

The Community Input Subcommittee continues to be committed to ensuring the bidirectional flow of information between communities most impacted by the harms of sugary drinks and SDDTAC. Our work for 2024-2025 includes the following:

- Youth Seat Legislative Amendment Process Research
- Process for seating members and revisiting the process, specifically on the committee imbalance of power of city appointed seats and community seats
- Continued efforts to ensure community engagement
- Continued discussions on SDDT communications/marketing funding to support ongoing and consistent messaging and outreach on SDDT efforts and priorities to engage community and increase awareness

The following members of the Committee were active members of the Community Input Subcommittee during the development of this report:

- Linda Ye, (Seat 6: Youth Seat) *Community Input Subcommittee Co-Chair*
- Eva Holman (Seat 15: SFUSD Parent Advisory Council), *Community Input Subcommittee Co-Chair*
- Chester Williams, (Seat 1: Community Health Equity)
- Marna Armstead, (Seat 3: Community Health Equity), SDDTAC Co-Chair
- Jennifer Lebarre, (Seat 9: San Francisco Unified School District)
- Veronica Shepard, (Seat 12: DPH Food Access/Food Security)
- John Iesha Ena (Seat 2: Community Health Equity)

All members of the subcommittee have extensive work experience with diverse communities disproportionately impacted by the consumption of sugary drinks and have expert knowledge on important issues and concerns affecting these communities. As a result, subcommittee members are well positioned to inform recommendations for community engagement and outreach efforts.

The Community Input Subcommittee met 8 times between April 2023 – Feb 2024:

April 11, 2023	September 12, 2023	December 12, 2023
May 2023 – <i>Cancelled</i>	August 2023 – <i>Cancelled</i>	January 9, 2024
June 13, 2023	October 2023 – <i>Cancelled</i>	February 7, 2023
July 2023 – <i>Cancelled</i>	November 14, 2023	



Infrastructure Subcommittee

The mission of the Infrastructure Subcommittee is to ensure needed staffing and resources are in place to support the functioning, administrative, and evaluation needs of the Committee and Subcommittees.

The duties of the Infrastructure subcommittee are to:

- Provide recommendations regarding the infrastructure resources needed to support implementation of the SDDT which includes infrastructure to:
 - Provide administrative and operational support to the Committee and its Subcommittees;
 - Support coordination across City departments and funded agencies;
 - Ensure community engagement so that Committee recommendations are developed and implemented in partnership with community;
 - Track the economic impact of the tax on small and larger businesses;
 - Support evaluation of funded City agencies and programs;
 - Support the creation of an annual report; and
 - Encourage CBOs and FBOs to respond to City RFPs related to SDDT funds.
- Ensure the full Committee is updated regularly on the progress of implementation and has opportunities to provide input as needed.
- Provide guidance/recommendations in the Committee's media relationships/communications, ensuring alignment and consistency of messaging.
- Provide regional representation with other cities with sugary beverage taxes, regularly reporting back to Subcommittee and full Committee.
- Contextualize the work of the Committee within City Department systems and processes.

The Infrastructure Subcommittee accomplishments include:

1. Reviewed and revised Infrastructure subcommittee workplan;
2. Reviewed Board of Supervisors and Mayor's Office SDDT Budget Recommendations for FY23-24;
3. SDDT budget recommendation process and timeline;
4. Reviewed list of SDDT funded grantees and identified potential CBOs to present at the SDDTAC meetings;
5. Discussed protocol and requirements for community letter of support requests;
6. Discussed, reviewed an approval of revision to SDDTAC bylaws;
7. Began discussions on planning for extension of SDDTAC beyond 2028; and
8. Dedicated time to prepare for the March 2024 report by reviewing FY 23-24 and FY 24-25 funding recommendations.

Future Considerations for Infrastructure Subcommittee

In general, existing data sources for 1) beverage prices, 2) consumer purchasing behavior, and 3) public health (particularly diet-sensitive chronic disease which the Committee is



particularly interested in given the impact of sugary beverages on these conditions) are not robust. It can be difficult to recognize changes in nutrition, food security, physical activity, and diet-sensitive chronic disease. Thus, the Committee has made recommendations to support data and evaluation infrastructure to better understand the impact of the SDDT especially on the communities most affected by the impact of sugary beverages. In addition, the infrastructure subcommittee will ensure the completed versions of the strategic plan are incorporated in future work plans. The Infrastructure Subcommittee will continue to explore a process or a policy around how the SDDTAC Committee can address emerging needs, such as the COVID-19 pandemic.

The following members of the Committee were active members of the Infrastructure Subcommittee during the development of this report:

- Tiffany Kenison (Seat 10 - Department of Public Health, Chronic Disease) Co-Chair as of December 2023
- Michelle Kim (Seat 13, Department of Children Youth & Their Families) Subcommittee Co-Chair
- Linda Barnard (Seat 14, Recreation and Parks Department) Co-Chair as of December 2023

Since the release of last year's annual report, the Infrastructure subcommittee met monthly between April 2023-February 2024 for approximately 2 hours each. Some meetings were cancelled due meeting conflicts or lack of quorum.

April 10, 2023

May 2023 - *Cancelled*

June 12, 2023

July - *Cancelled*

August 14, 2023

September 18, 2023

October 2, 2023

November 13, 2023

December 11, 2023

January 8, 2024

February 12, 2024



C. SDDTAC Budget Recommendations FY2024-25 and 2025-26

The Committee voted on January 17, 2024, for the following budget recommendations. Budget descriptions for each line item follow on subsequent pages.

SDDTAC Budget Recommendations	FY 24-25	%	FY 25-26	%	Department Rx
COMMUNITY-BASED (CB) GRANTS					
Health education, food security, physical activity	\$3,000,000	27.5%	\$3,000,000	27.5%	DPH
CB Organizations working with SFUSD	\$300,000	2.8%	\$300,000	2.8%	DPH
TOTAL CB GRANTS	\$3,300,000	30.3%	\$3,300,000	30.3%	
SAN FRANCISCO UNIFIED SCHOOL DISTRICT (SFUSD)					
School Food, Nutrition Education	\$1,261,000	11.6%	\$1,261,000	11.6%	DCYF/SFUSD
Student Led Action	\$300,000	2.8%	\$300,000	2.8%	DCYF/SFUSD
TOTAL SFUSD	\$1,561,000	14.3%	\$1,561,000	14.3%	
FOOD ACCESS					
Healthy Food Purchasing Supplement	\$1,800,000	16.5%	\$1,800,000	16.5%	DPH
Healthy Retail	\$150,000	1.4%	\$150,000	1.4%	OEWD
TOTAL FOOD ACCESS	\$1,950,000	17.9%	\$1,950,000	17.9%	
ORAL HEALTH					
Community Oral Health Task Forces	\$500,000	4.6%	\$500,000	4.6%	DPH
School-based Sealant Application	\$350,000	3.2%	\$350,000	3.2%	DPH
School-based education and case management	\$200,000	1.8%	\$200,000	1.8%	DCYF/SFUSD
TOTAL ORAL HEALTH	\$1,050,000	9.6%	\$1,050,000	9.6%	
WATER ACCESS					
Water Access - SFUSD	\$100,000	0.9%	\$100,000	0.9%	DCYF/SFUSD
Water Access – Public Spaces	\$100,000	0.9%	\$100,000	0.9%	RPD/PUC
TOTAL WATER ACCESS	\$200,000	1.8%	\$200,000	1.8%	
PHYSICAL ACTIVITY & WELLNESS (RECREATION & PARKS)					
Peace Parks	\$680,500	6.2%	\$680,500	6.2%	RPD
SVIP Funding – Peace Parks Transportation	\$225,000	2.1%	\$225,000	2.1%	DPH



SDDTAC Budget Recommendations	FY 24-25	%	FY 25-26	%	Department Rx
REQUITY: Outreach, scholarships, equity in recreation	\$830,500	7.6%	\$830,500	7.6%	RPD
TOTAL REC & PARKS PHYSICAL ACTIVITY & WELLNESS	\$1,736,000	15.9%	\$1,736,000	15.9%	
LACTATION					
Lactation CBO Grants	\$200,000	1.8%	\$200,000	1.8%	DPH
TOTAL LACTATION	\$200,000	1.8%	\$200,000	1.8%	
INFRASTRUCTURE					
Marketing, Promotion, Outreach	\$75,000	0.7%	\$75,000	0.7%	DPH
Evaluation, Research, Data, Capacity Building	\$300,000	2.8%	\$300,000	2.8%	DPH
Staffing	\$528,000	4.8%	\$528,000	4.8%	DPH
TOTAL INFRASTRUCTURE	\$903,000	8.3%	\$903,000	8.3%	
Total Proposed	\$10,900,000	100%	\$10,900,000	100%	

SDDTAC BUDGET DESCRIPTIONS FY2024-25 and 2025-26

COMMUNITY-BASED (CB) GRANTS

Health Education, Food Security, Physical Activity

City Departments should contract directly with CBOs through an RFP process managed through the Community Health Equity and Promotion (CHEP) Branch of the Department of Public Health. CBG should support community-based programs and services that address the health inequities of those most targeted by the beverage industry. Funding should go to Community Based Organizations (CBOs) and Faith Based Organizations (FBOs) for the following strategies:

- A. **Health Education activities** including, chronic disease prevention, healthy eating and active living, tap water promotion, oral/dental health
- B. **Physical Activity opportunities**, including a) Dance and movement, sports, yoga, walking groups, biking, etc.; b) Changes to the built environment (i.e. sidewalks, streets, parks, buildings, etc.) or safety of the built environment that facilitates increased physical activity and active transportation)
- C. **Food Security**, including a) Community-based pantries, community-based hot meals, community kitchens and community home delivery services; b) Increased financial resources (i.e. wages, income, government nutrition supplements, vouchers, etc.); c) Changes to the built environment that facilitate food security; d) Pursuit of institutional or local policies that facilitate food security; and e) Food Access, including community-based food systems, approaches, community-based pantries, community-



SDDTAC BUDGET DESCRIPTIONS FY2024-25 and 2025-26

- based hot meals, community kitchens and community home delivery services, etc.
- D. Water Promotion, such as support for Spa Water Supplies, station maintenance and beautification, refillable water bottles to distribute to communities, water testing
- E. Community Based Participatory Research

Community Based Organizations (CBO) working with SFUSD

Recommend 3% of all CBO funding should go towards CBOs implementing programs/initiatives that take place in school settings. Funding to issue grants to CBOs should follow the guidelines above.

SAN FRANCISCO UNIFIED SCHOOL DISTRICT (SFUSD)

School food, nutrition education - To improve the quality and appeal of school meals and support nutrition education to increase participation in school meal programs (for example: cooking and serving equipment, staff professional development, and innovative procurement and menu strategies to increase freshly prepared food). Funding will target schools with the largest populations of high-risk students that are disproportionately targeted by the sugary drinks industry.

Student Led Action - Support student led efforts to decrease consumption of sugary drinks and increase awareness of sugary drinks consumption among students, with focus on schools with the largest populations of high-risk students that are disproportionately targeted by the sugary drinks industry. SFUSD should provide to SDDTAC a proposal of how funding will be spent through student led action. Funding to also support adequate staffing for implementation.

FOOD ACCESS

Healthy Food Purchasing Supplement* - Support programs that increase financial resources to purchase healthy food such as vouchers and food purchasing incentives. These funds should be RFP'd out to CBOs and FBOs. Funding should support programs and services that increase financial resources to purchase healthy food; access to healthy fruits and vegetables while minimizing processed foods for high-risk communities; foods that are affordable and convenient; and programs that support the consumption of healthy foods including the ability to prepare and store meals and the knowledge of basic nutrition, food safety and cooking. Priority programs should incorporate a community-based food security perspective and have demonstrated increased ability of food insecure residents to purchase, access, and consume consumption of healthy, fresh, low-to-no cost and culturally appropriate foods, including but not limited to food vouchers/ incentives, transportation and delivery and prepared foods.

Healthy Retail SF - Supporting small business to increase healthy food access in high risk, impacted communities and neighborhoods by:

- A. Supporting business operations
- B. Promoting community engagement



SDDTAC BUDGET DESCRIPTIONS FY2024-25 and 2025-26

C. Improving the retail environment

ORAL HEALTH

Community Oral Health Task Forces - Support development of community infrastructure such as oral health community task forces that incorporate diverse stakeholders for outreach, education, and interventions to address the oral health needs of children in high-risk populations.

School-based Sealant Application - Support SF DPH oral health staff providing cavity-preventing sealants to high-risk populations within SFUSD schools. Sealants protect the chewing surfaces of teeth from cavities. Over 80% of cavities are on the chewing surfaces of the back teeth. There is a direct relationship between sugary drink consumption and dental cavities.

School-based Education and Case Management - Support dedicated SFUSD oral health staff to implement school-based oral health preventive education and dental care coordination programs within SFUSD schools serving high risk target populations. SFUSD oral health staff are key partners in CavityFree SF, SF's local oral health coalition.

WATER ACCESS

SFUSD - SFUSD water station installation. Also, invest in signage and art to 3 stations to pilot evidence-based community informed model for what designs should be and water education. Allows for comparison of usage between pilot stations with artwork/education and those without.

Public Spaces - Public water station installation. Also, invest in signage and art to 3 stations to pilot evidence-based community informed model for what designs should be and water education. Allows for comparison of usage between pilot stations with artwork/education and those without.

RECREATION & PARKS PHYSICAL ACTIVITY & WELLNESS

Peace Parks - To support staffing and supplies, including healthy food, for Peace Parks programs in target populations.

SVIP: Peace Parks Transportation - Transportation for Peace Parks participants

REQUITY: Outreach, Scholarships, recreation equity - Requity offers free dynamic, engaging, and culturally relevant recreation programming to youth under 18 living in shelters, foster care, public housing, or in housing developments. Through a combination of onsite and hyper-local program, coupled with extensive outreach. Requity increases access to and participation in RPD's existing programs and scholarships by educating and informing families on what RPD can offer them.



SDDTAC BUDGET DESCRIPTIONS FY2024-25 and 2025-26

LACTATION

Funding will support community-based organizations that are already supporting breastfeeding.

INFRASTRUCTURE

Marketing, Promotion, Outreach

Funds to DPH/CBOs/Private media firms to support media and communications that include:

- A. grassroots, community-driven awareness campaigns about the intent of the SDDT and the impact of the allocated funds
- B. city-wide communications campaign highlighting the impact and importance of the SDDT
- C. communications materials for merchants
- D. communicate the harmful impact of sugary drinks and healthy alternatives

Examples include community-driven, messaging, print, online, and social media campaigns. This also includes regular communication to SF Board of Supervisors, Mayor's Office, Board of Education and other elected officials via newsletters and other mechanisms.

Evaluation, Research, Data Support, Capacity Building

1. Professional services:
 - a. technical assistance for funded CBO and FBO
 - b. evaluation to develop framework and evaluate city agencies, CBO and FBO, and process evaluations from applicants, etc.
 - c. city attorney to provide ongoing technical consultation
 - d. project management agency to offset fiscal intermediary costs
2. Materials/Supplies for meetings and printing costs
3. Data for collection (pricing), analysis (Nielsen) and purchase (IRI)
4. Capacity Building for SDDT initiative
5. City Attorney Consultation
6. Infrastructure Staffing

Personnel:

1. Backbone staffing to support SDDTAC
2. Staffing to support DPH SDDT implementation of community-based grants
3. Staffing to support research/evaluation of SDDT impact



III. Impact on Beverage Prices and Consumer Purchasing Behavior & Public Health

A. Beverage Pricing and Sales Data

Reducing consumption of sugary drinks is a key goal of the tax; increasing prices through a distributor tax was one strategy to do so. And that approach is working. [A study published in the *JAMA Health Forum* in January 2024](#), found that retail prices of sugary beverages rose by 33% in the two years following the implementation of a local excise tax on sugary drinks in Philadelphia, Oakland, Seattle, San Francisco, and Boulder. The study also found a 33% reduction in purchases and determined there was not an increase in cross-border purchases (when people cross into a different jurisdiction without the tax).

B. Public Health Data Report

An updated [Fall 2023 Data Report](#) was approved by the Committee in October 2023 and can be found at the [SDDTAC webpage](#).

IV. Impact of SDDT

SDDT Fiscal Year 22-23 Evaluation Report

SF Department of Public Health partnered with Raimi + Associates to conduct the evaluation of SDDT funded city agencies, community-based organizations and initiatives. The impact of the SDDT is captured in the evaluation report which can be found in the appendices or on the [Soda Tax SF webpage](#).

SDDT funds support a wide range of programs, services and organizations. In 2022 the evaluation team developed a [data dashboard](#) which provides current and historical information about distribution of SDDT funds.

The following are evaluation findings for SDDT funding in Fiscal Year 2022–2023 (FY 2022–23), which includes July 1, 2022- June 30, 2023.

FINDING 1: Over the past five years, SDDT revenues have been invested in priority populations and places most targeted by the beverage industry.

FINDING 2: Over the past five years, SDDT investments have accelerated structural and systemic changes, especially in access to healthy food.

FINDING 3: Over the past five years, SDDT investments have improved cultural norms related to drinking more water, drinking fewer sugary drinks, and increasing



fruit and vegetable consumption.

FINDING 4: SDDT investments have increased economic opportunities and strengthened resident leadership within communities most burdened by inequities.

The Appendices include more information about funded organizations and their programs (SDDT Funded Initiatives) as well as the complete [2022 – 2023 Annual Evaluation Report](#).



V. Endnotes

- ¹Malik, V.S. (2012, January 31). Sweeteners and Risk of Obesity and Type 2 Diabetes: The Role of Sugar-Sweetened Beverages. *Curr Diab Rep* , 12, 195-203. doi:10.1007/s11892-012-0259-6. Retrieved from <http://link.springer.com/article/10.1007/s11892-012-0259-6>
- ² Wang, J. (2014, April). Consumption of added sugars and development of metabolic syndrome components among a sample of youth at risk of obesity. *Applied Physiology, Nutrition, and Metabolism* , 39(4), 512. doi:10.1111/jhn.12223. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/24669994>
- ³ Johnson, R.K., Appel, L., Brands, M., Howard, B., Lefevre, M., Lustig, R., Sacks, F., Steffen, L., & Wyllie-Rosett, J. (2009, September 15). Dietary sugars intake and cardiovascular health: a scientific statement from the American Heart Association. *Circulation* , 120(11), 1011-20. doi:10.1161/CIRCULATIONAHA.109.192627. Retrieved from <http://circ.ahajournals.org/content/120/11/1011.full.pdf>
- ⁴ Sohn W, Burt BA, Sowers MR. Carbonated soft drinks and dental caries in the primary dentition. *J Dent Res*. Mar 2006;85(3):262- 266.
- ⁵ Sohn W, Burt BA, Sowers MR. Carbonated Soft Drinks and Dental Caries in the Primary Dentition. *J Dent Res*. 2006; 85(3): 262– 266.
- ⁶ Zheng, M. (2014, February). Liquid versus solid energy intake in relation to body composition among Australian children. *J Hum Nutr Diet* . doi:10.1111/jhn.12223
- ⁷ U.S. Department of Agriculture, U.S. Department of Health and Human Services. (2010). Dietary Guidelines for Americans, 2010. Page 28. Retrieved from [\[LINK\]](#)
- ⁸ Wang, J. (2014, April). Consumption of added sugars and development of metabolic syndrome components among a sample of youth at risk of obesity. *Applied Physiology, Nutrition, and Metabolism* , 39(4), 512. doi:10.1111/jhn.12223. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/24669994>
- ⁹ Trust for America's Health and Robert Wood Johnson Foundation. F as in Fat: How Obesity Threatens America's Future – FastFacts: Obesity and Health. 2013. Accessed January 15, 2014 at <http://fasinfat.org/facts-on-obesity-and-health/>
- ¹⁰ Malik, V.S. (2012, January 31). Sweeteners and Risk of Obesity and Type 2 Diabetes: The Role of Sugar-Sweetened Beverages. *Curr Diab Rep* , 12, 195-203. doi:10.1007/s11892-012-0259-6. Retrieved from <http://link.springer.com/article/10.1007/s11892-012-0259-6>
- ¹¹ U.S. Department of Agriculture, U.S. Department of Health and Human Services. (2010). Dietary Guidelines for Americans, 2010. Page 28. Retrieved from [\[LINK\]](#)
- ¹² Wang, J. (2014, April). Consumption of added sugars and development of metabolic syndrome components among a sample of youth at risk of obesity. *Applied Physiology, Nutrition, and Metabolism* , 39(4), 512. doi:10.1111/jhn.12223. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/24669994>
- ¹³ Malik, V.S. (2012, January 31). Sweeteners and Risk of Obesity and Type 2 Diabetes: The Role of Sugar-Sweetened Beverages. *Curr Diab Rep* , 12, 195-203. doi:10.1007/s11892-012-0259-6. Retrieved from <http://link.springer.com/article/10.1007/s11892-012-0259-6>
- ¹⁴ Rosinger A, Herrick K, Gahche J, Park S. Sugar-sweetened Beverage Consumption Among U.S. Youth, 2011-2014. *NCHS Data Brief*. 2017;(271):1-8.
- ¹⁵ Puhl RM, Heuer CA. Obesity stigma: important considerations for public health. *Am J Public Health* 2010; 100:1019-28.
- ¹⁶ Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a fundamental cause of population health inequalities. *Am J Public Health* 2013; 103:813-21.



- ¹⁷ Puhl, RM, Heuer CA. The stigma of obesity: a review and update. *Obesity (Silver Spring)* 2009; 17:941-64.
- ¹⁸ Spahlholz J, Baer N, Konig HH, et al. Obesity and discrimination – a systemic review and meta-analysis of observational studies. *Obes Rev* 2016;17:43-55.
- ¹⁹ Seacat JC, Dougal SC, Roy D. A daily diary assessment of female weight stigmatization. *J Health Psychol* 2016;21:228-40.
- ²⁰ Cassady DL, Liaw K, Miller LMS. Disparities in Obesity-Related Outdoor Advertising by Neighborhood Income and Race. *J Urban Health*. 2015;92(5):835-842. doi:10.1007/s11524-015-9980-1
- ²¹ Adjoian T, Dannefer R, Sacks R, Van Wye G. Comparing Sugary Drinks in the Food Retail Environment in Six NYC Neighborhoods. *J Community Health*. 2014;39(2):327-335. doi:10.1007/s10900-013-9765-y
- ²² Kit BK, Fakhouri THI, Park S, Nielsen SJ, Ogden CL. Trends in sugar-sweetened beverage consumption among youth and adults in the United States: 1999-2010. *Am J Clin Nutr*. 2013;98(1):180-188. doi:10.3945/ajcn.112.057943
- ²³ Kit BK, Fakhouri THI, Park S, Nielsen SJ, Ogden CL. Trends in sugar-sweetened beverage consumption among youth and adults in the United States: 1999-2010. *Am J Clin Nutr*. 2013;98(1):180-188. doi:10.3945/ajcn.112.057943
- ²⁴ Bleich SN, Vercammen KA, Koma JW, Li Z. Trends in Beverage Consumption Among Children and Adults, 2003-2014. *Obes Silver Spring Md*. 2018;26(2):432-441. doi:10.1002/oby.22056
- ²⁵ Choi YY, Andreyeva T, Fleming-Milici F, Harris JL. U.S. Households' Children's Drink Purchases: 2006-2017 Trends and Associations with Marketing. *Am J Prev Med*. 2021;0(0).doi:10.1016/j.amepre.2021.06.013
- ²⁶ Silver LD, Padon AA, Li L, Simard BJ, Greenfield TK (2023) Changes in sugar-sweetened beverage consumption in the first two years (2018 – 2020) of San Francisco's tax: A prospective longitudinal study. *PLOS Glob Public Health* 3(1): e0001219. <https://doi.org/10.1371/journal.pgph.0001219>
- ²⁷ U.S. Department of Health and Human Services, U.S. Department of Agriculture. 2015-2020 Dietary Guidelines for Americans. U.S. Department of Health and Human Services and U.S. Department of Agriculture, 2015:144.
- ²⁸ Sanchez-Romero LM, Penko J, Coxson PG, Fernandez A, Mason A, Moran AE, et al. (2016) [Projected Impact of Mexico's Sugar-Sweetened Beverage Tax Policy on Diabetes and Cardiovascular Disease: A Modeling Study.](#)
- ²⁹ Lee, MM, Fable J, Schillinger D, Basu S, McCulloch CE, Madsen KA. Sugar-Sweetened Beverage Consumption 3 Years After the Berkeley, California, Sugar-Sweetened Beverage Tax. *Am J Public Health*. 2019 Apr;109(4):637-639. Doi:10.2105/AJPH.2019.304971. Epub 2019 Feb 21. PMID:30789779; PMCID: PMC6417561.



VI. Appendices

- A. SDDT Funded Initiatives FY 22-23
- B. SDDT FY 22-23 Data Report
- C. SDDT FY 22-23 Evaluation Report
- D. Article 8: Sugary Drinks Distributor Tax Ordinance (San Francisco Business and Tax Regulations Code)
- E. Article XXXIII: Sugary Drinks Distributor Tax Advisory Committee (San Francisco Administrative Code)
- F. Sugary Drinks Distributor Tax Advisory Committee Bylaws



Appendix A

SDDT Funded Initiatives FY 2022 - 2023



FY 2023-2024 Sugary Drinks Distributor Tax (SDDT) Funded Entities



2023- 2024 SDDT Healthy Communities Grants – through San Francisco Public Health Foundation

ORGANIZATION(S)	FY23-24 BUDGET	NEIGHBORHOOD(S)	PRIORITY POPULATION(S)	MISSION AND PROGRAM DESCRIPTION
All My Uso's (AMU) & Fa'atasi Youth Services	\$250,000	Bayview-Hunters Point, Potrero Hill, Sunnydale	Pacific Islander, Low Income	AMU's mission is to celebrate diversity and empower underrepresented communities while promoting cultural identity. Fa'atasi Youth Services' mission is to lower the obesity rate within the Native Hawaiian Pacific Islander youth by promoting health through fitness and recreational opportunities. Funding will support the OLAGA (Opportunities to Live and Grow for our Aiga) project, a partnership between AMU and Fa'atasi Youth Services, which will support career and leadership development for Community Health Workers and deliver programs and services focused on healthy eating, physical activity, and cross-generational connections for Pacific Islander families in San Francisco. Contact: Christine Mauia, christine@allmyusos.org and Sylvia Selinger, faatasiyouthservices@gmail.com
Association of the Ramaytush Ohlone	\$250,000	Excelsior, Crocker-Amazon, Visitacion Valley, Portola, Mission	Native American/ American Indian, Low Income	The Association of Ramaytush Ohlone (ARO) represents the interests of the original peoples of the San Francisco Peninsula. Funding will support the establishment of an urban farm in San Francisco which will increase access to ancestral land and nature; promote culture and traditional health activities; provide training, employment, and educational opportunities in Native land management and food production; and increase the use and consumption of native foods and medicinal plants while decreasing the use of processed, sugary foods and beverages. Contact: aro@ramaytush.org
Community Awareness Resource Entity (C.A.R.E.)	\$250,000	Potrero Hill	Black/ African American Low Income	The mission of C.A.R.E. is to build healthy communities that reflect our core values with concern for youth and young adults who are most vulnerable, while maintaining accountability to the community. C.A.R.E. serves the Potrero Hill neighborhood, focusing on the Potrero Annex and Terrace. Funding will support the implementation of the TEENS program (Teens Eating for Energy and Nutrition at School), a project that works across the spectrum of chronic disease prevention through education, programs, and services. The funding will also support youth leadership development and community gardens in Potrero. Contact: Uzuri Pease-Green, uzuri@sf-care.org

FY 2023-2024 Sugary Drinks Distributor Tax (SDDT) Funded Entities



Farming Hope	\$250,000	Civic Center, Tenderloin	Latinx, Low Income	Farming Hope's mission is to empower folks experiencing major barriers to employment to grow and cook food to sustain themselves and their communities. SDDT funding will support their work across the Spectrum of Prevention including their paid Apprenticeship program, Healthy Meals & Groceries Program, and Farming Hope's leadership on the city-wide coalition Food and Agriculture Action Coalition Toward Sovereignty (FAACTS). Contact: Haley Nielson, giving@farminghope.org
Florence Fang Community Farm	\$250,000	Bayview-Hunters Point	Black/ African American, Low Income	Florence Fang Community Farm is the only USDA-registered farm in San Francisco. Their Bayview Black Organic Farmers Program rehabilitates land and spirit in the San Francisco Bayview-Hunters Point community. Funding will support garden education for Bayview low-income youth, garden trainee youth career development, capacity building for local retailers and restaurants to offer neighborhood-grown produce at attractive prices, and policy change efforts to lower the cost of water for community and family gardens in the Black community. Contact: Ted Fang, tfang@asianweek.com
South of Market Community Action Network (SOMCAN)	\$250,000	SOMA, Tenderloin, Excelsior	Asian, Low Income	SOMCAN is a multi-issue and multi-strategy organization that nurtures the lives of youth, families, individuals and workers. Funding will support the Our Health/Kalusugan, Our Community/Bayan program which seeks to advance the recommendations/ potential solutions from their 2020 community assessment report and continue increasing Filipino Americans' knowledge, address attitudes and beliefs, and implement behavior-changes activities to prevent chronic disease at all levels. Contact: Angelica Cabande, acabande@somcan.org
Total	\$1,500,000			

FY 2023-2024 Sugary Drinks Distributor Tax (SDDT) Funded Entities



2023-2024 SDDT Healthy Schools Grants – through San Francisco Public Health Foundation

ORGANIZATION	FY23-24 BUDGET	NEIGHBORHOOD(S)	POPULATION(S)	MISSION AND PROGRAM
Project Commotion	\$85,000	City wide schools	Public school age youth	Project Commotion will bring creative movement programming to SFUSD's youngest learners, working to establish healthy habits during and beyond the school day. Project Commotion will provide training for teachers on easy-to-apply strategies such as brain breaks, transition activities, and new recess games. Student and community engagement pilots will help activate the larger school community. Contact: Susan Osterhoff, susan@projectcommotion.org
Ultimate Impact	\$85,000	City wide schools	Public school age youth	Ultimate Impact offers school day and after-school programming for students of all ages primarily in Bayview Hunter's Point, Vis Valley, the Mission, Portola, and Double Rock. Programming provides youth an opportunity to have positive peer interactions, receive consistent adult mentorship, be active, and have fun while playing ultimate frisbee. Coaches use trauma-informed practices and activities to support social and emotional growth. Contact: Rocky Beach, rocky@ultimate-impact.org
Urban Sprouts	\$100,000	City wide schools	Public school age youth	Urban Sprouts offers garden-based education to high schoolers in the southeast sector of the city. Urban Sprouts seeks to honor and restore cultural connections to health and wellness, reduce health disparities, and support job readiness through training and leadership opportunities. Their interactive gardens offer space for meditation, physical activity, community gathering, and sources of fresh nutritious foods. Contact: Herman Yee, herman@urbansprouts.org
Total	\$270,000			

FY 2023-2024 Sugary Drinks Distributor Tax (SDDT) Funded Entities



2023-2024 SDDT Healthy Communities SUPPORT Grants – through San Francisco Public Health Foundation

ORGANIZATION	GRANT TYPE	FY 23-24 BUDGET	PRIORITY POPULATION(S)	NEIGHBORHOOD(S)	PROJECT DESCRIPTION/EVENT
Children's Council	Capacity Building	\$60,000	B/AA	Bayview Hunters Point, Excelsior, Mission, OMI, Outer Mission	Purchase of electric vehicle (Chevy Bolt) to conduct Child and Adult Care Food Program (CACFP) monitoring visits.
Foodwise	Capacity Building	\$59,892	Latinx	Ferry Building, Citywide	Equipment upgrades for teaching kitchen including double oven, dishwasher, monitor, chairs.
Instituto Familiar de la Raza	Capacity Building	\$60,000	Latinx	Mission, Excelsior, SOMA, BVHP, Tenderloin	Development and implementation of new training curriculum for Indigena and Latinx Promotores.
Walk San Francisco	Capacity Building	\$49,105	B/AA	Citywide	Upgrade customer relationship management (CRM) system to Salesforce.
Project Open Hand	Capacity Building	\$59,462	Latinx	Tenderloin, Polk/Russian Hill, Vis Valley, Sunnysdale	Purchase of equipment and software to improve customer experience at the SF Grocery Center including digital displays, desktop and laptop computers for staff, POS System Hardware, client engagement software, and computer upgrades for staff.
Chinatown YMCA	Event Sponsorship	\$10,000	Asian	Chinatown	46th Annual Lunar New Year Run, Sunday, March 3, 2024.
Mission Science Workshop	Event Sponsorship	\$5,073	Latinx	Excelsior	"Giant Blood Vessel Experience", Saturday, May 18, 2024
National Coalition of 100 Black Women	Event Sponsorship	\$9,890	B/AA	Bayview Hunters Point, Fillmore, Vis Valley, OMI	"We've Got the Power to be Healthy: A Day Party Movement", April 20, 2024.
Bay Area SCORES	Event Sponsorship	\$10,000	Latinx	SOMA, Western Addition, Mission, Tenderloin, Bayview Hunters Point, Vis Valley	Healthy Eating Active Living Community Wellness Fairs, May 17, 2024 and May 18, 2024).
Cultura y Arte Nativa de las Americas (CANNA)	Event Sponsorship	\$9,999	Latinx	Mission	"Mission Food Hub Bicycle Rideout", Sunday, May 5, 2024.
The Healing Well	Event Sponsorship	\$9,775	Latinx	Tenderloin	Spring Wellness Fair, date TBD in March or April 2024.
RAMS	Event Sponsorship	\$10,000	Pacific Islander	Citywide	Asian Pacific American Mental Health Day, May 10, 2024.
Total		\$353,196			

FY 2023-2024 Sugary Drinks Distributor Tax (SDDT) Funded Entities



2023- 2024 SDDT Policy, Systems, Environmental Change (PSE) Grants – through SF Department of Public Health

ORGANIZATION	FY23-24 BUDGET	NEIGHBORHOOD(S)	POPULATION(S)	MISSION AND PROGRAM
Central American Resource Center-CARECEN	\$500,000	Mission	Low income, Latinx, immigrants	CARECEN uses the CAM model to work on PSE changes to increase access to health information, while engaging ALL San Francisco families in activities aimed at reducing consumption of sugary drinks, and increasing water consumption, healthy nutrition, and physical activity to manage chronic disease/obesity. Reduce systemic, environmental, and other barriers to health through community informed policy recommendations. Contact: Vanessa Bohm, vanessa@carecensf.org
18 Reasons	\$500,000	City Wide, Bayview	Low income	The goal of this project is to work with priority populations to develop policy, systems, and/or environmental programs that increase consumption of healthy food and decrease consumption of sugar-sweetened beverages. Contact: Sarah Nelson, sarah@18reasons.org
Tenderloin Neighborhood Development Corporation	\$475,000	Tenderloin, Mission Bay	Low income	The goal of the Promoting Health Equity Program is two-fold; one is Kain Na meaning “Let’s Eat!”, providing a space for low-income Mission Bay community members who are facing food insecurity to have access to weekly groceries, engage in family-friendly food & nutrition activities and second the Healthy Retail SF (HRSF) will convert corner stores into healthy food retailers to empower low-income San Franciscans of all ethnicities to have access to affordable healthy food. Contact: Tom Georgevits, tgeorgevits@tndc.org
Total	\$1,475,000			

FY 2023-2024 Sugary Drinks Distributor Tax (SDDT) Funded Entities



Healthy Food Purchasing Supplement Grants – through SF Public Health Foundation

ORGANIZATION	FY 23-24 BUDGET	NEIGHBORHOOD(S)	POPULATION(S)	MISSION AND PROGRAM
Heart of the City Farmers Market	\$300,000	City wide, especially Tenderloin, Mid Market, SOMA, Chinatown	Low income, CalFresh Clients	Heart of the City Farmers Market is a farmer-operated market open every Sunday, Wednesday in Fulton Plaza in San Francisco’s Civic Center. Heart of the City Farmers Market has the distinction of being the largest farmers’ market to be part of the CalFresh/Electronic Benefit Transfer (EBT) program in California, and one of the five largest in the nation. The “Market Match” incentive program provides a dollar-for-dollar match of up to \$5 when an EBT purchase is made. This program allows CalFresh clients to expand their purchases of fresh, locally grown produce from California farmers. It also directly supports local farmers through direct sales to consumers. HOCFM also accepts EatSF Vouchers. Serves over 6,000 unique families each month. Kate Creps Kate@hotcfarmersmarket.org
Total	\$300,000			

Healthy Food Purchasing Supplement Grants – through SF Department of Public Health

ORGANIZATION	FY 23-24 BUDGET	NEIGHBORHOOD(S)	POPULATION(S)	MISSION AND PROGRAM
EatSF/ Vouchers 4 Veggies/UCSF	\$700,000	City wide	Very low income Pregnant People, Families, and Single Adults	EatSF will increase food security and increase fruit and vegetable consumption. EatSF is a fruit and vegetable voucher program designed to make healthy food in neighborhood supermarkets, grocery stores and farmers markets affordable for low-income families and individuals. EatSF partners with the SFDPH Women, Infants, and Children (WIC) program to provide vouchers to pregnant WIC clients for 9 months; \$700k of the funds will go to WIC clients. Contact: Cissie Bonini, Cissie.Bonini@ucsf.edu
Total	\$700,000			

FY 2023-2024 Sugary Drinks Distributor Tax (SDDT) Funded Entities



Oral Health Community Task Force Grants – through San Francisco Department of Public Health

ORGANIZATION	FY 23-24 BUDGET	NEIGHBORHOOD(S)	FOCUS AREA(S)	MISSION AND PROGRAM
Chinatown Children’s Oral Health Task Force	\$150,000	Chinatown / citywide	Parents/guardians, other caregivers, as Asian American and Chinese-speaking low-income families	The Chinatown Task Force on Children’s Oral Health is led by NICOS Chinese Health Coalition. This task force targets parents/guardians and other caregivers living in Chinatown, as well as Asian American and Chinese-speaking low-income families living throughout San Francisco. Contact: Kent Woo, kentwoo@nicoschc.org
Mission Children’s Oral Health Task Force	\$150,000	Mission /citywide	Parents/guardians and other caregivers, Latinx and Spanish-speaking low-income families	The Mission Children’s Oral Health Task Force is led by CARECEN SF (Central American Resource Center). This task force targets parents/guardians and other caregivers living in the San Francisco Mission District, but also Latinx and Spanish-speaking low-income families living throughout San Francisco. Contact: Vanessa Bohm, vanessa@carecensf.org
District 10 Children’s Oral Health Task Force	\$150,000	Visitacion Valley/Bayview Hunters Point / citywide	Parents/guardians and other caregivers, Black/African American (B/AA) and other low-income families	The District 10 Children’s Oral Health Task Force is led by Dental Robin Hood. This task force targets parents/guardians and other caregivers living in the District10 area of San Francisco, but also Black/African American (B/AA) and other low-income families living throughout San Francisco. Contact: Rubin Sorrell, dentalrobinhood@gmail.com
TOTAL	\$450,000			

FY 2023-2024 Sugary Drinks Distributor Tax (SDDT) Funded Entities



SDDT Funded City Agencies

ORGANIZATION	FY23-24 BUDGET	NEIGHBORHOOD(S)	POPULATION(S)	MISSION AND PROGRAM
SF Unified School District	\$225,000	City Wide	SFUSD Students	Student led efforts to decrease consumption of sugary drinks and increase awareness of sugary drinks consumption among students, with focus on schools with the largest populations of high-risk students that are disproportionately targeted by the sugary drinks industry. Saeeda Hafiz: hafizs@sfusd.edu
SF Unified School District	\$1,135,000	City Wide	SFUSD Students	To improve quality and appeal of school meals to increase participation in school meal programs and support nutrition education. Funding to target schools with the largest populations of high-risk students that are disproportionately targeted by the sugary drinks industry. Jennifer LeBarre: lebarrej@sfusd.edu and Saeeda Hafiz: hafizs@sfusd.edu
SF Unified School District	\$340,000	City Wide	SFUSD Students	SFUSD water station installation. Additionally invest in adding signage and art to 3 stations to pilot evidence based community informed model for what designs should be. As well as water education. Allows for comparison of usage b/t pilot stations with artwork/ed and those without. Saeeda Hafiz: hafizs@sfusd.edu
Dept Public Health – MCAH and Health Network	\$363,893	City Wide	SFUSD Students in K-5	Sealant application, within SFUSD schools serving high risk target populations Irene Hilton: Irene.hilton@sfdph.org
Office of Economic & Workforce Development	\$150,000	City Wide	Neighborhoods with limited healthy food	Support small business to increase healthy food access in high risk and impacted communities/neighborhoods by 1) supporting business operations; 2) promoting community engagement; 3) improving retail environment. Larry McClendon: Larry.Mcclendon@sfgov.org
Recreation and Parks Department	\$2,008,734	City Wide	Low Income youth	Initiative to expand recreation scholarships and outreach to youth under 18 and living in public and low-income subsidized housing. Linda Barnard: linda.barnard@sfgov.org
Recreation and Parks Department	\$670,000	Visitacion Valley, BVHP, Potrero Hill	Low Income Transitional Age Youth	Peace Parks provide opportunities for recreation to underserved communities during times when youth don't have such opportunities. PP serves youth 18-25 years old, but anyone is welcome to join this program. Goal is to make communities safer, feel more together and to use the parks in SF more often. Linda Barnard: linda.barnard@sfgov.org
Total	\$4,892,627			

Appendix B

SDDT FY 22-23 Data Report





San Francisco
Sugary Drinks Distributor Tax
Advisory Committee
2023 DATA REPORT





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EXECUTIVE SUMMARY

Sugar-Sweetened Beverages Contribute to Diet-Sensitive Chronic Diseases in San Francisco and the Sugary Drinks Distributor Tax (SDDT) Seeks to Mitigate the Effects

A large body of evidence exists indicating that sugar-sweetened beverage (SSB) consumption increases risk for diet-sensitive chronic diseases, particularly cavities, type 2 diabetes, hypertension, and heart disease.¹⁻⁷ SSB consumption in San Francisco is greatest among the very populations most impacted by diet-sensitive chronic diseases. The percentage of Pacific Islander, Black/African American, Latinx and Filipinx students reporting daily consumption of SSBs is 1.4 to 2.1 times higher than White or Asian students. This is by design. The beverage industry targets youth, their parents, and especially low-income communities of color to drink their products, despite the scientific evidence that links overconsumption of SSB to diet-sensitive chronic diseases. The industry spends billions of dollars advertising SSB, undermining public health efforts that lead to long-term negative impacts on health.

Excise taxes on SSB are an effective public health intervention meant to decrease SSB consumption and the downstream health consequences of SSB consumption. In this vein, it is one of the few financial policy tools community and public health advocates have to level the playing field with an industry that receives financial subsidies to make their products cheaper and to advertise to youth.⁸ Currently we know the following on the state of SSB prices, sales and consumption in San Francisco:

- **Sugar-Sweetened Beverage Prices:** Between April-June 2017 (before tax collection began) and April-June 2018 (after tax collection began), the prices of SSB, as compared to prices in comparison cities without SSB taxes-- San Jose and Richmond-- increased by 0.61 - 1.25 cents per ounce (variable on container size) – essentially what was expected as the excise tax was a 1 cent per ounce tax on distributors bringing SSBs into San Francisco. The greatest increases were seen for sports drinks and coffee drinks. The price of non-SSBs did not

A note regarding use of obesity as a measure of health. Evolving research indicates that focusing on overweight/obesity furthers stigma and can exacerbate or contribute to poor health. Whereas the Healthy Eating Active Living Team in San Francisco Department of Public Health (SFDPH)'s Community Health Equity and Promotion Branch have focused on preventing chronic disease and promoting nutrition and physical activity as opposed to obesity prevention; their recommendation is to shift from using obesity as a measure in this work and focus instead on other health conditions impacted by SSB consumption. The Canadian Medical Association Journal provides additional context to this recommendation: "Although obesity has been shown to contribute to certain types of health problems, anti-fat stigma is also a threat to health. Anti-fat stigma adds both psychological and physiologic stress to people who are considered excessively fat, which some experts argue partially accounts for health disparities by weight.^{9,10} Anti-fat stigma is underpinned by common assumptions that fatness is highly malleable and under individual control, implying that people who are visibly fat have poor self-control, are unknowledgeable or are not invested in their health. Puhl and Heuer's 2009 review of over 200 studies (with experimental, survey, population-based and qualitative designs) highlighted how common such stigmatizing assumptions are and the discrimination that follows in multiple sectors.¹¹ In a 2016 systematic review and meta-analysis, Spahlholz and colleagues confirmed high rates of perceived weight-based discrimination in many life domains.¹² Stigmatization can be a daily occurrence; an analysis involving 50 overweight or obese women in the United States who filled out the Stigmatizing Situations Inventory over 298 days reported more than 1000 weight-stigmatizing events. Body mass index (BMI) was the strongest predictor.¹³



increase except for diet soda which increased by 0.48-0.71 cents per ounce.

■ **Sugar-Sweetened Beverage Sales:** Regular sodas are the most purchased SSB in San Francisco. Data from 2015 to 2017, before tax collection began, show a small but statistically significant decreasing trend in sales for regular soda.

■ **Sugar-Sweetened Beverage Consumption:** The Youth Risk Behavior Survey (YRBS) which is conducted among middle and high school students, found that the percent of students who drank SSBs daily declined among students from 2015 through 2019 and then increased in 2021. In 2017 the percent of high school students who consumed at least one SSB every day was 13%, which decreased to 12% in 2019 before increasing to 17% in 2021.

The SDDT is also expected to impact health through use of revenue generated by the tax to improve the nutrition and physical activity environments in San Francisco, and to create economic opportunities and provide direct services for heavily impacted populations.

Preventable, diet-sensitive diseases are prevalent, have major health and economic impacts, and are unequally distributed in San Francisco.

In San Francisco, 6 of the 10 leading causes of death are preventable, diet-sensitive chronic diseases— ischemic heart disease, hypertension, stroke, Alzheimer’s, diabetes mellitus, and colon cancer. Between 2010 and 2021, death rates due to ischemic heart disease, hypertensive disease, and colon cancer decreased or remained stable, while rates due to Alzheimer’s, cerebrovascular disease, and diabetes increased.

These 6, and other diet sensitive chronic diseases affect San Francisco’s residents differentially with residents of color and those with lower incomes most affected.ⁱ

Overall, Black/African American and Pacific Islander residents are the most impacted, particularly in these ways:

- Mortality rates for 5 of the 6 leading causes of death that are diet-sensitive are highest among Black/African American residents.ⁱⁱ
- Diabetes and hypertension rates among Black/African American residents are 2 to almost 3 times as high as the next highest group.
- Not only are rates higher, but Black/African American residents typically die younger due to these conditions. In San Francisco, on average, Black/African American males and females who die from diabetes live 3-9 fewer years than men and women of other races/ethnicities who die from diabetes.
- Rates of emergency room visits due to non-traumatic dental conditions are 2-18 times higher among Black/African American, Pacific Islander, and Native American residents as compared to White, Latinx and Asian residents.
- Note: data are often not sufficiently available for Native Hawaiian or Other Pacific Islander residents but the data we do have suggest they face similar degrees of health disparities as Black/African American residents.

Furthermore:

- While decreases seen for the age-adjusted mortality rate due to hypertension were observed for all race/ethnicities, the mortality rate due to colon cancer increased for White residents.
- Rates of emergency room visits due to diabetes among Black/African American residents are 25 times as high as those seen for White and Asian residents.

ⁱ Data are not available for all communities in San Francisco who likely experience health disparities. Data are often collected in a way that does not include certain designations and, when collected, data for smaller populations may be too sparse to calculate stable estimates and/or to protect the identity of affected persons.

ⁱⁱ Insufficient data is available to produce mortality rates for specific causes for Native Hawaiian or Pacific Islanders and American Indian and Alaska Native residents. Comparisons here are made with Asian, Latin(a), and White residents.



- Male Native Hawaiian and Other Pacific Islander residents have the most years of life lost due to diet-sensitive causes of death – around three times as much as White residents.
- While the disparities are not as vast as those seen for Black/African American and Native Hawaiian and Other Pacific Islanders, the following is occurring:
 - diabetes ER visit and hospitalization rates are also elevated among Latinx, and
 - the Alzheimer’s mortality rate is elevated among White residents.

Those most impacted by diet-sensitive chronic diseases are impacted at younger ages. Black/African American residents experience the health consequences of diabetes, hypertension and heart failure earlier in life than do other residents.ⁱⁱⁱ Hospitalization rates for Black/African American residents in their 30s and 40s are comparable to those of other race/ethnicities who are 30 or more years older.

In fact, for diabetes, hospitalization rates are higher among Black/African American 18-34 year-old residents than they are for others at any age.

San Francisco’s youth are at risk for and experiencing diet-sensitive chronic diseases. In school year 2018-2019, 35% of 5th grade students, 36% of 7th graders, and 32% of 9th graders had a measured body composition outside the healthy fitness zone. In 2022, 35% of SFUSD kindergarteners had experienced caries and 23% had untreated caries and rates of experiencing caries were about three times higher for Black/African American, Asian, and Latinx students than for White students. For both healthy body weight and oral health, economically disadvantaged children are at highest risk.

The economic impacts of diet-sensitive chronic diseases are immense. A 2013 report estimated the direct and indirect costs of obesity and diabetes in San Francisco at \$748 million. The report found the estimated costs of

obesity and diabetes attributed to SSBs was \$48.1 to \$61.8 million. Hospitalization data for 2016 show that together diabetes, hypertension and ischemic heart failure were the primary causes of 12,448 hospital admissions resulting in more than 29,000 days of hospitalization and a partial reporting of associated medical charges exceeding \$350 million in San Francisco.

To Address Diet-Sensitive Chronic Diseases in San Francisco, Upstream Causes Must be Targeted

Both the 2016 and 2019 San Francisco Community Health Needs Assessments identified poverty and racial health inequities as foundational issues which must be addressed in order to improve the health of all San Franciscans. Healthy eating and active living are only possible where conditions support them and many, especially Black/African American, Pacific Islanders, and Latinx San Franciscans do not experience those conditions. From 2016 to 2018 22.4% of Black/African American and 23.9% of Latinx pregnant women were food insecure compared to 9% of Asian pregnant women. A percentage of food insecurity among White pregnant women could not be calculated due to fewer than 5 women reporting food insecurity, the relative standard error was greater than 50%, or fewer than 100 White pregnant women had a live birth. The percentage of children living in poverty varies by race/ethnicity with 34% of Black/African American and 16% of Hispanic or Latino children under 18 years old living in poverty in 2021. Educational attainment and median household income vary drastically by race/ethnicity; the median household income for Black/African American and Hispanic or Latino households in San Francisco is only \$44k and \$85k, respectively, in a city where an estimated \$60K is considered a self-sufficient income in 2021 for a single adult without any children while \$124k is considered self-sufficient for a single adult with an infant. Upstream determinants of health – inadequate resources, inadequate education, experiencing an unjust criminal justice system, housing instability, systemic racism, and more, build up in a community and lead to the consistent health disparities that we see.

iii Data for Pacific Islanders are sparse but also suggest higher rates at younger ages.



BACKGROUND

In November of 2016, the voters of San Francisco approved the passage of Proposition V. Proposition V established a 1 cent per ounce fee on the initial distribution of a bottled sugar-sweetened beverage, syrup, or powder, within the City and County of San Francisco.¹⁴ The legislation defines a sugary drink, or sugary-sweetened beverage (SSB), as follows:

A sugar-sweetened beverage (SSB) means any non- alcoholic beverage intended for human consumption that contains caloric sweetener and contains 25 or more calories per 12 fluid ounces of beverage, including but not limited to all drinks and beverages commonly referred to “soda,” “pop,” “cola,” soft drinks” “sports drinks,” “energy drinks” “sweetened iced teas” or any other similar names.

Proposition V established the Sugary Drinks Distributor Tax Advisory Committee (Committee) whose powers and duties are to make recommendations to the Mayor and the Board of Supervisors on the effectiveness of the Sugary Drinks Distributor Tax (SDDT) and to submit a report that evaluates the impact of the SDDT on beverage prices, consumer purchasing behavior, and public health. The Committee also provides recommendations regarding the potential establishment and/or funding of programs to reduce the consumption of SSBs and to otherwise address diet-sensitive diseases in San Francisco.

Report Requirements and Process

Starting in 2018, by March 1, of each year, the Committee shall submit to the Board of Supervisors and the Mayor a report that evaluates the impact of the SDDT on beverage prices, consumer purchasing behavior, and public health. The Committee in their report shall make recommendations regarding the potential establishment and/or funding of programs to reduce the consumption of SSBs in San Francisco. This data report fulfills the requirement to evaluate the impact of the SDDT.

While the SDDTAC has submitted its annual report and recommendations since 2018, this is the first time the

[data report has been updated since 2019](#) due to the COVID-19 pandemic. As of 2024, we are on track to resume the annual data report.

The goals of the SDDT, aka Soda Tax, are long-term. It takes time to see a decrease in diet-related chronic diseases. Whereas this data report may not yet show desired trends in health outcomes, Raimi & Associates, [the evaluators for SDDT-funded work](#), have found positive changes with respect to norms and behavior changes. It takes time to translate into improved health outcomes, and more work and investments are needed. To help move forward these desired health outcomes, the newly funded second cohort of community-based grantees are being asked to include education about water and SSB in a more intentional manner.

Relationship Between Sugar-Sweetened Beverage Consumption, Health, and Health Equity

A large body of evidence exists indicating that SSB consumption increases risk for cavities, type 2 diabetes, hypertension, heart disease and death.¹⁵⁻²¹ Although SSBs can contain hundreds of calories in a serving, they do not signal “fullness” to the brain and thus facilitate overconsumption.²² SSBs are the leading source of sugar in the American diet, contributing 36% of the added sugar Americans consume.

Numerous organizations and agencies, including the American Heart Association, American Diabetes Association, American Academy of Pediatrics, Institute of Medicine of the National Academies, American Medical Association, and the Centers for Disease Control, recommend limiting intake of added sugar and SSBs to improve health. Studies show that SSBs flood the liver with high amounts of sugar in a short amount of time and that this “sugar rush” over time leads to fat deposits and metabolic disturbances that are associated with the development of type 2 diabetes, cardiovascular disease, and other serious health problems.²³ Of note, every additional sugar-sweetened beverage consumed daily can increase a child’s risk of developing type 2 diabetes by 26%.²⁴



Diseases connected to SSBs are also found to disproportionately impact ethnic minority and low-income communities in San Francisco – the very communities that are found to consume higher amounts of SSBs. According to Healthcare Access and Information (HCAI) data, diabetes hospitalizations are more than three times as high in low-income communities as compared with higher income communities. African American death rates from diabetes are two times higher than San Francisco’s overall rate. With respect to oral health, the data indicate that Asian and Pacific Islander children suffer from cavities at a higher rate than other populations; but Latinx and African American children also have a higher prevalence than the average for cavities.

The SDDT is intended to discourage the distribution and consumption of SSBs in San Francisco by taxing their distribution. Mexico, where an average of 163 liters of SSBs are consumed per person each year, enacted an excise tax on SSBs in 2014, with the result that the purchase of taxed SSBs declined by 12% generally and by 17% among low-income Mexicans by December 2014.^{25,26} The Mexico data indicate that, when people cut back on SSBs, to a significant extent they choose lower-caloric or non-caloric alternatives. Studies have projected that a 10% reduction in SSB consumption in Mexico would result in about 189,300 fewer incident type 2 diabetes cases, 20,400 fewer incident strokes and myocardial infarctions, and 18,900 fewer deaths occurring from 2013 to 2022. This modeling predicts the SSBs tax could save Mexico \$983 million international dollars.²⁷ Following the implementation of Berkeley, California’s SSB tax, the first in the nation, there was a 50% decline in SSB consumption among diverse adults over the first 3 years of the tax.²⁸ Modeling suggests that a national SSB tax that reduced consumption by just 20% would avert 101,000 disability-adjusted life-years; gain 871,000 quality-adjusted life-years; and result in \$23.6 billion in healthcare cost savings over just 5 years.²⁹ The tax is further estimated

to generate \$12.5 billion in annual revenue. This body of research demonstrates that taxation can provide a powerful incentive for individuals to reduce their consumption of SSBs, which in turn can reduce the burden of chronic disease.

Efficacy of Sugar-Sweetened Beverage Taxes

Berkeley, CA became the first city in the U.S. to pass a SSB tax in 2014. Since then, there have been 8 jurisdictions within the U.S. that have implemented SSB taxes.³⁰ Various studies have shown that implementation of a soda tax results in a decline in SSB consumption. According to researchers from the University of California, San Francisco, SSB purchases declined nearly 27% between July 2017 and December 2019 in Oakland, CA. Here in San Francisco a recent longitudinal study reported a 34% decrease in the consumption of SSB, after two years of soda tax implementation; in comparison, there was a 16.5% drop in San Jose, CA, which does not have a SSB tax.³¹ These data are part of the growing literature demonstrating the efficacy of SSB tax policies. Currently there are at least 85 countries implementing some type of SSB taxation helping to reduce diet sensitive chronic diseases.³² According to Dr. Alisa Padon, research scientist at the Public Health Institute, “new data demonstrates that San Francisco was successful in simultaneously improving public health while raising revenue for critical programs that build healthy communities and address the root causes of systemic inequities.” These studies indicate that SSB taxes are making good on their potential to decrease SSB consumption, thereby lowering risk for diet-sensitive chronic diseases. Additionally, SSB tax revenue is providing resources and health programs to lower-income communities and communities of color targeted by the beverage industry.³³ Over time, SSB taxes can improve diet and health, while also generating cost savings and providing support to communities.



History of Sugar-Sweetened Beverage Interventions in San Francisco

In evaluating the impact of the SDDT, it is important to recognize the previous efforts made to curb SSB consumption and subsequent health effects as consumption may have been affected and continue to be affected by these efforts.

2008

- City and County of San Francisco declares Soda Free Summer (SFS) with the Bay Area Nutrition and Physical Activity Collaborative.
- Shape Up SF sends 40,000 Soda Free Summer brochures to SFUSD, Summer lunch sites, worksites, clinics, community partners.
- SF Department of Public Health implements healthy food policies to help people make healthier eating and drinking choices by improving the nutritional quality of food and beverages sold on City property and served by the City.
- Mayor Newsom calls for nexus study to assess feasibility of local sugary drinks legislation.



Bay Area Nutrition & Physical Activity Collaborative

2009



- City and County of San Francisco declares a Soda Free Summer.
- 25,000 “Drink Water Said the Otter” books were distributed to San Francisco pre-k and kindergarten classes.
- American Heart Association releases guidelines on sugar intake.
- California Center for Public Health Advocacy released Bubbling Over report, scientifically linking soda consumption to overweight and obesity.
- SFDPH releases nexus study on feasibility of SSB legislation in San Francisco.
- SF Organizations implement Soda Free policies: Boys and Girls Club, Junior Giants, Sunday Streets.



2010

- City and County of San Francisco declares a Soda Free Summer.
- SFDPH runs NYC’s Pouring on the Pounds Campaign on MUNI buses.
- Mayor Newsom signs Executive Directives: Healthy and Sustainable Foods and Healthy Vending.
- Healthy Meals Ordinance Passes.
- SF organizations implement Rethink Your Drink/Soda Free policies: SF Recreation and Parks, Bay Area SCORES, and Kai Ming Head Start.”



2011 - 2012

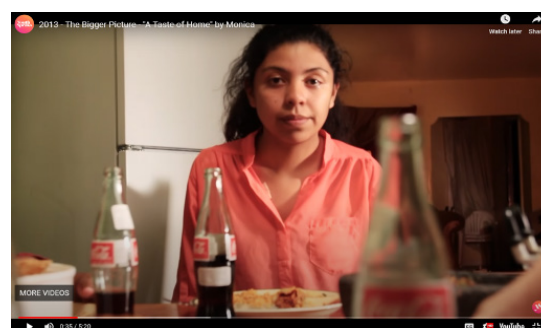


- City and County of San Francisco declares a Soda Free Summer.
- The Bay Area Nutrition and Physical Activity Collaborative launches *Potter the Otter, A Tale About Water*.
- City and County of San Francisco declares a Soda Free Summer.
- Shape Up SF supports youth-serving organizations to develop healthy beverage policies.
- Nature* publishes paper that argues sugar is addictive and linked to diseases associated with metabolic syndrome.
- Mother Jones* publishes expose on sugar industry and its parallels to big tobacco.
- New York City Health Department became the first in the nation to ban the sale of SSB larger than 16 oz. at restaurants, mobile food carts, sports arenas, and movie theaters.



2013

- City and County of San Francisco declares a Soda Free Summer.
- Senator Monning introduces SB622 for statewide soda tax and create a Children’s Health Promotion Fund.
- SF Public Utilities Commission convenes water hearing.
- Mayor Lee and 17 other mayors urge congressional leaders to ban use of food stamps to buy sugary drinks.
- SF orgs implement Soda Free Policies: YMCA of SF, Bayview Hunters Point Foundation, Children’s Council of SF.
- Shape Up SF secures \$250k to run sugary drinks education campaign.
- Shape Up SF funds The Bigger Picture to develop sugary drink PSAs.
- SF Board of Supervisors unanimously pass resolution to support SB622.
- Bayview HEAL Zone implements “Water Week” at Carver Elementary to celebrate new tap station.
- The California Center for Public Health Advocacy (CCPHA) hosts the first Healthy Beverage Summit.
- CA State Senator Bill Monning introduces a soda tax (SB 622) to impose as 12 cent tax on a can of soda and direct funds to childhood obesity-preventing measures such as improving the quality of school lunches. The bill died in community three months later.



Monica Mendoza introduces us to an unhealthy family tradition to analyze how sugary drinks impact Latino communities and contribute to the type 2 diabetes epidemic. Watch the video at <https://www.opentruthnow.org/take-action/>



2014

- Shape Up SF launches Choose Healthy Drinks Campaign with Alameda, Sonoma, San Mateo counties.
- Shape Up SF launches Sugar Science trainings to educate about health impacts of sugary drinks and industry tactics.
- The Bigger Picture launches Canzilla campaign to engage young people to talk about type 2 diabetes.
- 56% of SF voters supported tax on sugary drink distributors. Over 123,000 San Franciscans voted yes, more than any other city in the world. Tax does not pass because it requires supermajority.
- Berkeley becomes first city in US to pass a voter-approved soda tax.
- UCSF launches SugarScience.org.
- Senator Bill Monning introduces bill (SB 1000) to add warning labels to drinks with added sugar that have 75 calories or more per 12 oz. that would say "State of California Safety Warning: Drinking beverages with added sugar(s) contributes to obesity, diabetes and tooth decay." The bill passed the state Senate but died in the Assembly.
- June 26, 2014 – New York Court of Appeals ruled that the New York City Board of Health's sugary drinks portion cap rule was unconstitutional and repealed the regulation.

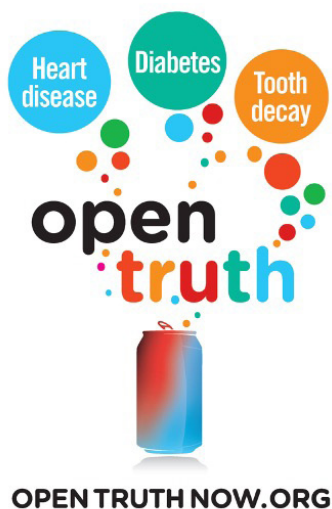


SF community members pledge to be soda free at press conference for the Choose Healthy Drinks Campaign.

2015



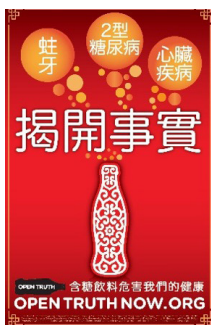
SFSU Real Food Challenge students on campus, educating their peers about SSB.



- February 11, 2015 - California State Senator Bill Monning introduces Senate bill (SB 203) to add warning label to SSBs.
- February 27, 2015 - California State Assemblymember Bloom introduces AB 1357 to impose a tax on distributors of sugary drinks at \$.02 per fluid ounce to establish a Children and Family Health Promotion Trust Fund. The bill died in committee on May 12, 2015.
- April 7, 2015 – SF Board of Supervisors unanimously adopt a resolution in support of SB 203 (Monning).
- Shape Up SF and partners launch Open Truth Campaign to expose tactics of the sugary industry, which targets young people, parents, and communities of color for profit.
- SF policymakers approve policies to eliminate use of public dollars to purchase sugary drinks and require warning labels on ads for sugary drinks.
- SF General Hospital and UCSF campuses become sugary-drinks free.
- California Healthcare Foundation and A Small Planet fund transcreation of Open Truth into Spanish.
- SFDPH issues policy prohibiting sugary drinks at any event led by DPH or at DPH facility, or to be paid for with DPH funding.
- In partnership with SF Health Improvement Partnership, Shape Up SF supports health equity coalitions with SSB outreach and education.
- Shape Up SF supports SF State University (SFSU) Real Food Challenge students to successfully end the university’s contract negotiations for pouring rights. SFSU remains the ONLY CSU in the state without a pouring rights contract.



2016



- USDA guidelines recommend limiting sugar consumption to 12 tsp/day for adults.
- SF defends sugary drinks warning label law against the American Beverage Association.
- Open Truth campaign materials translated into Spanish and Chinese.
- SF policymakers adopt legislation requiring healthy vending machine standards and prohibit sales of drinks with added sugars.
- San Francisco, Oakland and Albany voters pass soda taxes!
- February 19, 2016 – California Assembly Member Bloom introduces AB 2782 to impose a \$.02 per fluid ounce fee on distributors of sugary drinks. Funds would be deposited into a Healthy California Fund for our Children and Families. The bill failed in committee in November 2016.

2017 - 2018

- SF Warning Label fought in court– SF City Attorney’s defends warning label policy.
- December 2017 – SDDTAC is convened.
- January 1, 2018 – SF’s soda tax goes into effect.
- January 1, 2018 – Soda industry-sponsored “Keep Groceries Affordable Act of 2018” goes into effect, prohibiting cities, counties, or other local agencies to impose, increase, levy, or collect any new tax, fee, or other assessment on groceries.
- March 1, 2018 – the SDDTAC submits its first Annual Report and Recommendations to the Mayor.





2019



Corner stores in Tenderloin redesigned to increase access to fresh produce as a part of the Healthy Retail SF Program.

- First multi-year SDDT Healthy Communities Grants, administered through the San Francisco Public Health Foundation, awarded to 11 small community-based organizations. Funded organizations included: Bayview Hunters Point Community Advocates, BMAGIC/3rd Street Youth Center & Clinic, Bounce Back Generation, Community Grows, Community Well, Asociacion Mayab/Instituto Familiar de la Raza, Farming Hope, San Francisco African American Faith-Based Coalition, SisterWeb, SoMa Community Action Network (SOMCAN), and Urban Sprouts
- March 2019 - [Sugary drink tax brings healthy food to more SF corner stores.](#)
- Sept 19, 2019 - the 9th Circuit Court of Appeals reverses the district court’s decision upholding the soda warning ordinance. Due to this decision, the Board of Supervisors ultimately rescinds the legislation (in 2021).

2020

- Launched www.sodatax-sf.org
- March 1, 2020 – SDDTAC submits annual report and recommendations to the mayor.
- March 11, 2020 – World Health Organization officially declares the Covid-19 outbreak a pandemic.
- March 18, 2020 - the SDDTAC voted to consider using unused funds from the fiscal year 2019-2020 to support food security and food distribution costs for the most vulnerable populations in the city and county of San Francisco. The SDDTAC has recommended that \$1.65 million be allocated to increase food security for our priority populations, especially seniors, children, and pregnant women within minority communities.
- Developed and placed a campaign on Muni promoting how soda tax funding was being expended.
- First multi-year SDDT Policy/Systems/Environmental (PSE) Change Grants, administered through SF Department of Public Health (SDFPH) awarded to five organizations including 18 Reasons, CARECEN, Marin City Health and Wellness Center Bayview Clinic, Southeast Asian Development Center (SEADC), and Tenderloin Neighborhood Development Center (TNDC).

SF's Soda Tax Supports...

EMERGENCY FOOD ACCESS

www.SodaTax-SF.org

We know that Covid-19 has made it harder for many SF residents to get fresh, healthy food. Since shelter-in-place began more than \$1.65 million in funds raised by the SF Soda Tax has been used for emergency food purchases to help make sure every San Franciscan has enough to eat. Find out where you can get free, healthy food at <https://farminghope.org/food-for-sf/>

San Francisco Department of Public Health



2021 - 2022



Community Grows BEETS Interns at Koshland Community Garden.

- March 1, 2021 – SDDTAC submits annual report and recommendations to the Mayor.
- April 2021 – the SF Board of Supervisors rescinded legislation to require warning labels on sugary drinks advertisements.
- March 1, 2022 – SDDTAC submits annual report and recommendations to the Mayor.

2023

- March 1, 2023 – SDDTAC submits annual report and recommendations to the Mayor.
- March 27, 2023 Sacramento County Superior Court rules the penalty provision of California’s Keep Groceries Affordable Act of 2018 is unconstitutional.
- June 30, 2023 - 1st cohort of Healthy Communities grantees comes to a close.
- July 1, 2023 - Welcome second cohort of Healthy Communities grantees. The six funded organizations include: All My Uso’s/ Fa’atasi Youth Services, Association of the Ramaytush Ohlone, CARE, Farming Hope, Florence Fang Community Farm, and SOMCAN.
- July 19, 2023 – Cambridge University Press publishes [study that workplace sales bans can reduce SSB consumption in ethnically diverse employee populations, including those at higher risk for cardiometabolic disease.](#)
- November 4 – 9, 2023 San Francisco celebrates the [5-year anniversary](#) of the implementation of the soda tax with events that focused on community, science, youth and policy.



Faheem Carter, Farmer-in-Charge, speaks at the kick-off event for the 5-year anniversary of the soda tax at Florence Fang Community Farm.



A Note on the Social and Commercial Determinants of Health

According to the World Health Organization, the social determinants of health are “the conditions in which people are born, grow, work, live, and age, and the set of forces and systems shaping the conditions of daily life.”³⁴ While biology, genetics, and access to medical services are largely understood to play an important role in health, social-economic and physical environmental conditions are known to be major, if not primary, drivers of health.³⁵⁻³⁷

This report only touches on select social determinants of diet-sensitive chronic diseases- the food and beverage environment, food security, and physical activity opportunities and barriers. However, according to the Institute of Medicine, the most important social factors determining health are income, accumulated wealth, education, occupational characteristics, and social inequality based on race and ethnic group membership³⁸ These determinants are not equally distributed in San Francisco and contribute to the disparities seen both in the health outcomes as well as the upstream behavioral risk factors presented in this report.³⁹ Furthermore, the 2019 San Francisco Community Health Needs Assessment identified poverty and racial health inequities as foundational issues which must be addressed in order to improve the health of all San Franciscans. Data on poverty and racial health inequities in San Francisco as well as housing, criminal justice and other upstream social determinants of health are presented in detail in the triannual Community Health Needs Assessment available at www.sfhip.org.

The World Health Organization defines commercial determinants of health as the “private sector activities that affect people’s health, directly or indirectly, positively or negatively.” The beverage industry’s targeted marketing is a commercial determinant of health that can have detrimental impacts, especially on the health of impressionable youth. According to the American Psychology Association’s Task Force on Advertising and Children, children under the age of 8 cannot tell the difference between advertising and reality and are therefore especially vulnerable to persuasive tactics. Companies shape our physical and social environments, and with billions of dollars at their disposal, the beverage industry’s relentless marketing, misinformation, and lobbying activities that target the low-income, vulnerable, communities of color must be addressed in comprehensive public health strategies.





SUGAR-SWEETENED BEVERAGE PRICE, SALES, AND CONSUMPTION IN SAN FRANCISCO

We do not have great confidence in these data, because available data capture stores that are mostly larger retailers and thus miss important differences in consumer behavior at corner stores that would not be reflected in purchasing patterns at supermarkets, for example. In addition, data about sales of some beverages appear to be missing sporadically throughout the years. Further complicating these data is the classification of drinks as sugar-sweetened which was performed by UPC look up and manual spot-checking and thus subject to error.

Therefore, when reviewing the data in this section, interpret with extreme caution as these summaries likely do not reflect true beverage sales, and we cannot assess or validate these data. Given all the limitations stated above, SFDPH will be sunsetting the use of this data for understanding SSB prices, sales, and consumption. SFDPH is currently exploring the availability of other data sources that can provide this information as these measures are critically important for understanding the impact of Proposition V.

Beverage Sales in San Francisco

For both SSBs and non-SSBs, the total dollar amount of beverages sold in San Francisco increased from 2015 through 2018 before decreasing to pre-2015 level by 2021 (Tables 1 & 2). From 2016 (before the SDDT went into effect) to 2021 the largest drop for non-SSBs was observed for energy drinks (42% decrease), diet soft drinks (27% decrease), and juices/drinks (25% decrease). The only non-SSB category that saw an increase in sales was milk (25% increase).

Excluding diet soft drinks which had incomplete data for several years, from 2016 to 2021 the largest decreases for SSBs were observed for milk (48% decrease), energy drinks (37% decrease), and bottled water (29% decrease). The only increases observed for SSBs were seen for juices/drinks (10% increase) and soft drinks (29% increase).





Table 1. Non-SSB Sales by Beverage Category in San Francisco, 2015-2021

Beverage Category	2015	2016	2017	2018	2019	2020	2021	% Change from 2016 to 2021
Bottled Water	\$17,044,590	\$18,801,650	\$20,208,204	\$21,425,245	\$19,990,684	\$16,733,205	\$16,188,516	-14%
Diet Soft Drink	\$5,633,690	\$5,514,199	\$5,265,681	\$5,721,881	\$5,803,675	\$4,379,745	\$4,003,054	-27%
Energy Drinks	\$2,892,485	\$2,894,435	\$2,785,491	\$2,985,475	\$2,858,375	\$1,737,124	\$1,684,613	-42%
Juices/ Drinks	\$17,528,673	\$17,429,179	\$16,331,612	\$15,322,719	\$13,638,833	\$14,383,375	\$13,061,049	-25%
Milk	\$2,467,355	\$2,592,631	\$2,649,546	\$3,309,146	\$3,141,884	\$3,598,673	\$3,229,237	25%
Soft Drinks	\$1,628,603	\$1,704,374	\$1,507,400	\$1,211,973	\$1,102,686	\$1,353,551	\$1,345,127	-21%
Sports Drinks	\$397,039	\$407,147	\$471,162	\$497,371	\$595,066	\$374,018	\$396,271	-3%
Tea/ Coffee	\$2,276,558	\$2,637,510	\$2,996,182	\$3,438,421	\$3,196,502	\$2,290,623	--	-13%*
Total	\$49,868,991	\$51,981,129	\$52,215,283	\$53,912,232	\$50,327,703	\$44,850,318	\$39,907,869	-23%

Note: There were no data available for tea/coffee beverages in 2021, indicated by a "--." Therefore, the percent change for tea/coffee compares 2020 sales to 2016, indicated by *. Data represent sales from a non-representative sample of participating stores and should be interpreted with extreme caution.

Data source: IRI





Table 2. SSB Sales by Beverage Category in San Francisco, 2015-2021

Beverage Category	2015	2016	2017	2018	2019	2020	2021	% Change From 2016 - 2021
Bottled Water	\$858,548	\$866,843	\$822,385	\$753,864	\$700,032	\$574,507	\$619,512	-29%
Diet Soft Drink	\$6,056	\$19,952	\$14,852	\$6,023	\$3,093	\$1,265	\$12	-100%*
Energy Drinks	\$2,742,813	\$2,981,140	\$2,772,224	\$2,829,245	\$2,727,925	\$1,968,607	\$1,868,000	-37%
Juices/ Drinks	\$3,184,585	\$3,291,813	\$3,294,419	\$3,346,213	\$3,185,830	\$3,890,258	\$3,609,244	10%
Milk	\$28,150	\$27,029	\$26,478	\$20,890	\$25,474	\$21,604	\$13,998	-48%
Soft Drinks	\$8,684,953	\$8,775,686	\$8,613,705	\$8,862,280	\$8,891,352	\$11,090,708	\$11,303,568	29%
Sports Drinks	\$2,996,107	\$3,065,322	\$2,887,606	\$2,791,439	\$2,634,857	\$2,385,187	\$2,332,508	-24%
Tea/ Coffee	\$3,506,979	\$3,917,134	\$4,468,106	\$5,166,582	\$4,658,202	\$3,566,592	--	-9%*
Total	\$22,008,192	\$22,944,915	\$22,899,778	\$23,776,537	\$22,826,763	\$23,498,724	\$19,746,844	-14%

Note: There were no data available for tea/coffee beverages in 2021, indicated by a "--." Therefore, the percent change for tea/coffee compares 2020 sales to 2016, indicated by *. * = incomplete data for sugar-sweetened diet soft drink data. Data represent sales from a non-representative sample of participating stores and should be interpreted with extreme caution.

Data source: IRI

Price Per Fluid Ounce Sold

In order to adjust for the volume of beverages sold for each category, we can look at the average price in dollars for each fluid ounce sold (Tables 3 & 4). For non-SSBs, from 2016-2021 the average price per fluid ounce decreased 24%. By beverage category, the largest decreases were observed for bottled water (28% decrease) and juices/drinks (7% decrease). Interestingly, the average price per fluid ounce of non-SSB sports drinks increased 123% from 2016 to 2021 – non-SSB diet soft drinks also increased by 8%.

While the average price per fluid ounce of SSB decreased 9% from 2016 to 2021, there was a lot of variability by beverage category (Table 4). The largest increases in the price per fluid ounce sold from 2016 to 2021 for SSBs were observed for sports drinks (17% increase), soft drinks (12% increase), and energy drinks (10% increase). Meanwhile, milk, tea/coffee, and juices/drinks saw decreases in the average price of fluid ounce sold (26%, 16% through 2020, and 14% respectively).



Table 3. Non-SSB Sales Per Fluid Ounce by Beverage Category in San Francisco, 2015-2021

Beverage Category	2015	2016	2017	2018	2019	2020	2021	% Change from 2016 to 2021
Bottled Water	\$0.02	\$0.02	\$0.03	\$0.03	\$0.03	\$0.02	\$0.02	-28%
Diet Soft Drink	\$0.04	\$0.04	\$0.04	\$0.05	\$0.05	\$0.04	\$0.04	8%
Energy Drinks	\$0.19	\$0.18	\$0.18	\$0.18	\$0.17	\$0.16	\$0.18	-3%
Juices/Drinks	\$0.07	\$0.07	\$0.07	\$0.08	\$0.08	\$0.06	\$0.06	-7%
Milk	\$0.05	\$0.06	\$0.06	\$0.06	\$0.06	\$0.05	\$0.05	-4%
Soft Drinks	\$0.05	\$0.04	\$0.04	\$0.06	\$0.06	\$0.04	\$0.05	6%
Sports Drinks	\$0.03	\$0.04	\$0.04	\$0.05	\$0.05	\$0.06	\$0.08	-6%
Tea/Coffee	\$0.06	\$0.07	\$0.08	\$0.09	\$0.09	\$0.06	--	-6%*
Total	\$0.04	\$0.04	\$0.04	\$0.04	\$0.04	\$0.03	\$0.034	-24%

Note: Data represent the average sales in dollars per fluid ounce of beverage sold. There were no data available for tea/coffee beverages in 2021, indicated by a "--." Therefore, the percent change for tea/coffee compares 2020 sales to 2016, indicated by *. **Data represent sales from a non-representative sample of participating stores and should be interpreted with extreme caution.**
Data source: IRI

Table 4. SSB Sales Per Fluid Ounce by Beverage Category in San Francisco, 2015-2021

Beverage Category	2015	2016	2017	2018	2019	2020	2021	% Increase from 2016 to 2021
Bottled Water	0.06	0.07	0.06	0.07	0.07	0.06	0.07	0%
Diet Soft Drink	0.05	0.09	0.08	0.08	0.08	0.03	0.04	-55% ^x
Energy Drinks	0.16	0.16	0.16	0.18	0.18	0.16	0.18	10%
Juices/Drinks	0.06	0.06	0.06	0.07	0.07	0.05	0.05	-14%
Milk	0.30	0.31	0.33	0.33	0.32	0.20	0.23	-26%
Soft Drinks	0.03	0.04	0.04	0.05	0.05	0.04	0.04	12%
Sports Drinks	0.05	0.06	0.06	0.07	0.07	0.06	0.07	17%
Tea/Coffee	0.08	0.09	0.10	0.11	0.12	0.07	--	-16%*
Total	0.05	0.05	0.05	0.07	0.07	0.05	0.05	-9%

Note: Data represent the average sales in dollars per fluid ounce of beverage sold. There were no data available for tea/coffee beverages in 2021, indicated by a "--." Therefore, the percent change for tea/coffee compares 2020 sales to 2016, indicated by *. ^x = incomplete data for sugar-sweetened diet soft drink data. **Data represent sales from a non-representative sample of participating stores and should be interpreted with extreme caution.**
Data source: IRI

Beverage Volume Per Unit Sold

For both non-SSBs and SSBs, the average size (in fluid ounces) of a beverage sold increased substantially in 2020 and 2021 (Tables 5 & 6). For non-SSBs, the average unit or beverage sold increased from 59 fl oz in 2016 to 98 fl oz in 2021 (a 67% increase). The largest increases were observed among bottled water (94% increase), tea/coffee (36% increase through 2020), and diet soft drinks (35% increase). A decrease was seen for sports drinks (23% decrease).

Among SSBs, a similar trend was observed where the average SSB sold increased from 39 fl oz in 2016 to 55 fl oz in 2021 (a 42% increase). Excluding diet soft drinks which had incomplete data for several years, the largest increases were observed for tea/coffee (41% increase through 2020), juices/drinks (37% increase), and soft drinks (24% increase).



These increases in the average volume of a beverage sold likely explain why the price per fluid ounce sold for most beverages decreased, as value packs typically cost less when controlling for size/weight. It’s also likely that these increases in the average size of a beverage sold can be explained by consumers choosing to purchase value packs of beverages due to the COVID-19 pandemic and a desire to make less frequent trips to the grocery store and/or purchase food and drinks online.

Table 5. Non-SSB Volume (Fluid Ounces) Per Unit Sold by Beverage Category in San Francisco, 2015-2021

Beverage Category	2015	2016	2017	2018	2019	2020	2021	% Change from 2016 -2021
Bottled Water	78	78	80	76	77	150	152	94%
Diet Soft Drink	58	56	56	55	56	79	75	35%
Energy Drinks	15	16	16	16	16	18	17	11%
Juices/Drinks	46	45	44	41	41	54	52	17%
Milk	62	62	62	62	62	67	67	8%
Soft Drinks	39	42	43	40	40	51	53	26%
Sports Drinks	31	31	30	29	28	26	23	-23%
Tea/Coffee	35	33	31	30	30	45	--	36%*
Total	59	59	60	58	58	94	98	67%

Note: Data represent the average volume in in fluid ounces per unit of beverage sold. There were no data available for tea/coffee beverages in 2021, indicated by a “--.” Therefore, the percent change for tea/coffee compares 2020 sales to 2016, indicated by *. Data represent sales from a non-representative sample of participating stores and should be interpreted with extreme caution. Data source: IRI

Table 6. SSB Volume (Fluid Ounces) Per Unit Sold by Beverage Category in San Francisco, 2015-2021

Beverage Category	2015	2016	2017	2018	2019	2020	2021	% Change from 2016 -2021
Bottled Water	22	22	23	23	23	25	26	17%
Diet Soft Drink	106	69	67	52	51	141	144	109% ^x
Energy Drinks	14	14	14	14	14	15	14	2%
Juices/Drinks	40	39	40	39	40	54	54	37%
Milk	16	16	15	15	15	22	19	20%
Soft Drinks	61	60	60	55	53	74	74	24%
Sports Drinks	30	29	30	29	30	31	30	3%
Tea/Coffee	26	25	24	22	22	35	--	41%*
Total	41	39	39	36	36	53	55	42%

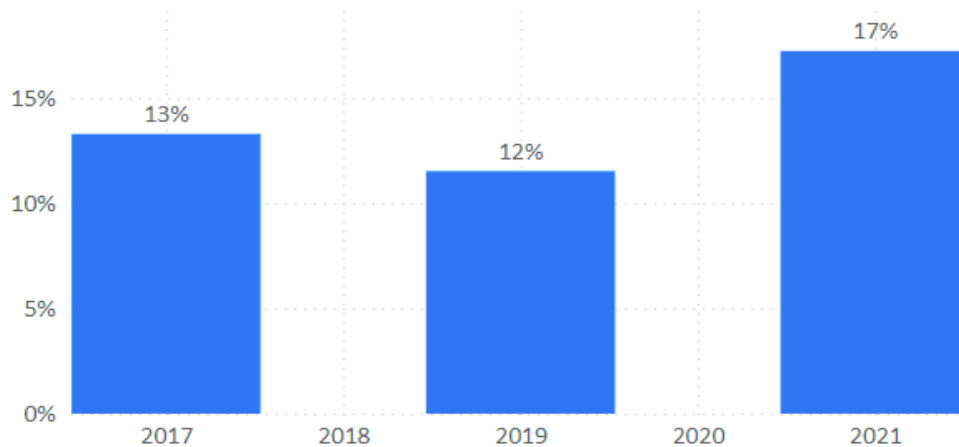
Note: Data represent the average volume in fluid ounces per unit of beverage sold. There were no data available for tea/coffee beverages in 2021, indicated by a “--.” Therefore, the percent change for tea/coffee compares 2020 sales to 2016, indicated by *. ^x = incomplete data for sugar-sweetened diet soft drink data. Data represent sales from a non-representative sample of participating stores and should be interpreted with extreme caution. Data source: IRI



Sugar-Sweetened Beverage Consumption

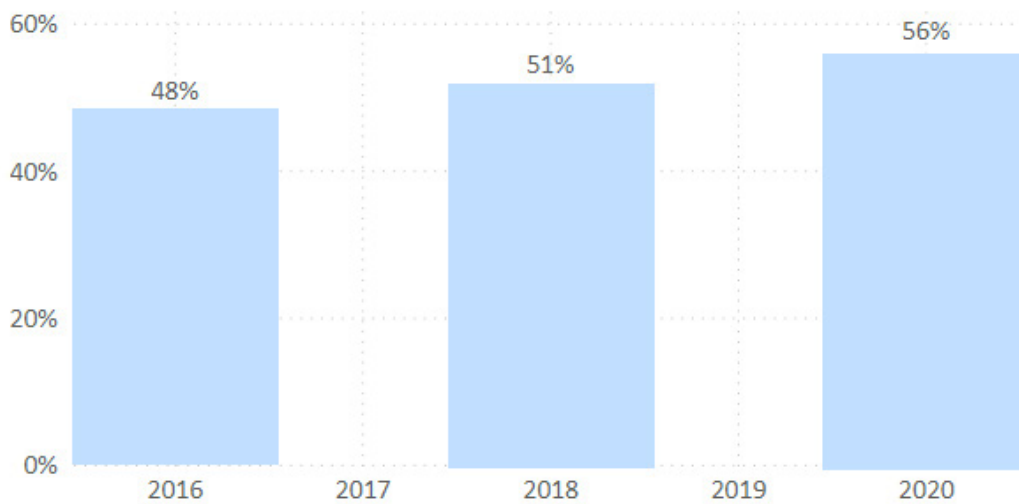
Youth Risk Behavioral Surveillance Survey (YRBS) collected prior to Sugary Drink Distributor Tax implementation shows that about half (48%) of SFUSD middle school students reported consuming any sugar-sweetened beverages the day prior and 13% of high school students report consuming SSBs daily during the prior week (Figure 1 and 2). More recent data shows this number increasing for both High School and Middle School students. In 2020, 56% of SFUSD middle school students reported consuming a SSB in the previous day while in 2021 17% of SFUSD high school students reported consuming a SSB one or more times per day in the last week.

Figure 1. Percentage of SFUSD High School Students Consuming SSB Daily, 2021



Note: The YRBS collects data from High School students on alternating years.
Data source: 2021 High School YRBS

Figure 2. Percentage of SFUSD Middle School Students Consuming SSB the Day Before the Survey, 2020



Note: The YRBS collects data from Middle School students on alternating years.
Data source: 2020 Middle School YRBS



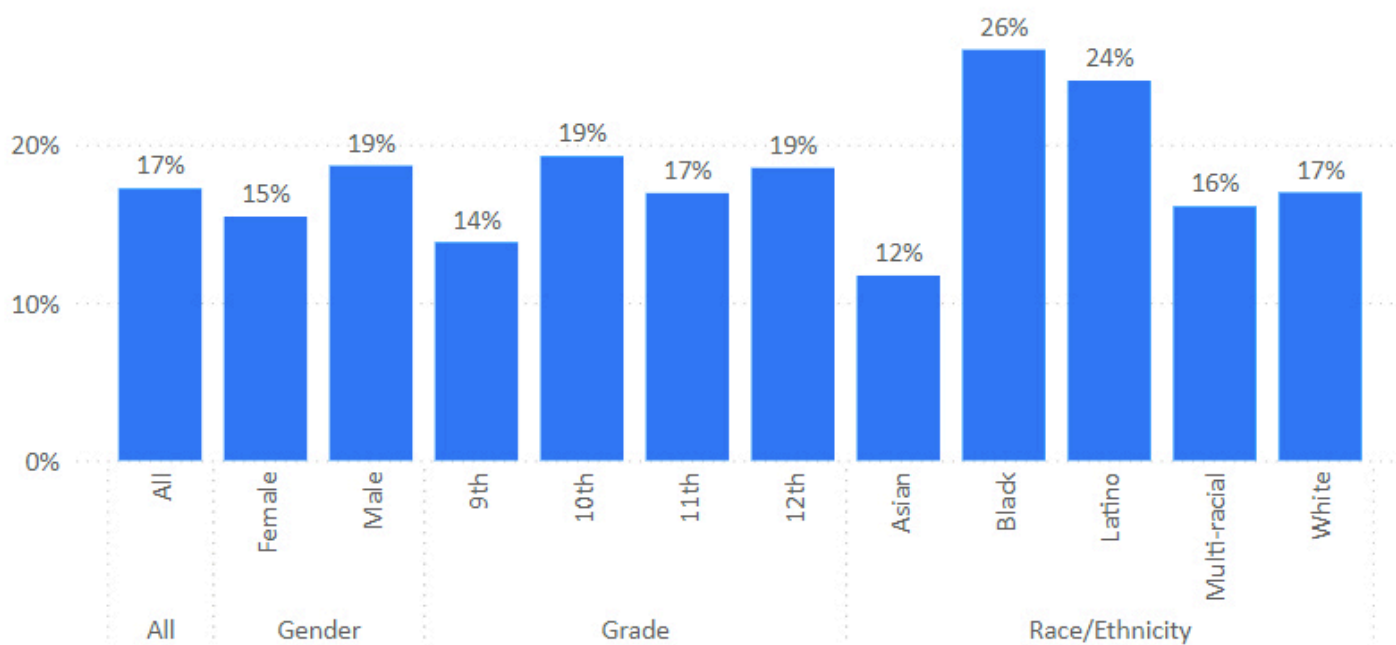
The School Health Survey has not been repeated since 2018. Please refer to [2019 SDDT report](#) for past findings from this survey.

Disparities in Sugar-Sweetened Beverage Consumption Among SFUSD Students

Consistent with national trends, San Francisco SFUSD male students and students of ethnic minority backgrounds are most likely to consume SSBs.^{40,41}

In 2021, Black/African American high school students were the most likely to report consuming SSBs daily and rates were 1.5 times higher than White students in High School (Figure 3a). In Middle School, consumption rates for Hispanic/Latinx and Pacific Islander students in 2020 were 1.4 and 1.6 times higher than consumption rates for White students, respectively (Figure 3b).

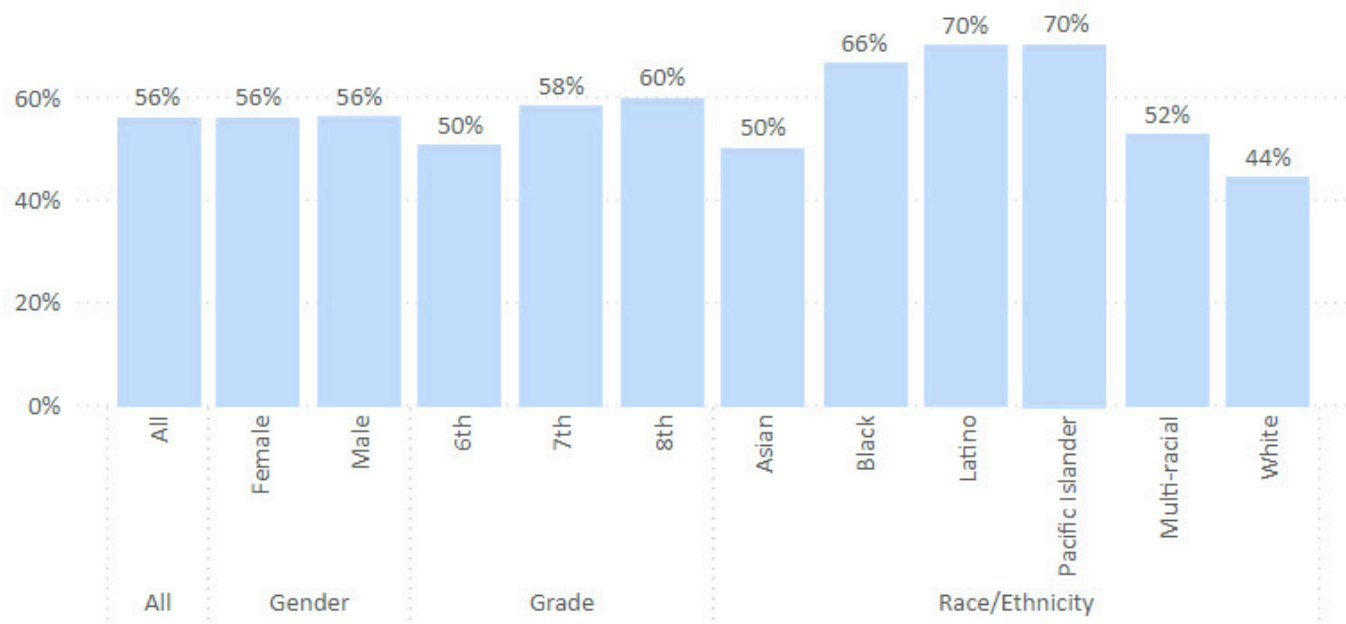
Figure 3a. Percentage of High School SFUSD Students Consuming SSBs Daily, by Race/Ethnicity, 2021



Note: Data for American Indian and Alaska Native and Native Hawaiian and Other Pacific Islander students are not reported because they were statistically unstable.
Data source: 2021 High School YRBS



Figure 3b. Percentage of Middle School SFUSD Students Consuming at Least One SSB the Day Before the Survey, by Race/Ethnicity, 2020



Note: Data for American Indian and Alaska Native and Native Hawaiian are not reported because they were statistically unstable.

Data source: 2020 Middle School YRBS

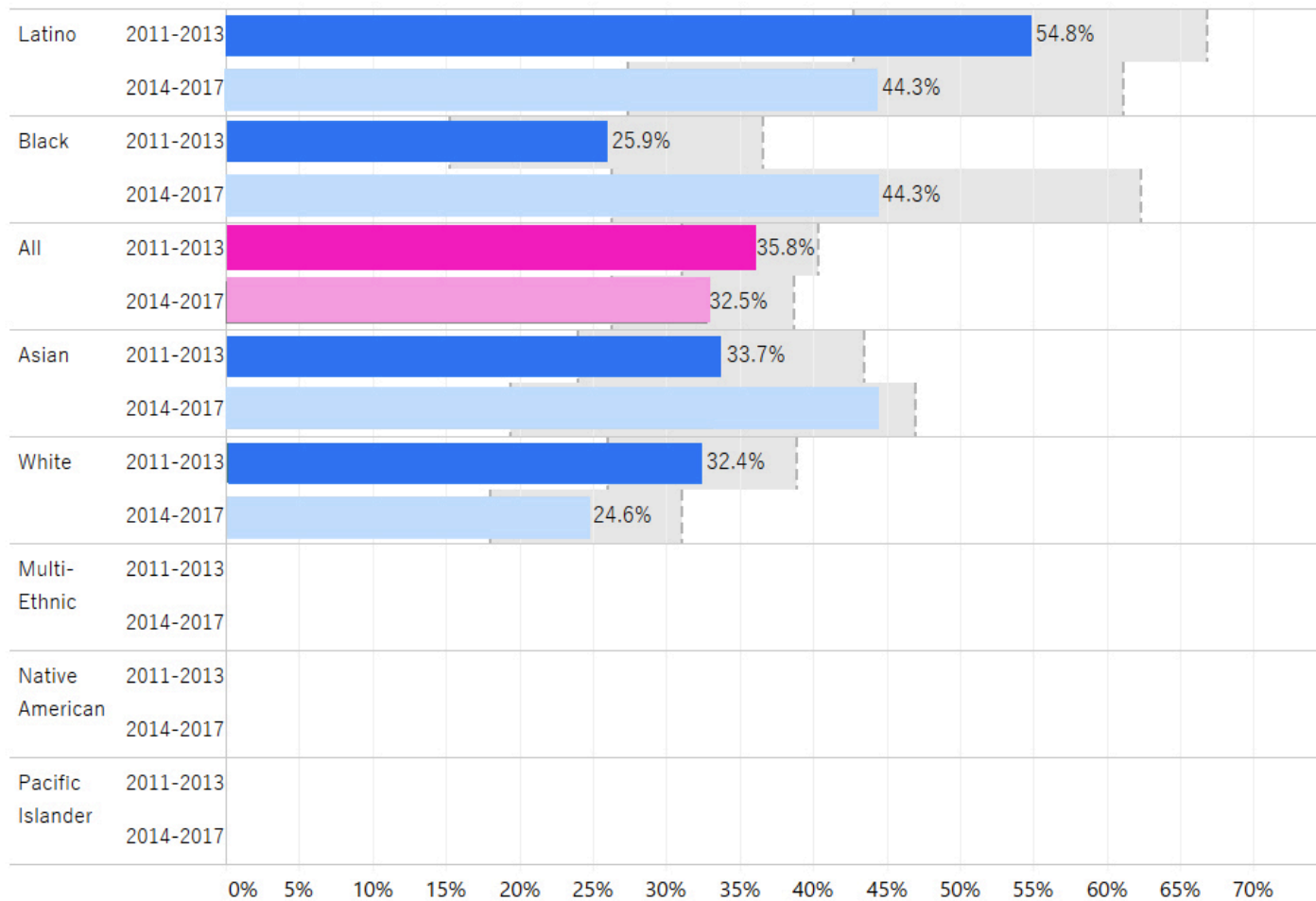
SSB Consumption Among Adults

The available data on adult SSB consumption is limited to soda, which is just one type of SSB. However, more adults in U.S. report consuming soda than any other category of sugar-sweetened beverage and sodas remain an important source of added sugars in the diet.^{42,43} While CHIS is the best available source of adult sugary beverage consumption data for adults in San Francisco, unfortunately, data collection on this measure has not been repeated by CHIS since 2017.

As reported in 2019 SDDTAC Report, approximately 32% of adults in San Francisco report drinking soda at least once per week. Males are about 50% more likely than women to report consuming any soda (40% vs 26%). Among those for whom data is available, a larger percentage of Latinx and Black/African American residents are more likely that consumed soda one or more times per week than White residents to consume any soda (Figure 4). See 2019 report for further details on CHIS findings: [San Francisco Sugary Drinks Distributor Tax Advisory Committee](#).



Figure 4. Percentage of Adults Reporting Any Soda Consumption, by Race/Ethnicity, 2017



Data for Multi-ethnic, Native American, and Pacific Islander populations are unstable.



Current State of Food Security, Food & Beverage Environment, and Nutrition in San Francisco

Food Security

Food security is the ability, at all times, to obtain and consume enough nutritious food to support an active, healthy life.⁴⁴ Food insecurity exists when the ability to obtain and prepare nutritious food is uncertain or not possible. Food insecurity can have far reaching impact throughout the life course that helps establish and perpetuate health disparities; fetal development in utero is impacted by maternal food security and that impact on early development can increase unborn babies' lifetime risk of obesity and diabetes.⁴⁵⁻⁴⁷ Children who are food insecure are more likely to have behavioral issues and worse school performance as well as more hospitalizations – all of which can limit socioeconomic advancement and lay the foundations for developing chronic disease as adults.^{48,49} In adults, food insecurity increases the risk of multiple chronic conditions including type 2 diabetes, heart disease, and hypertension, and exacerbates existing physical and mental health conditions.⁵⁰ The San Francisco Food Security Task Force, frames food security as an issue of:

1. **Food Resources:** the ability to secure enough financial resources to purchase enough nutritious food to support a healthy diet on a consistent basis
2. **Food Access:** the ability to obtain affordable, nutritious, and culturally appropriate foods safely and conveniently
3. **Food Consumption:** the ability to prepare and store healthy meals, and the knowledge of basic nutrition, food safety, and cooking

The City does not currently have data infrastructure to fully assess food security in San Francisco. However, we do know that a primary driver of food security is inadequate resources to purchase food. In this regard, data on poverty rates reveal that 31% of American Indian and Alaska Native residents, 26% of Black/African American residents, 15% of Native Hawaiian and Other Pacific Islander residents, 13% of Latinx residents, and 10% of Asian residents are living at less than 100% FPL compared

to 8% of White residents. Overall, approximately 10% of San Franciscans are living at less than 100% FPL and 21% are living at less than 200% FPL.⁵¹ Data from the 2021 California Health Interview Survey revealed that 35% of San Franciscans surveyed who earned less than 200% FPL were food insecure, which decreased from 59% in 2019. However, it's important to note that this decline is likely transitory. Unparalleled financial assistance from the federal government during the COVID-19 pandemic resulted in the lowest levels of food security in decades in 2020 (16% in San Francisco). As expected, the rate increased in 2021 and is expected to return to pre-pandemic levels for 2022.

The Food Security Task Force will be releasing their Biennial Food Security and Equity Report by the end of 2023. This comprehensive report will describe the current state of food insecurity in San Francisco, outline the food-related programs and services delivered to San Franciscans as well as the infrastructure in place to address food insecurity across the city. Once published, this report can be accessed on the [Food Security Task Force website](#).

At this time, we have some data on the food security status of some specific vulnerable groups including:

- **Pregnant Women:** Data from the Maternal and Infant Health Assessment (MIHA) survey indicate that approximately 9% of all pregnant women in San Francisco are food insecure, including 24% of Latinx and 22% of Black/African American women.
- **Low Income Families with Young Children:** See [2019 Sugary Drinks Distributor Tax Data Report](#) for findings on this population.
- **Immigrants:** National research indicates that the risk for food insecurity among households with immigrants is higher than households with members who are all US born, and immigrant families with young children experience disparities in their ability to afford food.^{52,53} Although food insecurity rates among immigrants living in San Francisco are not available, 25% of children in San Francisco living in households headed by



two immigrant parents live below 200% of FPL, compared to only 5% of children living with two US born parents.⁵⁴

- **People Without Homes:** During the 2022 San Francisco homeless survey, 51% of respondents indicated that they had experienced a food shortage in the past four weeks⁵⁵ In 2019 59% reported food insecurity. It is estimated that around 7,700 people without homes live in San Francisco but up to 20,000 people may experience homelessness over the course of a year.
- **Residents of Single Room Occupancy Hotels:** See [2019 Sugary Drinks Distributor Tax Advisory Committee Data Report](#) for findings on this population.
- **Transitional-Aged Youth and College Students:** There is growing awareness of high rates of food insecurity among youth and young adults in San Francisco. According to the 2021 National College Health Assessment data for San Francisco State University, 42% of students surveyed were food insecure. A recent assessment of 1,088 students at City College of San Francisco found that 41% were food insecure.
- **Seniors and People with Disabilities:** An estimated 32% of low-income seniors in San Francisco are reportedly unable to afford enough food.⁵⁶In San Francisco, program data for Fiscal Year 2022-23 from the Department of Aging and Adult Services indicate that 44% seniors and adults with disabilities (18-59 years) seeking home delivered meal and congregate meals were food insecure.⁵⁷

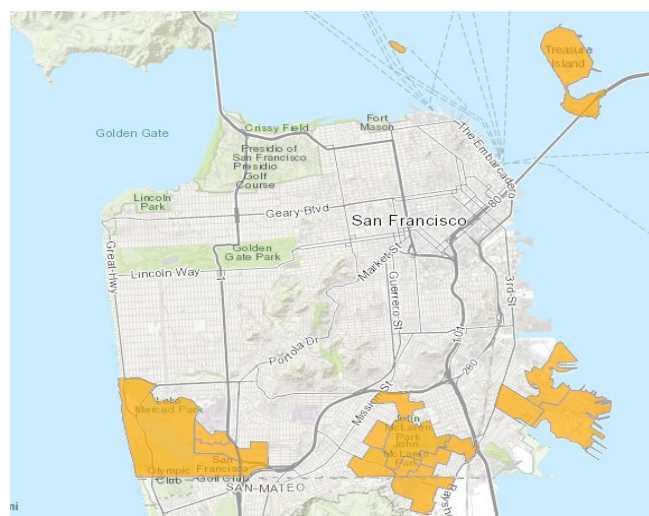
Despite the high level of need for food support among many communities in San Francisco, the food safety net is both impacted and not fully utilized. In 2016, 65.6% of eligible San Franciscans were enrolled in CalFresh, compared to a national average of 85% eligible enrollment. See [2019 Sugary Drinks Distributor Data Tax Advisory Committee Report](#) for further information on

CalFresh Enrollment.

Food Environment

Although research supports the primary role of income in healthy eating, the food retail environment is also an important component of equity and the equitable distribution of resources.⁵⁸ In several areas throughout San Francisco, there are concentrations of corner stores paired with a paucity of full-service grocery stores, most often found in low-income neighborhoods.

Figure 5. USDA-Designated Areas of Low-Income and Low-Food Access, 2019



The USDA designated several areas in San Francisco as areas of low-income and low-food access (Figure 5) defined as census tracts where a significant number or share of residents is more than ½ mile (urban) from the nearest supermarket and have a poverty rate of 20% or higher, or tracts with a median family income less than 80% of median family income for the state or metropolitan area. Fresh produce and a variety of healthier food items can then be more inconvenient for low-income residents to access, requiring increased travel time and expenses. Whether or not a food retail environment facilitates food security and promotes health is dependent on several factors beyond the type of food retail establishments available in a given neighborhood (i.e. corner store, fast-food restaurant, grocery store, etc.). These include: the convenience, quality, affordability, and

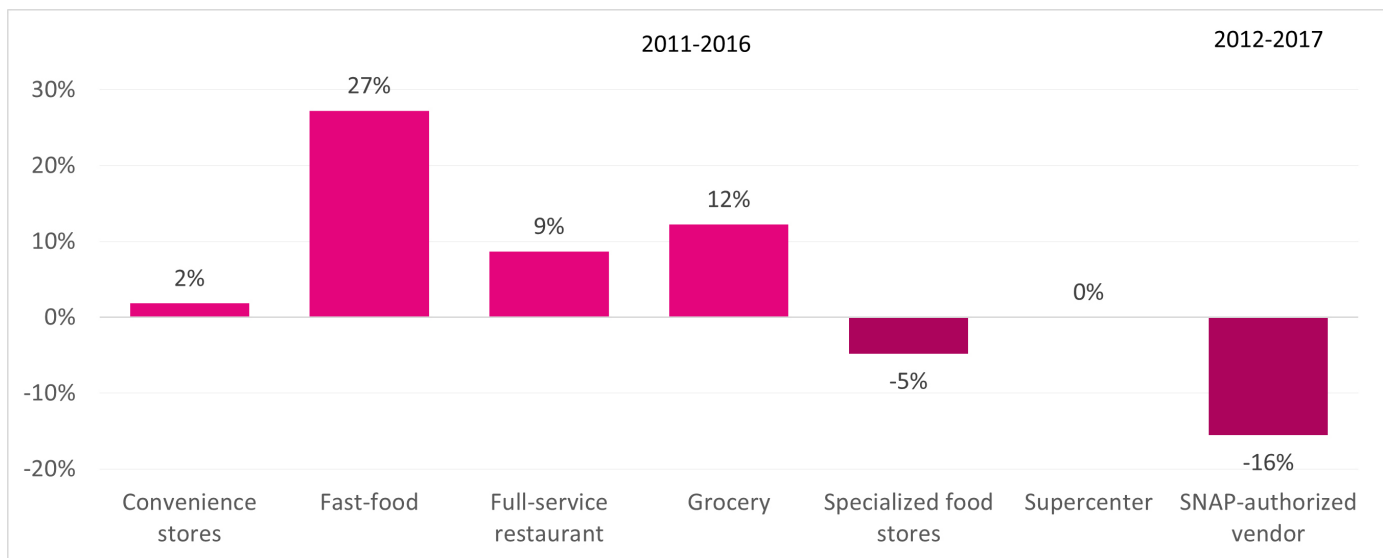


cultural acceptability of healthy foods offered within the food retail store; the transportation infrastructure that affects accessibility; the acceptance of federal nutrition programs and local food purchasing supplements; the accessibility of online ordering options; and the food sourcing practices of the food retail establishment (i.e. production, distribution, and procurement of foods from local farms).

Consistent with nationwide norms to spend less time cooking and eating more meals away from home, access to ready-to-eat meals at fast food stores and full-service restaurants increased in San Francisco between 2011 and 2016 (Figure 6). The number of fast food restaurants increased by 27% from 753 to 958. The number of full-

service restaurants increased by 9% from 1764 to 1917. In 2016, there were 1.1 fast food restaurants and 2.2 full-service restaurants for every 1,000 people in San Francisco. The magnitude of change in number of fast food stores was greater from 2011-2016 than what was previously observed from 2009-2014 (27% vs 21%), see [2019 Sugary Drinks Distributor Tax Report](#) for more details. Meanwhile, the number of vendors authorized to accept SNAP (Supplemental Nutrition Assistance Program, formerly referred to as food stamps) decreased by 16%. In 2017, 0.50 stores per 1,000 people accepted SNAP. While a decrease in number of vendors accepting SNAP was observed in the past, the magnitude of the decrease from 2012- 2017 was 2 times greater than the previous change observed (16% vs 7%).

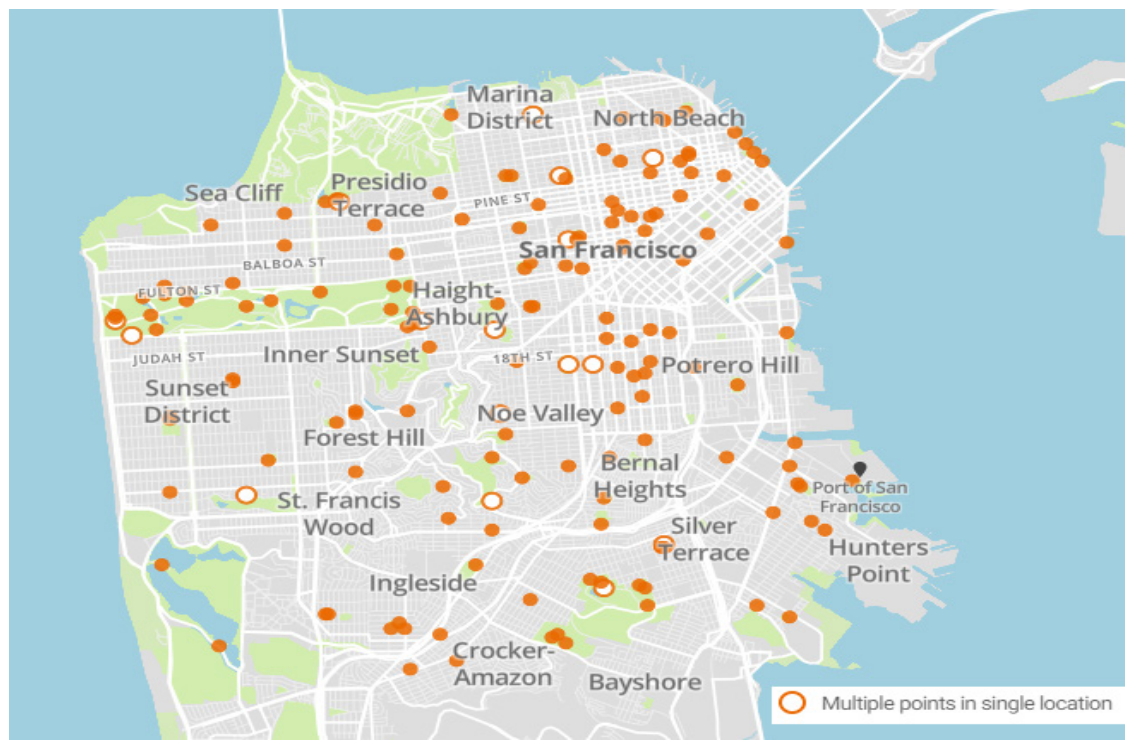
Figure 6. Change in the Types of Food Retail or Stores Available in San Francisco



Data source: United States Department of Agriculture Economic Research Service. Food Environment Atlas.⁵⁹

As San Francisco communities increasingly recognize the health harms of SSB and the beverage industry tactics to maintain consumption, San Franciscans will increasingly turn to water as the preferred beverage. Infrastructure for water access, including hydration stations, water fountains, and refillable water bottles, must exist to support the community’s desire for healthy, accessible drinking options. Hydration stations, distinct from drinking fountains, are stations designed to fill water bottles. Currently, they are not abundantly available nor equitably distributed throughout San Francisco (Figure 7).

Figure 7. Hydration Stations in San Francisco



Data source: City and County of San Francisco Public Utilities Commission, 2023.

Nutrition

Breastfeeding

Breast milk is the optimal source of nutrition for most infants and is associated with health benefits for both the mother and infant. Mothers who do not breastfeed are at higher risk of several diet-sensitive chronic diseases such as diabetes mellitus, hyperlipidemia, hypertension, and heart disease, as well as breast and ovarian cancer.⁶⁰ Breastfeeding is consistently associated with a modest reduction in the risk of later overweight and obesity in childhood and adulthood.⁶¹ Thus good, optimal nutrition in the early months of life can set the stage for health outcomes in adulthood. Breastfeeding also reduces risk of pediatric infections and death in the first year of life, promotes infant brain development and is associated with improved intelligence by about 2 IQ points.⁶²

Breastfeeding has dose-dependent effects, such that both the duration and exclusivity of breastfeeding are associated with positive health benefits.⁶³ Annually, in the US, billions of dollars could be saved by reducing

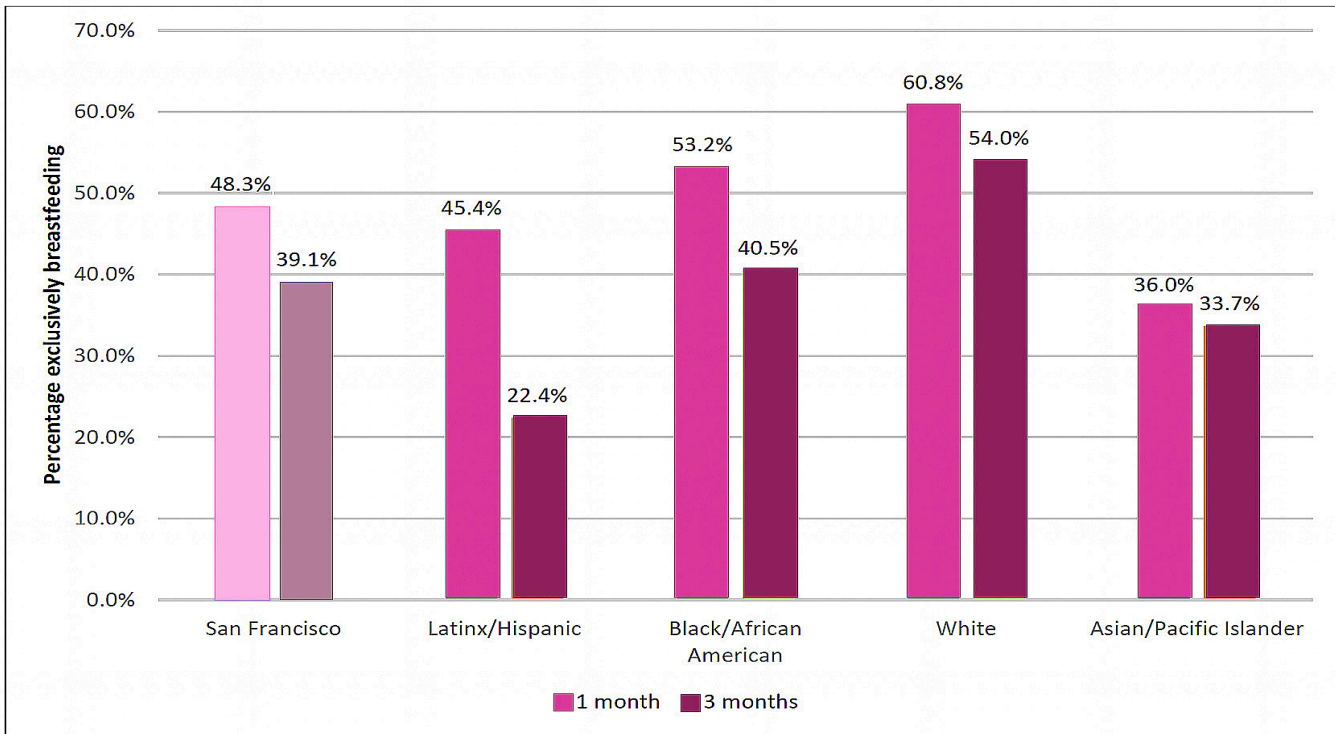
hypertension and heart attacks, and more than 4,000 infant deaths could be prevented, if 90% of U.S. mothers were able to breastfeed for one year after every birth.⁶⁴

In San Francisco, rates of exclusive breastfeeding at 1 month and 3 months varied by mother’s age, race-ethnicity, education, income level, and parity. Around one in three Asian/Pacific Islander and one in four Latinx women exclusively breastfed at 3 months, compared to 54% of White women (Figure 8). The proportion of women with a college degree who exclusively breastfed at 3 months was about 50% more than that of women with less than a high school degree. Almost half of women with an income over 200% of the Federal Poverty Level (FPL) exclusively breastfed their infant at 3 months, compared to about 23% of women with an income under 100% FPL (Figure 9).

Among women with an income under 200% of the FPL, the proportion who exclusively breastfed decreased by nearly 40% between 1 and 3 months postpartum. The corresponding decrease among women with an income above 200% of the Federal Poverty Level was 12%.

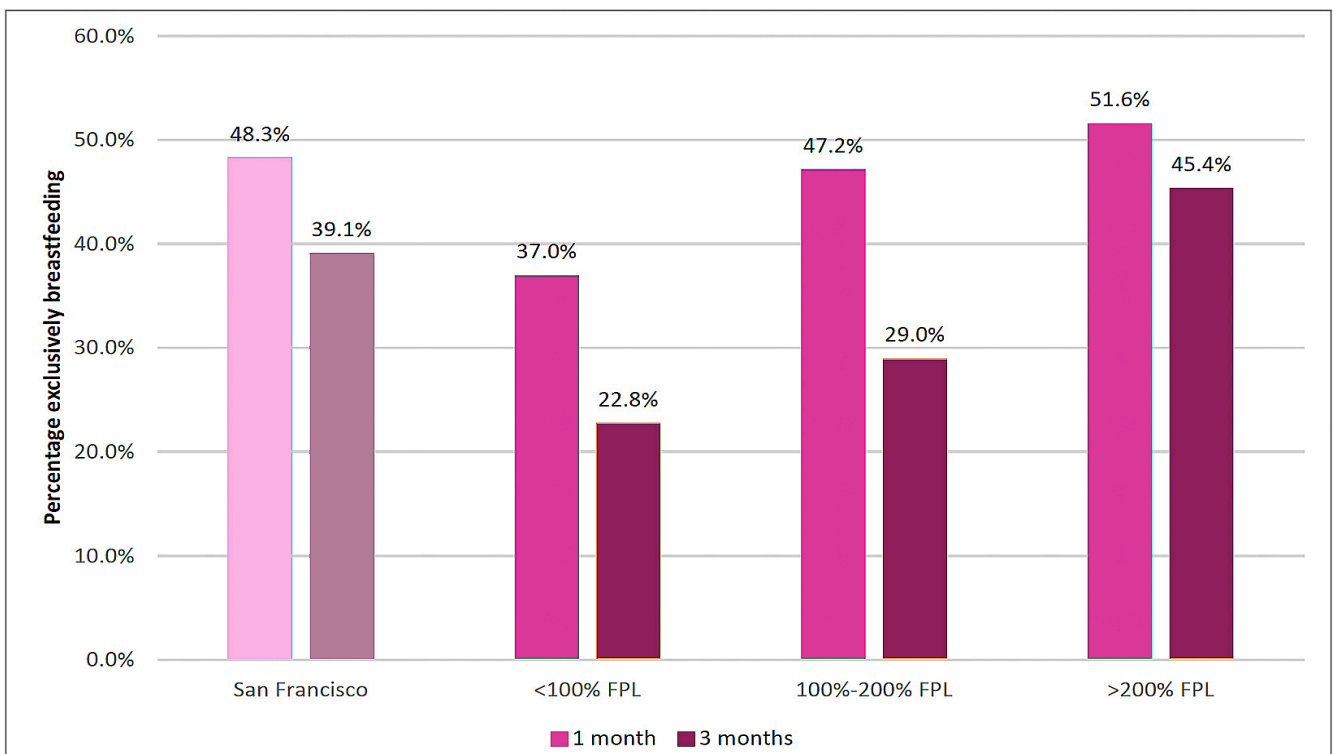


Figure 8. Exclusive Breastfeeding at 1 and 3 months by Race/Ethnicity, San Francisco, 2016-2018



Data source: Maternal and Infant Health Assessment

Figure 9. Exclusive Breastfeeding at 1 and 3 months by Federal Poverty Level, San Francisco, 2016-2018



Data source: Maternal and Infant Health Assessment



Healthy Food Consumption

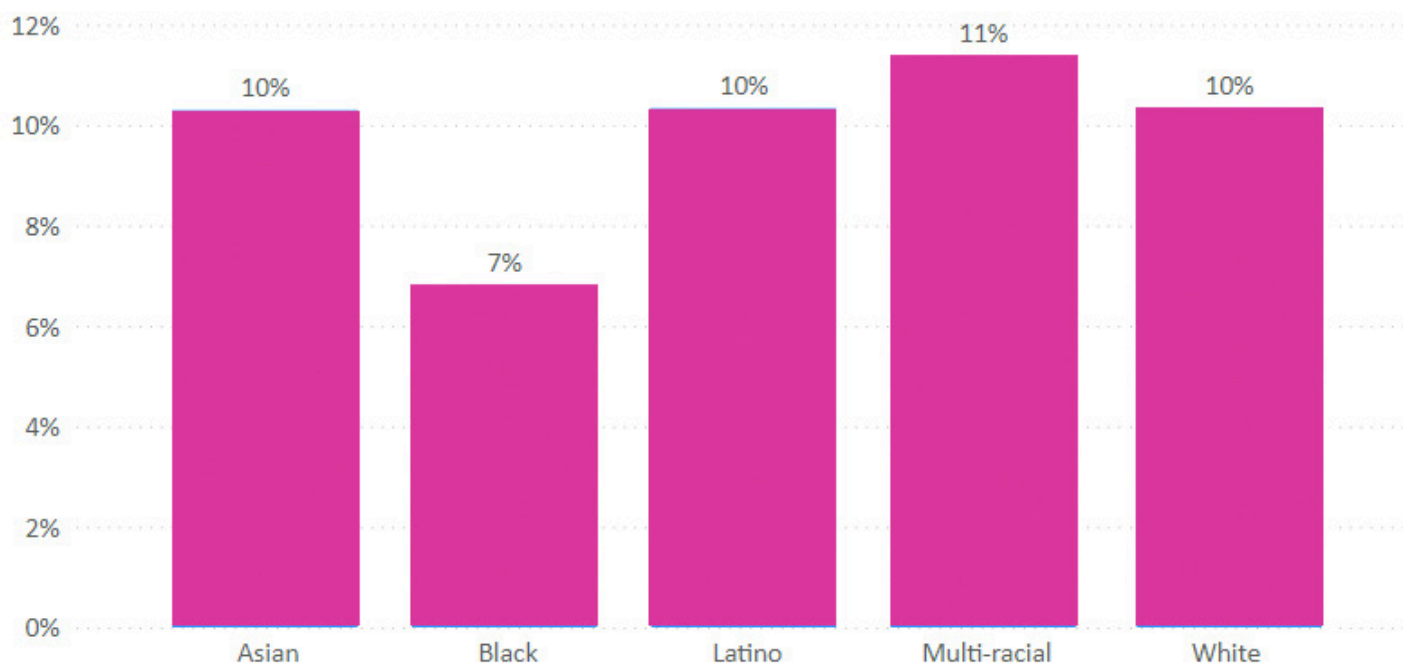
Promoting health and reducing chronic disease risk through the consumption of healthful food and drink is a national priority.⁶⁵ Good nutrition is critical for growth, development, physical and cognitive function, reproduction, mental health, immunity, and long-term health. An estimated 45% of all heart disease, stroke, and type 2 diabetes deaths are associated with poor nutritional intake of 10 dietary factors (low intake of vegetables, fruits, seafood, whole grains, nuts/seeds, polyunsaturated fats and high intake of sodium, red meats, processed meats, sugary beverages).⁶⁶

Local consumption of fruit and vegetables is below recommendations for the majority of adolescents and

adults. Only 10% of high school students report eating 4 or more servings of fruit or vegetables daily. The Behavioral Risk Factor Surveillance System (BRFSS) asks similar questions about adult vegetable consumption which revealed that 14% of residents in the metropolitan statistical area including San Francisco reported not eating any vegetables.⁶⁷

According to YRBS, among high school students, fewer Black students had 4 or more servings of fruits or vegetables per day than any other race/ethnicity (Figure 10). In 2021, 7% of Black students ate 4 or more servings of fruits or vegetables compared to 10% of Asian, Latino, and White students.

Figure 10. Percent of SFUSD High School Students Reporting 4+ Servings of Fruits or Vegetables per Day, by Race/Ethnicity, 2021



Note: Data for American Indian and Alaska Native and Native Hawaiian and Other Pacific Islander students are not reported because they were statistically unstable.

Data source: 2021 High School YRBS

CHIS is the best source of adult fast-food consumption in San Francisco. Unfortunately, data collection on this measure has not been repeated by CHIS since 2016.

As reported in 2019 Sugary Drinks Distributor Tax Advisory Committee Report, data from 2014 to 2016 show that 44% of San Franciscans reported eating fast food at least weekly. Differences in consumption by age, gender and race/ethnicity were observed. See [2019 Sugary Drinks Distributor Tax Advisory Committee Report](#) for more details on those findings.



Current State of Physical Activity and Built Environment in San Francisco

Physical activity is defined as any bodily movement that requires energy expenditure. The Centers for Disease Control and Prevention (CDC) recommends that children and adolescents, age 5 to 17 years, should do at least 60 minutes of moderate-to-vigorous physical activity daily, while adults, age 18 years and above, should do at least 150 minutes of moderate-intensity physical activity, 75 minutes of vigorous-intensity physical activity, or an equivalent combination of moderate and vigorous activity throughout the week.⁶⁸ The National Association for Sport and Physical Education set physical activity guidelines for infants to children 5 years old at a minimum of 120 minutes daily in the form of 60 minutes of structured activity and 60 minutes of unstructured activity.⁶⁹

Regular physical activity can help people live longer, healthier lives. According to WHO, physical inactivity has been identified as the fourth-leading risk factor (after hypertension, tobacco use, and high blood sugar) for mortality, causing an estimated 3.2 million deaths globally.⁷⁰ Physical activity protects against many chronic health conditions including obesity, cardiovascular disease, type 2 diabetes, metabolic syndrome, and cancer (breast and colon). Through the release of serotonin, exercise can help reduce stress, anxiety, and depression.⁷¹

Beyond physical and mental health, physical activity has been found to be important to the success of students. It supports learning by improving concentration and cognitive functioning, and is shown to have a positive influence on students' academic performance.⁷² California uses the FitnessGram® to assess physical fitness of 5th, 7th and 9th graders. On average, California students who achieve more fitness standards perform better on standardized tests.⁷³

Despite health advantages of physical activity, few are meeting public health goals. Less than a quarter (between 21% and 28% of children 6 to 17 years and just 23% of high school students in the U.S. are physically active for at least 60 minutes every day.⁷⁴ In 2020 just 25% of adults across the US met physical activity recommendations for aerobic and muscle-strengthening activity.⁷⁵

The environments in which we live can have significant impact on our level of physical activity. Institutional policies and practices, living conditions, especially physical and social environments, and individual factors interact to promote or inhibit physical activity.^{76,77} Land use and transportation policies determine the location and design of infrastructure and activities. Neighborhood features such as parks, sidewalks, bicycle trails, recreational

facilities, nearby shops, and public transportation stops promote leisurely physical activity, sports, and active transportation.^{78,79}

Although 100% of residents live within 10 minutes of a park, existence of infrastructure alone is insufficient. Barriers to use of facilities and physical activity include costs, poor access to facilities, and perceived unsafe environments.⁸⁰⁻⁸² Institutional policies, including those in the workplace and school and childcare, also affect health. Policies including transportation vouchers, on-location gyms, safe routes to school, recess, physical education, and after-hours availability of the school yard for play can boost physical activity among children and adults.⁸³ Additionally, social support is instrumental in starting and maintaining a physically active lifestyle. Persons who receive encouragement, support or companionship from family and friends are more likely to form positive views of physical activity and to begin and continue being physically active.⁸⁴⁻⁸⁷ At the individual level, interest in and ability to do physical activity vary. Individuals may have physical or emotional blocks to doing physical activity. Examples include a lack of skills or confidence; a functional limitation associated with a disability, a chronic disease, or increased age; habits such as cigarette smoking or drinking alcohol; as well as a dislike for physical activity.⁸⁸⁻⁹⁰ Additional personal barriers which are commonly cited are competing priorities, limited discretionary time and/or money, lack of childcare, and a lack of culturally-appropriate activities.

Walking or biking for utilitarian trips, sometimes referred to as active transportation, is an opportunity to incorporate routine physical activity into daily living. In San Francisco, 50% of adults report walking at least 150 minutes each week for transportation, fun or exercise. There is no difference in the percentage of adults walking by race, gender, or poverty status in San Francisco. The percentage of people walking in San Francisco is significantly higher than for California overall (38%).

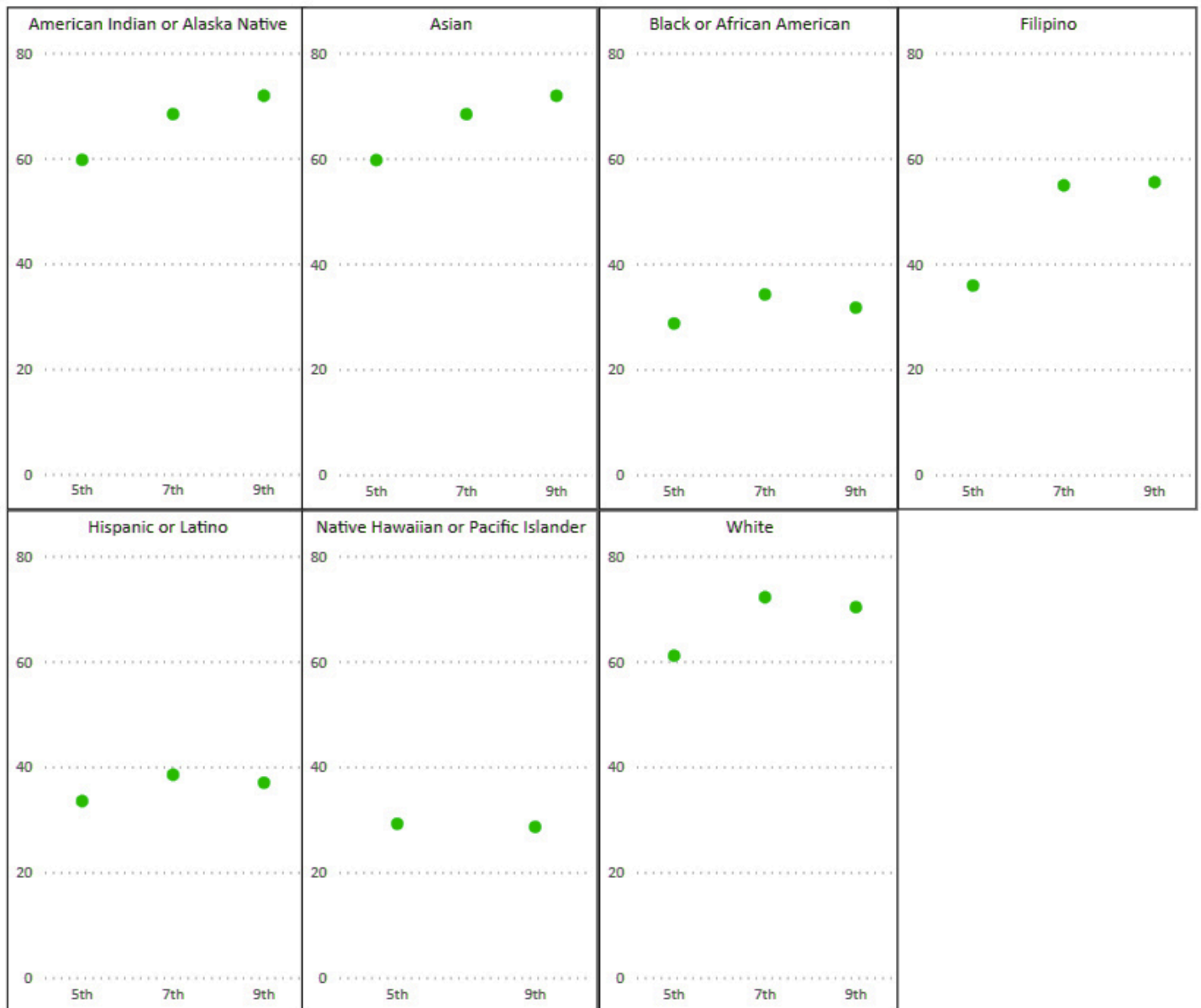
According to the California State Board of Education's standardized FitnessGram®, which tests students in grades 5, 7, and 9 on six measures of fitness, 45-59% of 5th, 7th and 9th grade SFUSD students are physically fit - defined as being in five or six out of six Healthy Fitness Zones (Figures 11a, 11b, and 11c). Children from economically disadvantaged households perform worse than students from families who are not economically disadvantaged (Figure 11c). While around 60% of Asian and White 5th grade students score within five or six zones, only 29% of Black/African American and Native Hawaiian or Pacific Islander 5th graders, 33% of Hispanic or Latino, and 36% of Filipino 5th graders do the same.



One of the most potent measures of physical fitness from the FitnessGram® test is aerobic capacity because of its relationship to cardiovascular and metabolic health. In San Francisco, about 72-74% of 5th and 7th graders meet the standard for aerobic capacity (Figure 12b) while about 65% of 9th graders meet the standard. When examined by income, the percentage of 9th graders identified as not economically disadvantaged who met the aerobic standard was more than 15 percentage points higher than

those identified as economically disadvantaged. By race/ethnicity, 80% or more of White and Asian students meet aerobic standards in 5th and 7th grade while only 49-53% of Black/African American and 59-67% of Hispanic or Latino students do the same. In 9th grade those rates for White students drop to around 73%, while they drop to 35% for Black/African American, 29% for Native Hawaiian or Pacific Islander, and 48% for Hispanic or Latino students.

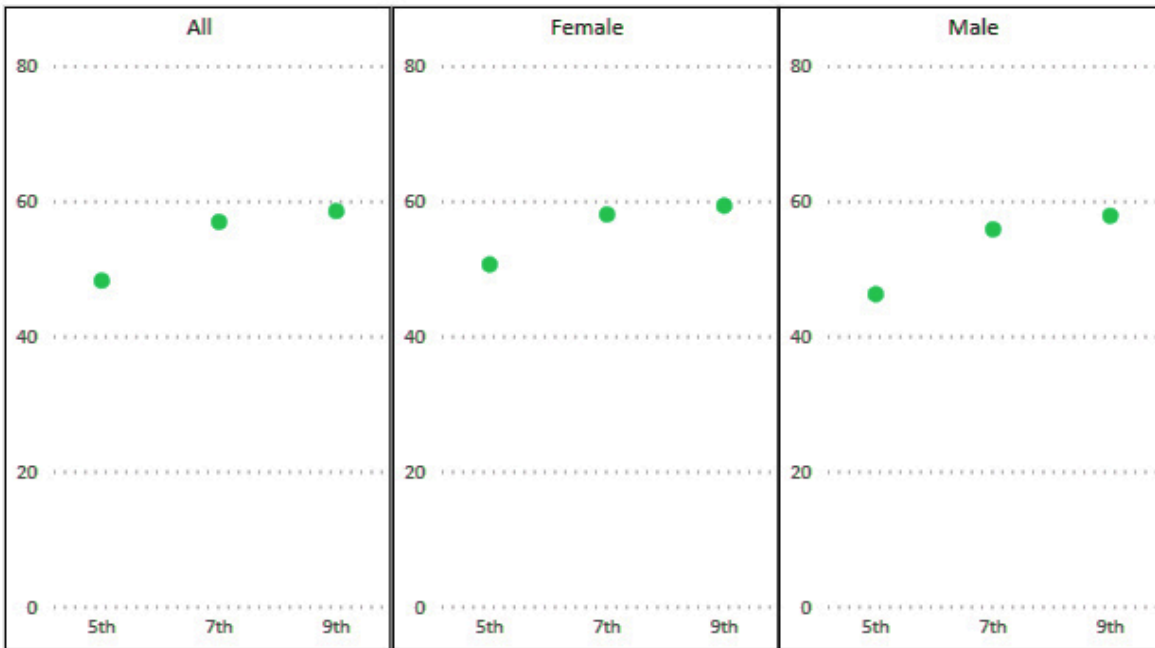
Figure 11a. Percent of SFUSD Students Meeting 5 by Race/Ethnicity, 2018-2019



Note: Data represent the percent of SFUSD students meeting 5 or more of 6 different fitness tests – aerobic capacity, body composition, abdominal strength, trunk extension strength, upper body strength, and flexibility.
Data source: California Department of Public Health

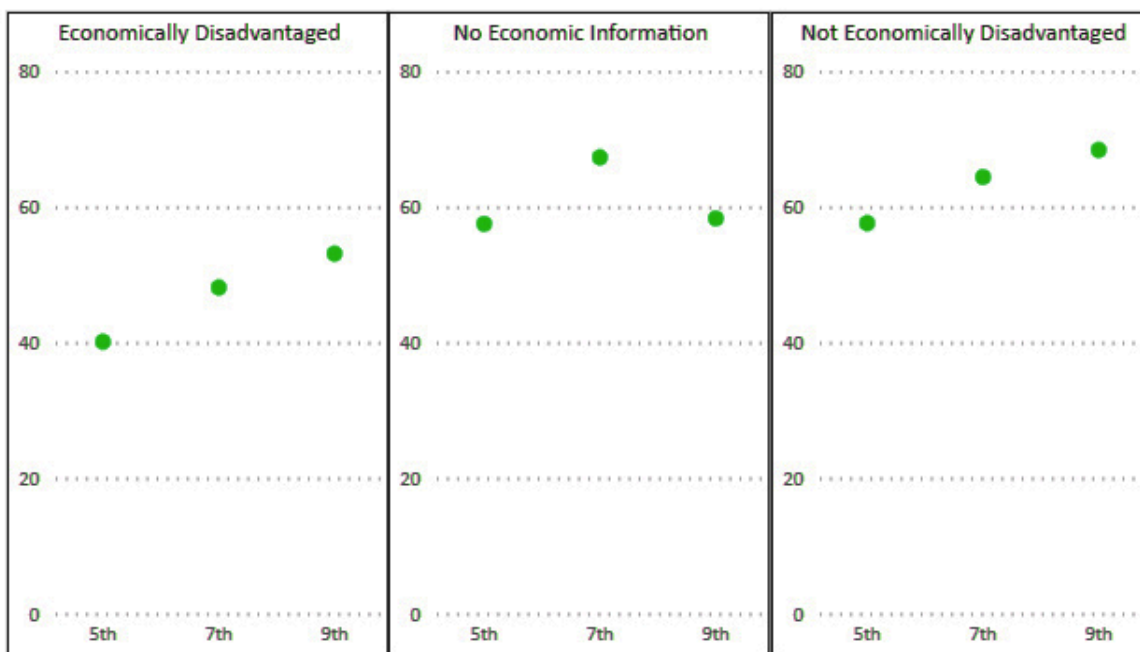


Figure 11b. Percent of SFUSD Students Meeting 5 or 6 of 6 Fitness Goals by Sex, 2018-2019



Note: Data represent the percent of SFUSD students meeting 5 or more of 6 different fitness tests – aerobic capacity, body composition, abdominal strength, trunk extension strength, upper body strength, and flexibility.
Data source: California Department of Public Health

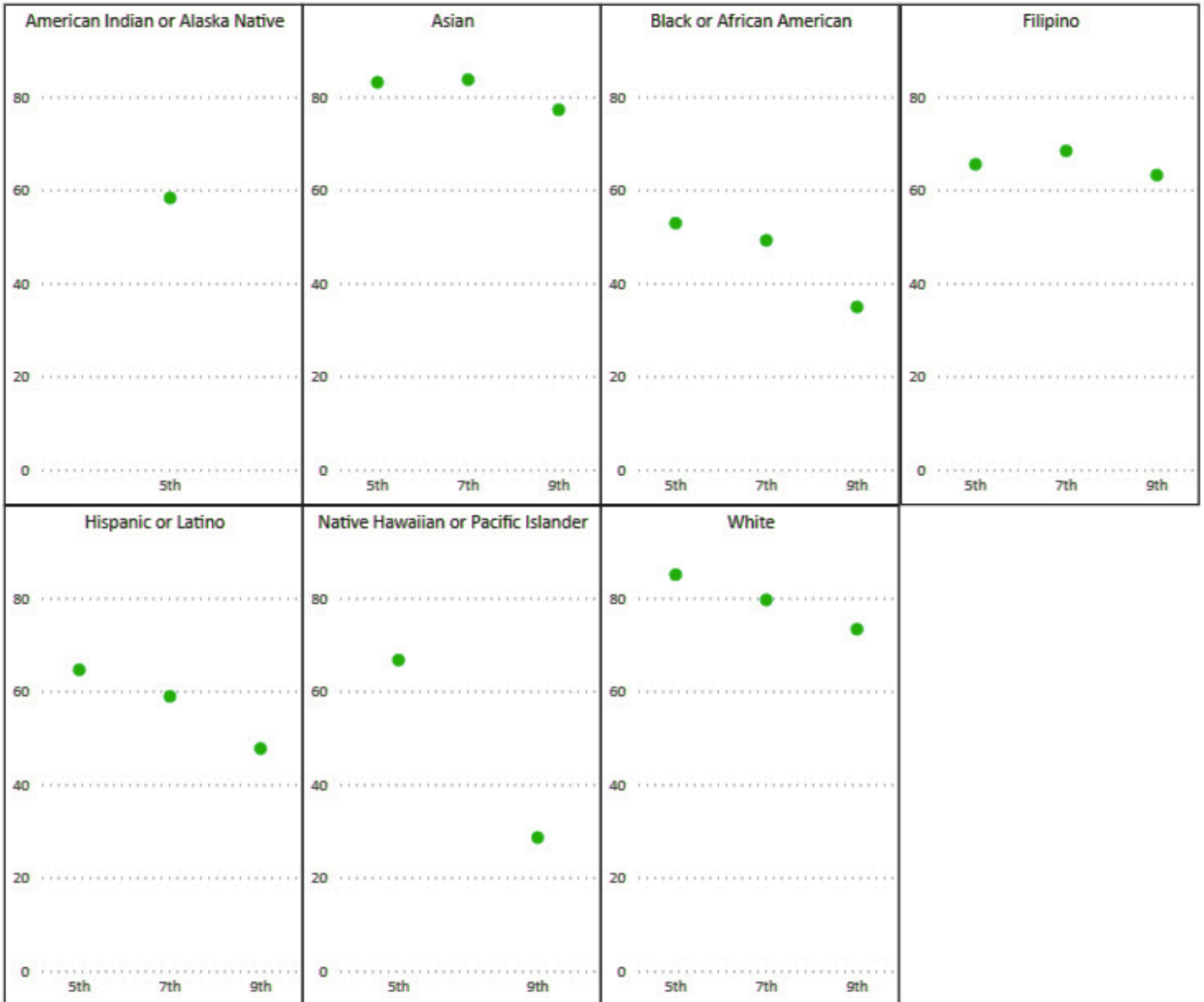
Figure 11c. Percent of SFUSD Students Meeting 5 or 6 of 6 Fitness Goals by Economic Status, 2018-2019



Note: Data represent the percent of SFUSD students meeting 5 or more of 6 different fitness tests – aerobic capacity, body composition, abdominal strength, trunk extension strength, upper body strength, and flexibility.
Data source: California Department of Public Health



Figure 12a. Percent of SFUSD Students with Aerobic Capacity in the Healthy Fitness Zone by Race/Ethnicity, 2018-2019

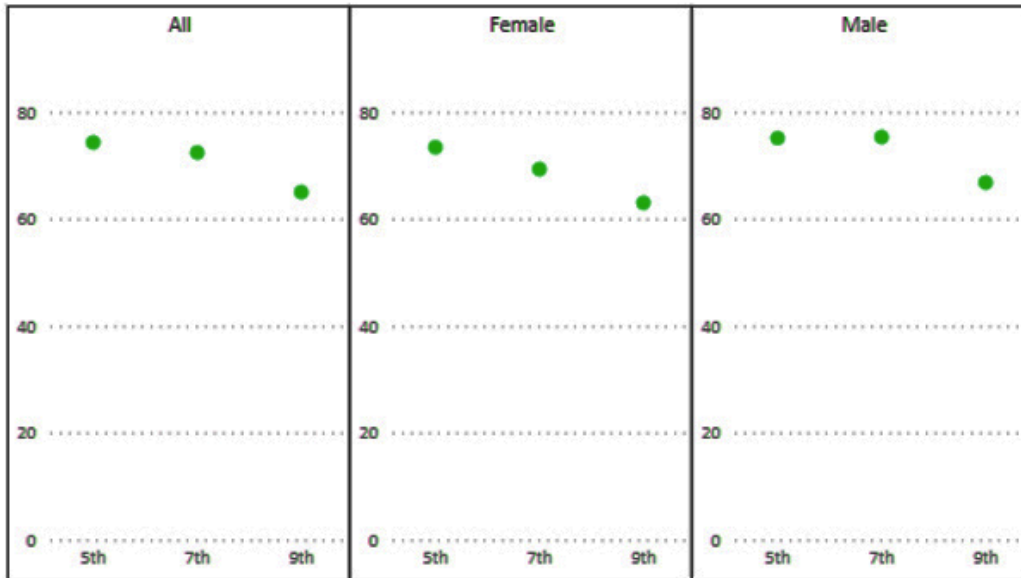


Note: Data represent the percent of SFUSD students meeting the healthy fitness zone for aerobic capacity. Missing data for a grade indicate that there were too few observations to report.

Data source: California Department of Public Health

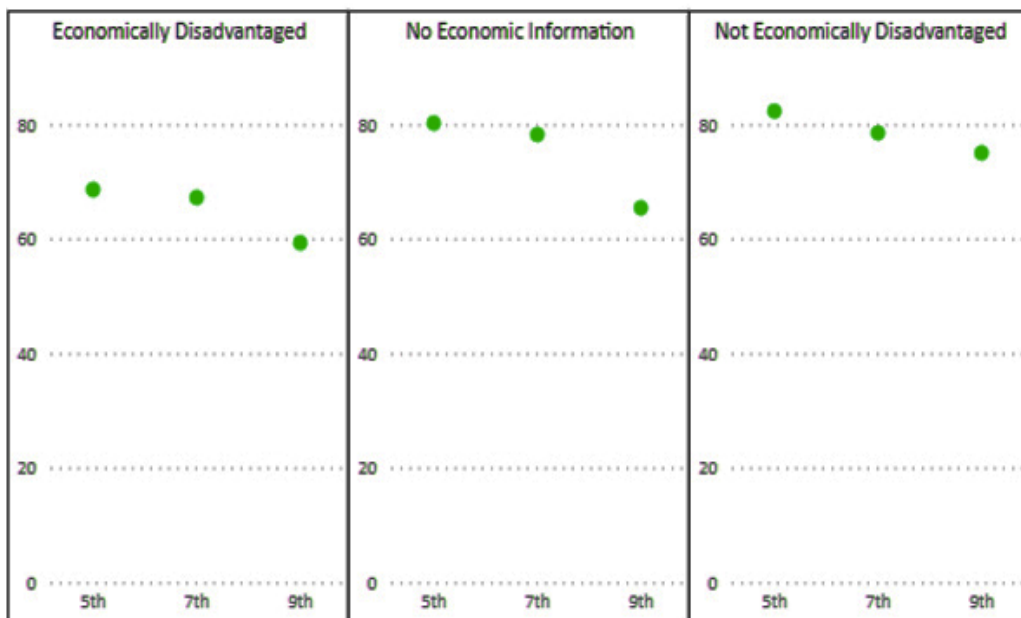


Figure 12b. Percent of SFUSD Students with Aerobic Capacity in the Healthy Fitness Zone by Sex, 2018-2019



Note: Data represent the percent of SFUSD students meeting the healthy fitness zone for aerobic capacity. Data source: California Department of Public Health

Figure 12c. Percent of SFUSD Students with Aerobic Capacity in the Healthy Fitness Zone by Economic Status, 2018-2019



Note: Data represent the percent of SFUSD students meeting the healthy fitness zone for aerobic capacity. Data source: California Department of Public Health



CURRENT STATE OF DIET-SENSITIVE DISEASE

Oral Health

Oral health is essential to general health and quality of life. It is a state of being free from mouth and facial pain, oral and throat cancer, oral infection and sores, periodontal (gum) disease, tooth decay, tooth loss, and other diseases and disorders that limit an individual's capacity in biting, chewing, smiling, speaking, and psychosocial well-being.⁹¹ SSB consumption is associated with increased tooth decay, cavities and tooth loss.⁹²⁻⁹⁵

Children's Oral Health

Tooth decay is the most common chronic disease of childhood and the leading cause for missed school days. Poor oral health can cause pain, dysfunction, school or work absences, difficulty concentrating, and poor appearance—problems that greatly affect quality of life and ability to interact with others. Children who experience dental decay miss more school, have lower academic achievement, and have an increased risk for a lifetime of dental problems.^{96,97} California students are estimated to miss 874,000 days of school due to dental problems, costing schools over \$29 million in funding based on reductions in the average daily attendance rate⁹⁸ Poor oral health can reflect systemic inflammation, which over time may limit growth and development, as well as increase risk of adverse health outcomes, including hypertension, cardiovascular disease, and cancer.⁹⁹

Routine preventive dental care including daily oral hygiene, fluoride treatments and dental sealants, and reduction of sugars in the diet can prevent tooth decay. Fluoride varnish applications reduce decayed/missing/

filled tooth surfaces by 43% in permanent teeth and by 37% in primary teeth.¹⁰⁰ Dental sealants can prevent up to 80% of tooth decay in children and adolescents.¹⁰¹

Despite steady decreases in caries (i.e. tooth decay or cavities) prevalence in San Francisco over the past 10 years, tooth decay remains a prevalent local health problem. In 2022-2023, 35% of SFUSD kindergarteners had experienced caries and 23% had untreated caries (Figure 26). As treatment of decay is alone insufficient and children who do not receive adequate treatment—fluoride treatments, dental sealants, ongoing care of cavity fillings—and reduce sugars in the diet are at higher risk for the development of further caries, the initial development of caries signals the beginning of a lifetime of otherwise preventable dental procedures. National and state data show that 52% to 71% of all children 6-9 years have caries^{102,103}

Consistent with nationwide patterns and trends, disparities in oral health persist in San Francisco. Low-income and minority children have higher tooth decay rates. In San Francisco, Black/African American, Latinx, and Asian kindergarteners are two to three times more likely to experience dental decay as White kindergarteners (Figure 13). Disparities are similar for *untreated* caries with Black/African American, Latinx, and Asian kindergarteners more likely to experience untreated caries (Figure 14). Rates of dental caries and the untreated dental caries among kindergarteners at the lowest income schools are three times higher than rates at the highest income schools (Figure 14).



Figure 13. Percent of SFUSD Students in Kindergarten that had Experienced Caries By Race/Ethnicity and School Income Level, 2018-2023

	2018-19	2019-2020*	2020-21	2021-2022**	2022-23***
Total	34 (33-35)	28 (27-33)	-	34 (32-36)	35 (33-37)
Race-ethnicity					
Asian	40 (37-43)	38 (33-43)	-	38 (35-41)	39 (36-42)
Black or African American	40 (33-47)	32 (20-45)	-	37 (30-44)	46 (38-54)
Latino/a/x	37 (34-40)	41 (35-47)	-	43 (40-46)	47 (44-50)
White	14 (11-17)	11 (7-15)	-	14 (11-17)	14 (11-17)
School income level					
Highest	16 (18-20)	12 (8-16)	-	18 (14-22)	18 (14-22)
Medium	23 (21-25)	16 (12-20)	-	25 (23-27)	23 (21-25)
Low medium	38 (31-44)	29 (24-35)	-	43 (40-46)	43 (40-46)
Lowest	52 (47-57)	49 (44-53)	-	50 (46-54)	55 (51-59)

*Estimates based on incomplete data from screenings finished in Fall 2019, before the COVID-19 shelter in place orders, were weighted using enrollment data for 2019-2020.

**Estimates for 2021-22 and 2022-23 are not weighted. Note that screening response rates for 2021-2023 were below pre-pandemic levels. The unweighted estimates for 2019-2023 (based on n~3,000) may not be comparable to rates in 2018-2019 (n~4,000).

Data source: San Francisco Unified School District-San Francisco Department of Public Health Dental Services Kindergarten Oral Health Screening Program

Figure 14. Percent of SFUSD Students in Kindergarten with Untreated Caries Experience by Race/Ethnicity and School, 2018-2023

	2018-19	2019-2020*	2020-21	2021-2022**	2022-23***
Total	19 (18-20)	18 (16-21)	-	23 (22-24)	23 (22-24)
Race-ethnicity					
Asian	21 (19-23)	24 (20-29)	-	25 (22-28)	33 (30-36)
Black or African American	25 (18-32)	26 (14-39)	-	27 (20-34)	31 (24-39)
Latino/a/x	19 (16-22)	24 (19-29)	-	30 (27-33)	32 (29-35)
White	8 (6-10)	7 (3-11)	-	9 (6-12)	7 (5-9)
School income level					
Highest	8 (6-10)	9 (6-13)	-	11 (8-14)	9 (6-12)
Medium	12 (10-14)	6 (3-9)	-	16 (14-18)	13 (11-15)
Low medium	22 (16-27)	16 (12-21)	-	30 (27-33)	29 (26-32)
Lowest	31 (26-36)	33 (29-38)	-	36 (33-40)	38 (34-41)

*Estimates based on incomplete data from screenings finished in Fall 2019, before the COVID-19 shelter in place orders, were weighted using enrollment data for 2019-2020.

**Estimates for 2021-22 and 2022-23 are not weighted. Note that screening response rates for 2021-2023 were below pre-pandemic levels. The unweighted estimates for 2019-2023 (based on n~3,000) may not be comparable to rates in 2018-2019 (n~4,000).

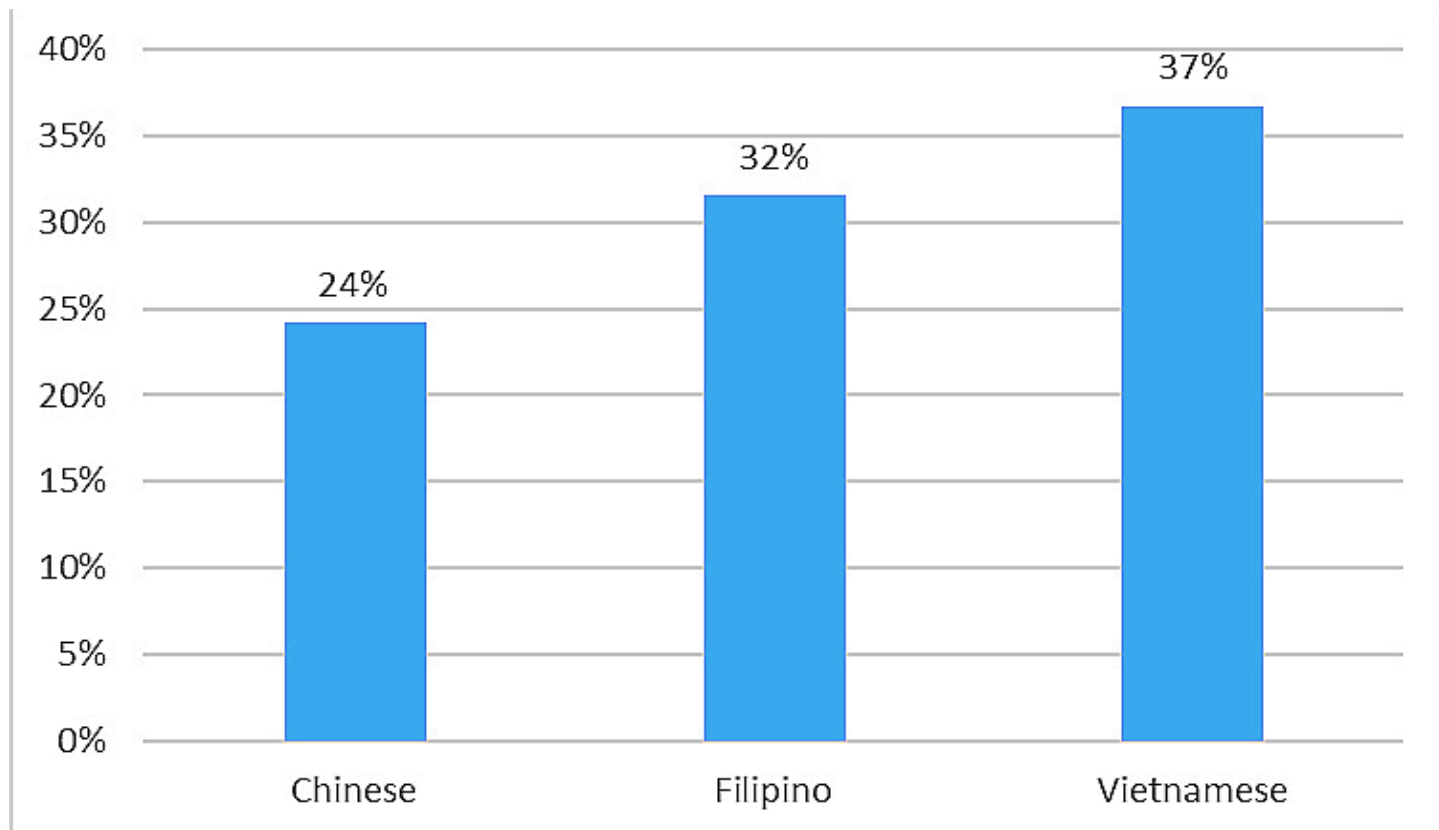
Data source: San Francisco Unified School District-San Francisco Department of Public Health Dental Services Kindergarten Oral Health Screening Program



Rates of caries experience vary among Asians subpopulations in San Francisco (Figure 15). Asian Indian, Cambodian, Hmong, Japanese, Korean, and Laotian collectively have lower rates of caries prevalence (20%) compared to Chinese, Vietnamese, and Filipinx (37-45%).

Caries experience varies by neighborhood. In 2022, children living in the following zip codes 94112, 94134, and 94124 experienced caries at the highest percentages (data not shown). The most affected neighborhoods being those with high proportions of Latinx, African American, Asian, and low-income residents.¹⁰⁴

Figure 15. Percent of SFUSD Kindergarteners with Untreated Caries by Asian Subgroup, 2022-2023



Note: Data are pooled estimates from 2022-2023
Data source: Kindergarten Oral Health Screening Program

Adult Oral Health

While data on tooth decay and caries experience rates is not available for San Francisco adults, there is statewide, county-level data on the number of emergency department visits for Non-Traumatic Dental Conditions (NTDCs), most of which are a result of tooth decay. During the years 2017-2021 there were over 84,000 visits to emergency departments in San Francisco where NTDCs were present (Table 7). Eighty percent of these visits were by individuals aged 18 and over. Black/African American, Native Hawaiian and Other Pacific Islander and American Indian or Alaska Native residents utilized emergency departments for NTDCs at much higher rates than other groups (Table 8). It's important to note that not presenting to the emergency department does not mean individuals are free of morbidity.



Table 7. Emergency Room Visits for Non-Traumatic Dental Conditions by Age Group, San Francisco, 2017-2021

Age Group	Count	Crude Rate (per 10,000)
Infants <1	2365	482.2
Children 1-4	6359	340.4
Children 5-8	3181	197.6
Adolescents 9-12	1976	154.7
Teens 13-17	2308	137.6
TAY 18-24	7786	220.9
25-34	13669	180.0
35-44	11221	160.6
45-54	10193	179.8
55-64	9699	194.6
65-74	6972	174.8
75+	8379	292.7

Note: Data represent emergency department visits where an individual had a related non-traumatic dental condition, regardless of the chief reason for the visit. Data are pooled 5-year estimates from 2017 to 2021.
Data source: California Department of Healthcare Access and Information

Table 8. Emergency Room Visits for Non-Traumatic Dental Conditions by Race/Ethnicity, San Francisco 2017-2021

Race/Ethnicity	Count	Crude Rate (per 10,000)
All	84108	197.7
American Indian or Alaska Native	478	494.1
Asian	13912	99.5
Black or African American	17270	788.8
Latino(a)	22662	327.0
Native Hawaiian or other Pacific Islander	1391	752.5
White	22800	129.7

Note: Data represent emergency department visits where an individual had a related non-traumatic dental condition, regardless of the chief reason for the visit. Data are pooled 5-year estimates from 2017 to 2021.
Data source: California Department of Healthcare Access and Information



Overweight and Obesity

A note regarding use of obesity as a measure of health.

Evolving research indicates that focusing on overweight/obesity furthers stigma and can exacerbate or contribute to poor health. Whereas the Healthy Eating Active Living Team in SFDPH's Community Health Equity and Promotion Branch have focused on preventing chronic disease and promoting nutrition and physical activity as opposed to obesity prevention; their recommendation is to shift from using obesity as a measure in this work and focus instead on other health conditions impacted by sugary drink consumption. The Canadian Medical Association Journal provides additional context to this recommendation:

"Although obesity has been shown to contribute to certain types of health problems, anti-fat stigma is also a threat to health. Anti-fat stigma adds both psychological and physiologic stress to people who are considered excessively fat, which some experts argue partially accounts for health disparities by weight.^{105,106} Anti-fat stigma is underpinned by common assumptions that fatness is highly malleable and under individual control, implying that people who are visibly fat have poor self-control, are unknowledgeable or are not invested in their health. Puhl and Heuer's 2009 review of over 200 studies (with experimental, survey, population-based and qualitative designs) highlighted how common such stigmatizing assumptions are and the discrimination that follows in multiple sectors.¹⁰⁷ In a 2016 systematic review and meta-analysis, Spahlholz and colleagues confirmed high rates of perceived weight-based discrimination in many life domains.¹⁰⁸ Stigmatization can be a daily occurrence; an analysis involving 50 overweight or obese women in the United States who filled out the Stigmatizing Situations Inventory over 298 days reported more than 1000 weight-stigmatizing events. Body mass index (BMI) was the strongest predictor."¹⁰⁹

SSB consumption is associated with overweight and obesity.^{110,111} Overweight and obesity reflect excess body weight relative to height. Overweight and obesity are associated with greater risk of chronic disease, pain, disability, anxiety, depression, mental illness, and lower quality of life. Obesity increases risk of chronic conditions, including high blood pressure, high cholesterol, heart

disease, type 2 diabetes, osteoarthritis, breast and colon cancers, sleep apnea, and gynecological problems.¹¹²⁻¹¹⁴ Obesity is associated with all-cause mortality, and is a leading cause of preventable death. Obese men age 20 to 39 have an estimated six years of life lost.¹¹⁵ That being said, overweight and obesity are not absolutely predictive of negative health outcomes for a given individual whose personal risk of disease can be equivalent or less than that of a normal weight individual depending on their genetics, diet, and level of physical activity.

For adults, overweight is defined as a body mass index (BMI) of 25.0 to 29.9 kg/m² and obesity as a BMI of \geq 30kg/m².¹¹⁶ For infants and toddlers up to two years of age, excess weight is identified as a weight-for-length greater than or equal to the 98th percentile.¹¹⁷ For children and adolescents, the CDC defines overweight as a body mass index (BMI) percentile over the 85th percentile for age and sex.¹¹⁸

FitnessGram® data for youth in San Francisco describe students as having body compositions either being within or outside the "healthy fitness zone" which is comprised of BMI and a measure of percent body fat.¹¹⁹ For pregnant women, excess weight gain is defined as a gain of more than 40 pounds if the mother is underweight before pregnancy, more than 35 pounds if she is normal weight before pregnancy, more than 25 pounds if she is overweight before pregnancy, and more than 20 pounds if she is obese before pregnancy.¹²⁰

Risk of overweight and obesity begins during pregnancy and tracks throughout the life course. Excess maternal weight gain during pregnancy programs the unborn fetus for a lifetime of exaggerated response to insulin and stress hormones, and increased susceptibility to weight gain.¹²¹⁻¹²⁷ Excess weight gain during pregnancy is associated with excess infant weight at birth, excess weight gain before age five, and childhood and adult obesity. Overweight children are more likely to become overweight adolescents who in turn have a 70% chance of becoming an overweight or obese adult.^{128,129} Prevention and early intervention are very important, because obesity is difficult to treat once established.¹³⁰



YOUTH – Overweight and Obesity

Nationally, childhood obesity has more than doubled in children and tripled in adolescents in the past 30 years; in 2010, more than one-third of children and adolescents were overweight or obese.¹³¹

SFUSD assesses students for body mass index (BMI) and other fitness measures annually in grades 5, 7, and 9 (the FitnessGram®). In school year 2018-2019, 66% of 5th grade students, 66% of 7th graders, and 69% of 9th graders had a measured body composition inside the healthy fitness zone.

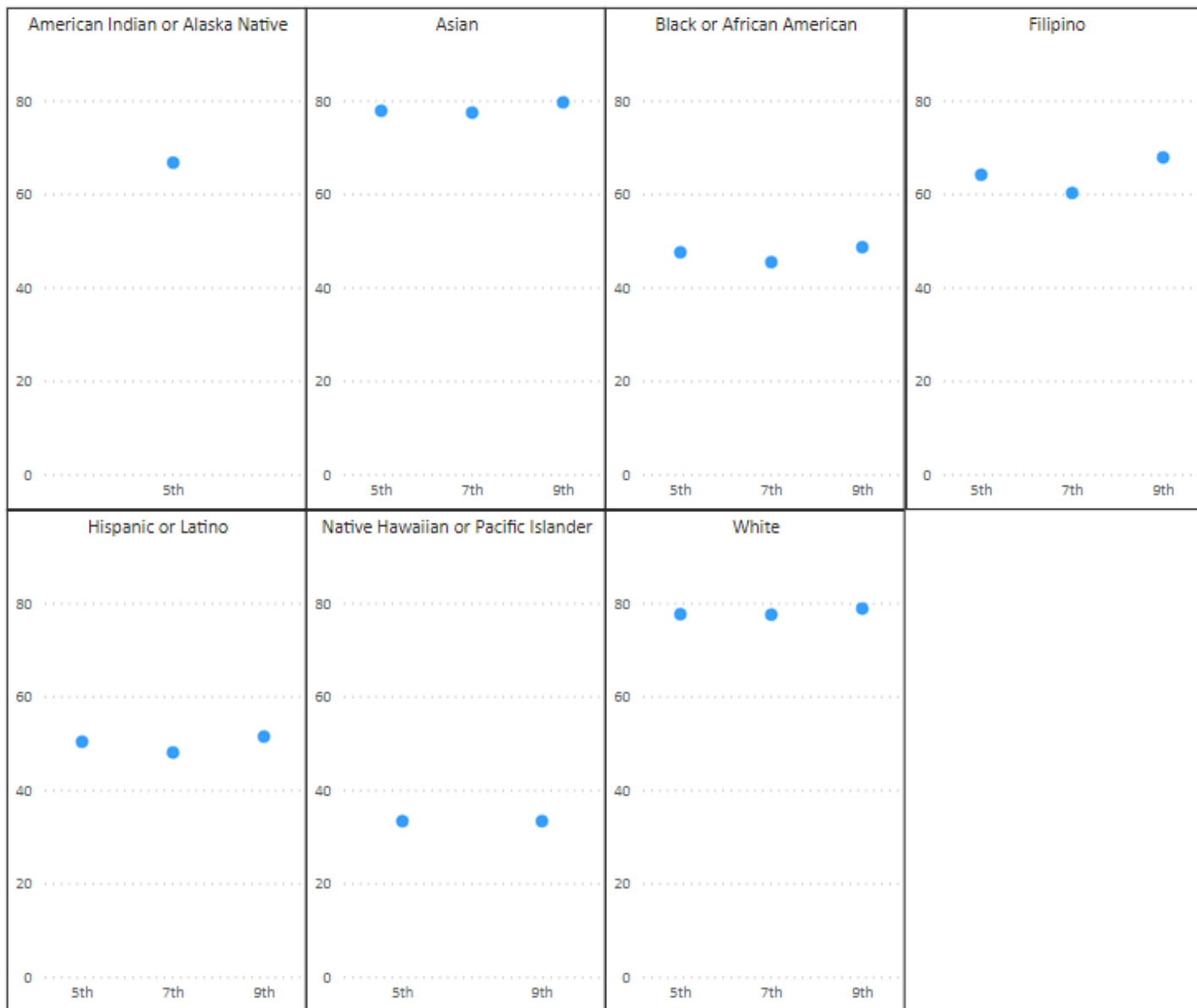
A lower proportion of racial minority, economically disadvantaged, and male students have a body composition inside of the healthy fitness zone (Figures

16a-16c). Asian and white students are about 2.2 times more likely than Pacific Islander students, 1.8 times more likely than Black/African American or Latinx students, and 1.2 times more likely than Filipinx students to have a healthy body composition. Similarly, economically disadvantaged students (58-65%) are less likely to have a measured body composition inside the healthy fitness zone than not economically disadvantaged students (67-76%). These trends among people of color, and those at an economic disadvantage are mirrored in the adult population; however, unlike among adults, female students (68-72%) appear to be more likely to be within the healthy fitness zone as compared to male students (62-66%).





Figure 16a. Percent of SFUSD Students with a Body Composition Inside the Healthy Fitness Zone by Race/Ethnicity, 2018-2019

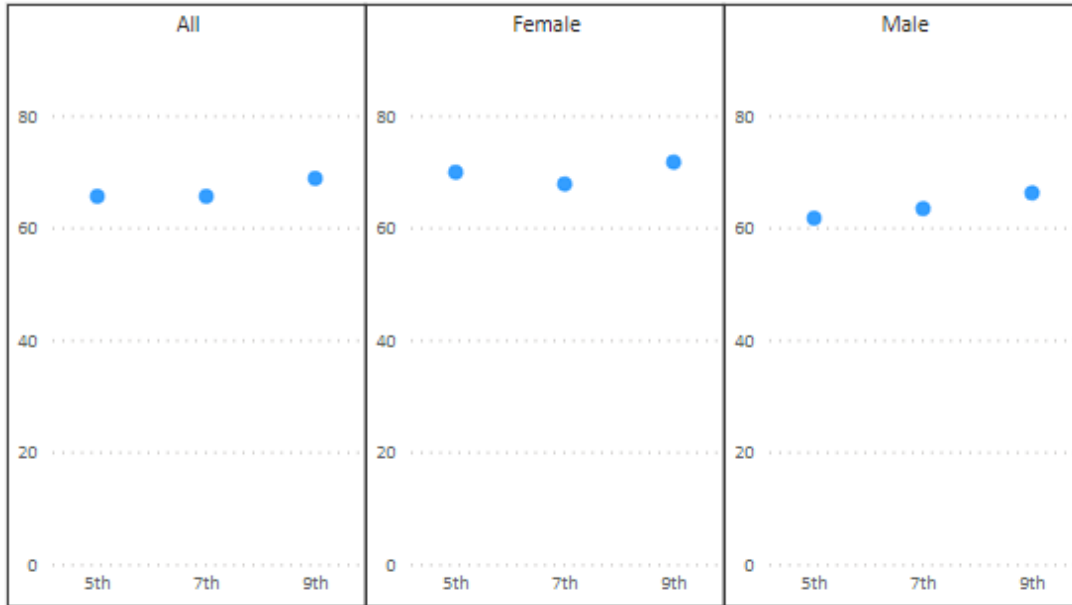


Note: Data represent the percent of SFUSD students meeting the healthy fitness zone for body composition. Missing data for a grade indicate that there were too few observations to report.

Data source: California Department of Public Health

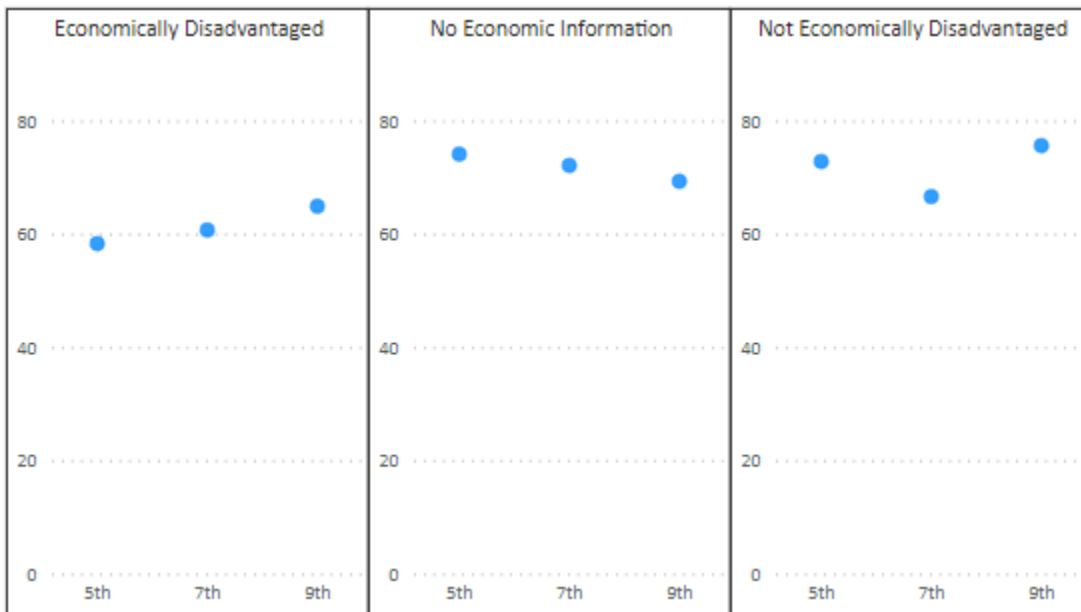


Figure 16b. Percent of SFUSD Students with a Body Composition Inside the Healthy Fitness Zone by Sex, 2018-2019



Note: Data represent the percent of SFUSD students meeting the healthy fitness zone for body composition.
Data source: California Department of Public Health

Figure 16c. Percent of SFUSD Students with a Body Composition Inside the Healthy Fitness Zone by Economic Status, 2018-2019



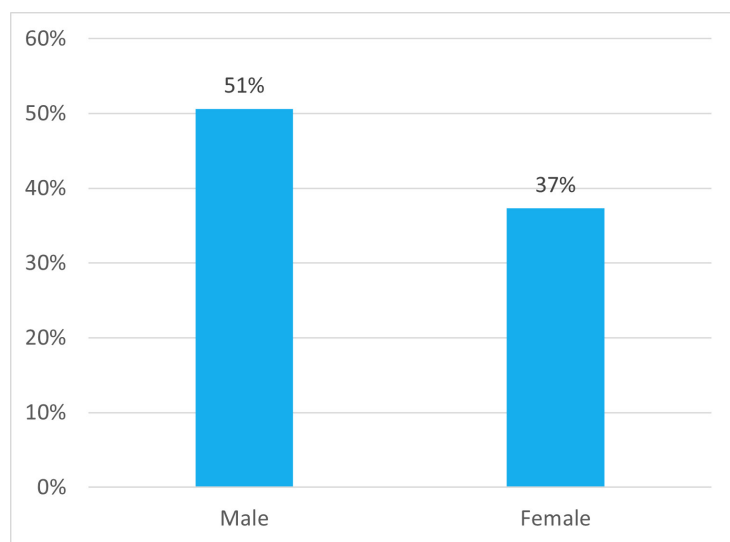
Note: Data represent the percent of SFUSD students meeting the healthy fitness zone body composition.
Data source: California Department of Public Health



ADULTS – Overweight and Obesity

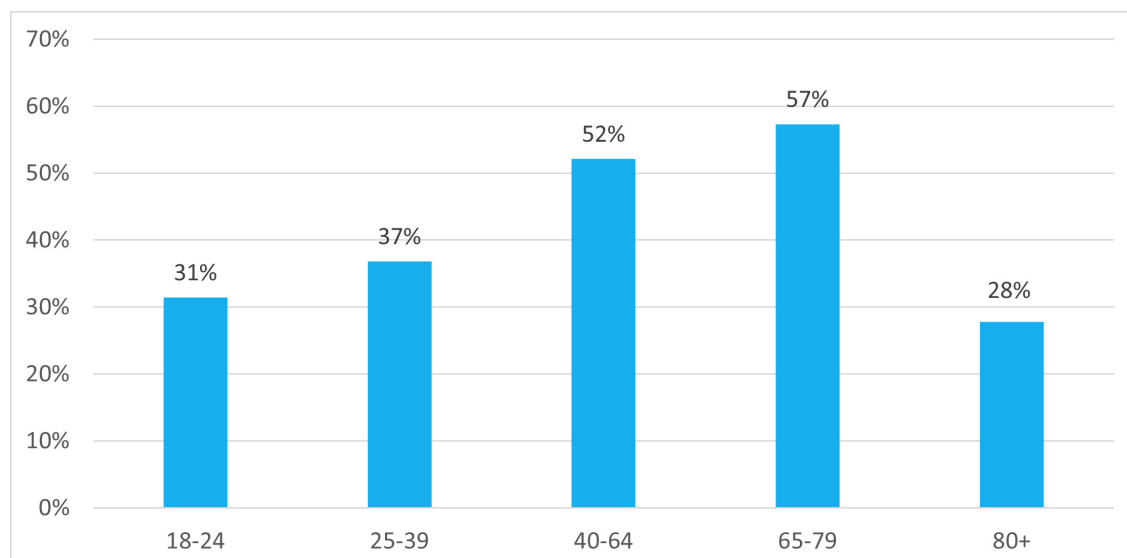
According to CHIS, the percentage of adults reporting weight and height consistent with overweight and obesity (which includes BMI ≥ 25) among adults has remained relatively stable since 2011. In 2011, 65.1% of San Francisco adults reported a height and weight consistent with being overweight/obese compared with 64.5% in 2021. More men report experiencing overweight or obesity than women 51% vs 37%, respectively (Figure 17). More than 50% of adults 40-79 years old in San Francisco are overweight or obese compared to 31% of adults 18 to 24 years.

Figure 17. Percentage of Adults Reporting Height and Weight Consistent with Overweight or Obesity, by Gender, 2021



Data source: California Health Interview Survey

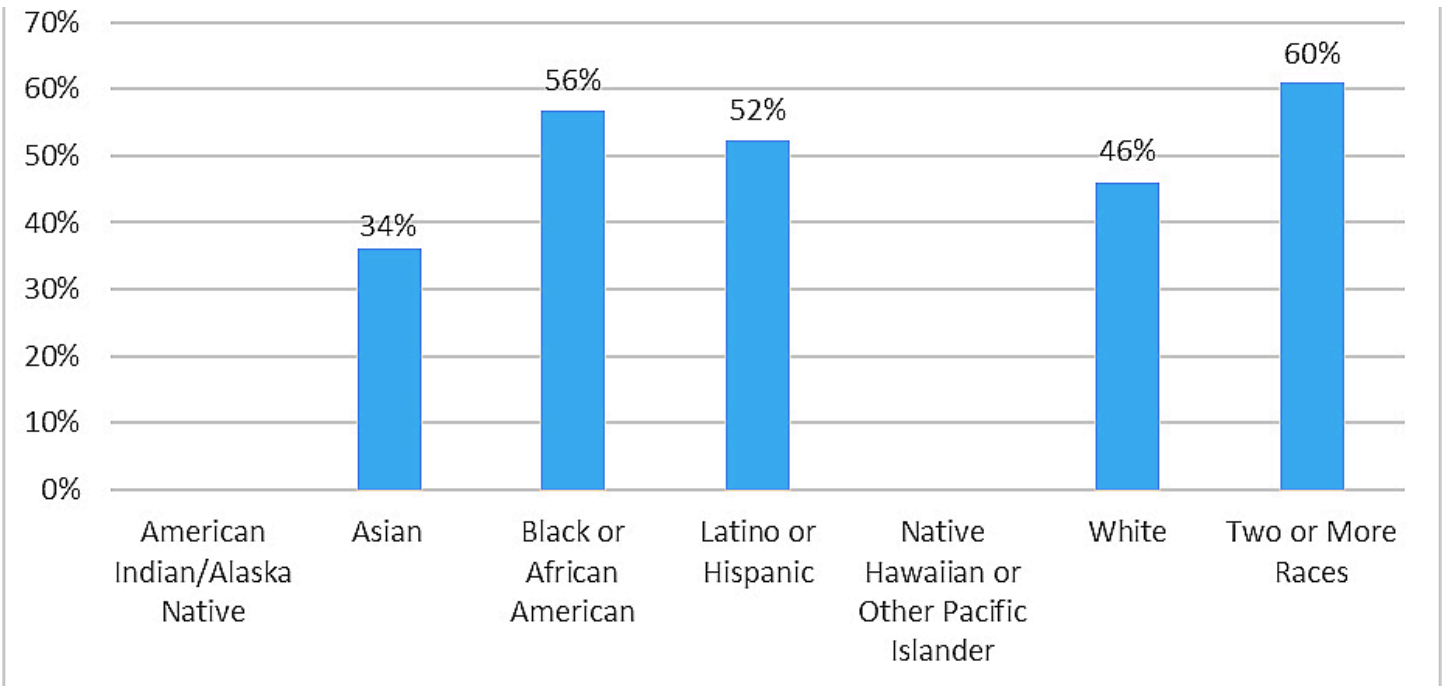
Figure 18. Percentage of Adults Reporting Height and Weight Consistent with Overweight or Obesity, by Age, 2021



Data source: California Health Interview Survey



Figure 19. Percentage of Adults Reporting Height and Weight Consistent with Overweight or Obesity, by Race/Ethnicity, 2021

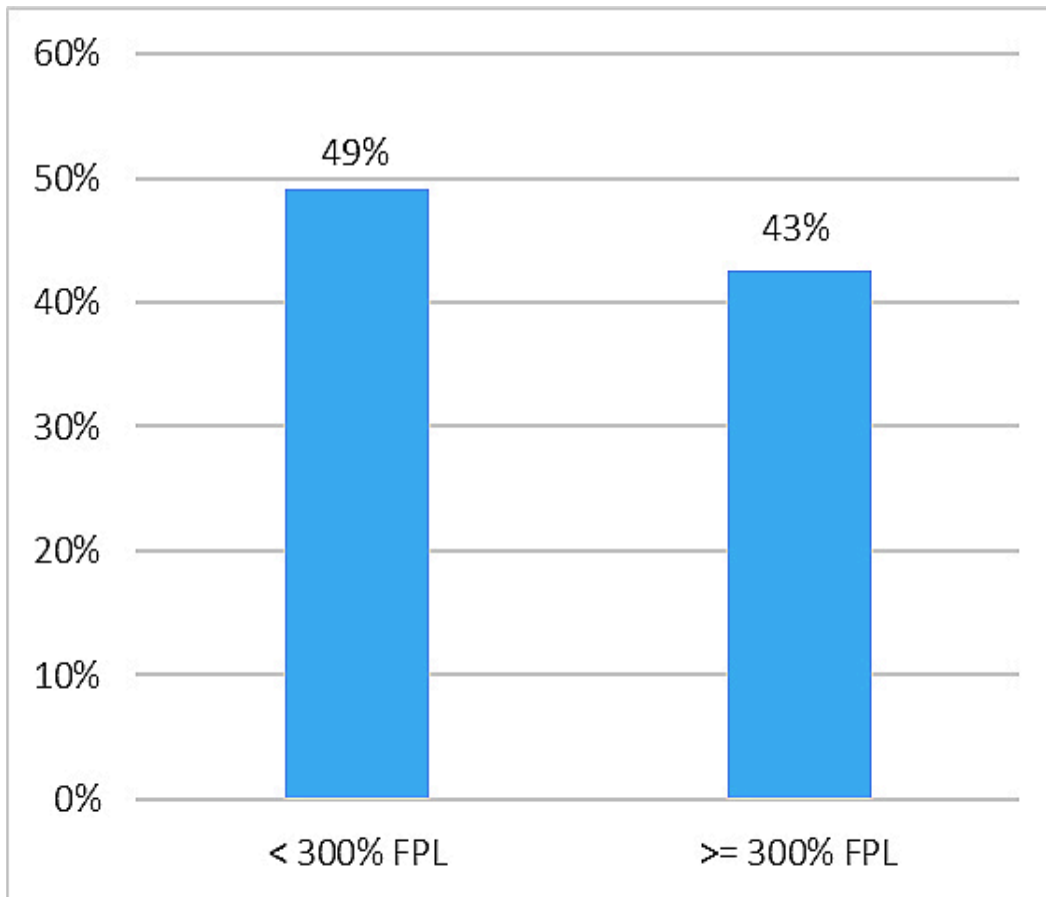


Note: Data were not available for American Indian/Alaska Native or Native Hawaiian or Other Pacific Islander residents due to small sample sizes.

Data source: California Health Interview Survey



Figure 20. Percentage of Adults Reporting Height and Weight Consistent with Overweight or Obesity, by Poverty Level, 2013



Data source: California Health Interview Survey

Consistent with national obesity disparities, locally, the rates of overweight and obesity vary by income, race/ethnicity, and zip code. Data from the California Health Interview Survey indicates that Black/African Americans (56%), Latinx (52%), and Whites (46%) have higher prevalence of overweight/obesity than Asians (34%), who have the lowest rate of overweight and obesity in San Francisco (Figure 34).^{iv} Residents in households earning less than 300% of the federal poverty level are 38% more likely to experience overweight or obesity as compared to those at 300% or above (Figure 20).

^{iv} While data does suggest that Asian people with a high risk of type 2 diabetes and cardiovascular disease is substantial at BMIs lower than the cutoff for overweight (>25kg/m²), no clear cut-off point has been identified for all Asians for overweight and obesity. For international classification, the WHO recommends keeping the standard cut points. However, for many Asian populations public health action points were defined as 23 kg/m² indicating increased risk and 27.5 kg/m² as high risk. At this time data are not available for the different cut-points and guidance is required to determine which cut-off points are useful for San Francisco. ii Insufficient data is available to produce mortality rates for specific causes for Native Hawaiian or Pacific Islanders and American Indian and Alaska Native residents. Comparisons here are made with Asian, Latin(a), and White residents.



The CDC's modeling of obesity suggests that it is concentrated in parts of Bayview Hunters Point, Tenderloin, Western Addition, Hayes Valley, Visitacion Valley, and McLaren Park, coinciding with concentrations of populations at higher risk.¹³³

Pregnant People

Data on excessive weight gain during pregnancy is provided by the Maternal, Child and Adolescent Health (MCAH) Section at SFDPH. An update on this indicator will be released Spring of 2024. Since this is later than this report's release, new data on this indicator will be included in the next version of this report.

As reported in [2019 Sugary Drinks Distributor Tax Advisory Committee Report](#), more than one third of women (37%) gained excess weight during pregnancy in San Francisco in 2018. Differences in excess weight gain during pregnancy by weight status prior to becoming pregnant, race/ethnicity, and insurance type were observed. See [2019 Sugary Drinks Distributor Tax Advisory Committee Report](#) for more details on those findings.

Diabetes

Diabetes is a condition in which the body does not properly process food for use as energy, leading to increased levels of glucose in the blood which can cause damage to tissues and organs throughout the body. The two main types of diabetes are type 1 diabetes and type 2 diabetes. Type 1 diabetes, previously called insulin-dependent diabetes mellitus or juvenile onset diabetes, accounts for 5-10% of all cases of diabetes and is considered primarily a genetic disease whose onset is not particularly influenced by diet or the environment.¹³⁴ In contrast, type 2 diabetes, previously called non-insulin-dependent diabetes mellitus or adult-onset diabetes, accounts for about 90 to 95% of all diagnosed cases of diabetes. SSB consumption is associated with increased risk of developing type 2 diabetes.^{135,136} A third type, gestational diabetes, develops only during pregnancy. Babies born to mothers with gestational diabetes may suffer from excessive birth weight, preterm birth, respiratory distress syndrome, low blood sugar, and type

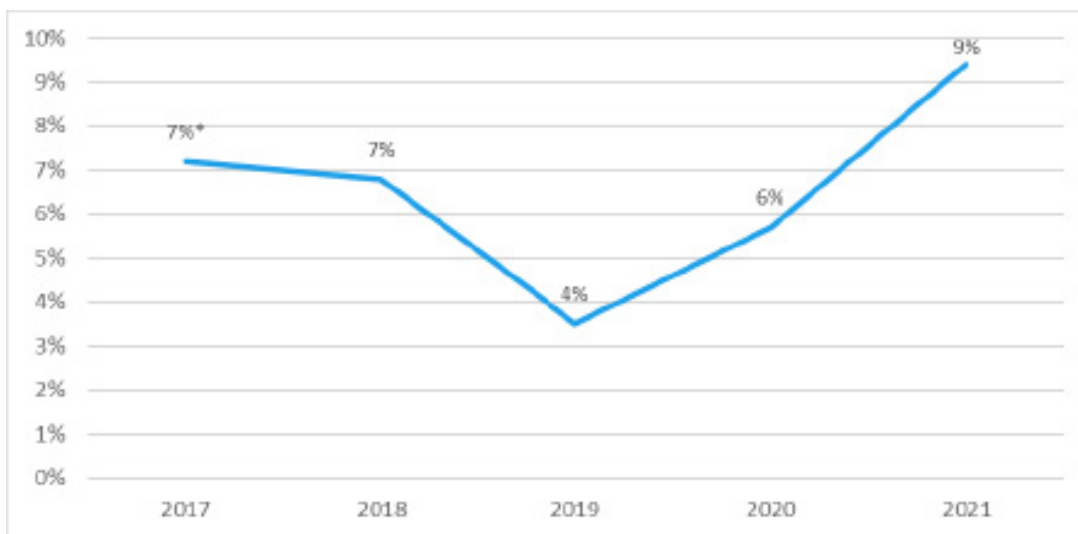
2 diabetes later in life. Women who have gestational diabetes during pregnancy have a 7.5-fold increased risk for the development of type 2 diabetes after delivery. This increased risk persists for their lifetime, even if diabetes does not develop immediately following pregnancy. Risk factors for type 2 diabetes and gestational diabetes include older age, obesity, family history of diabetes, prior history of gestational diabetes, impaired glucose tolerance, unhealthy diet, physical inactivity, and race/ethnicity.¹³⁷

Prediabetes, also referred to as impaired glucose tolerance or impaired fasting glucose, is a condition in which blood glucose levels are higher than normal but not high enough for a diagnosis of diabetes. People with prediabetes have a much higher risk of developing type 2 diabetes, as well as an increased risk for cardiovascular disease. Without intervention, up to 30 % of people with prediabetes will develop type 2 diabetes within five years, and up to 70 % will develop diabetes within their lifetime.^{138,139} According to modeled prevalence estimates by the UCLA Center for Health Policy Research, approximately 44% of San Franciscans have pre-diabetes.¹⁴⁰

Type 2 Diabetes can be prevented or delayed through moderate weight loss, exercise and improved nutrition, yet, type 2 diabetes impacts health and health spending significantly.^{141,142} Diabetes is the eighth leading cause of death in San Francisco which is an underestimate since heart disease, the leading killer, is often worsened by having concurrent diabetes.¹⁴³ It is also the leading cause of kidney failure and the need for dialysis and can cause other serious health complications including blindness and lower-extremity amputations.^{144,145} Diabetes reduced the lifespan of San Franciscans by approximately eight years and, as estimated by San Francisco's Budget and Legislative Analyst Office, the City and County of San Francisco pays over \$87 million for direct and indirect diabetes care costs.¹⁴⁶



Figure 21. Percentage of Adults Reporting Having Diabetes, by Year, 2017-2021



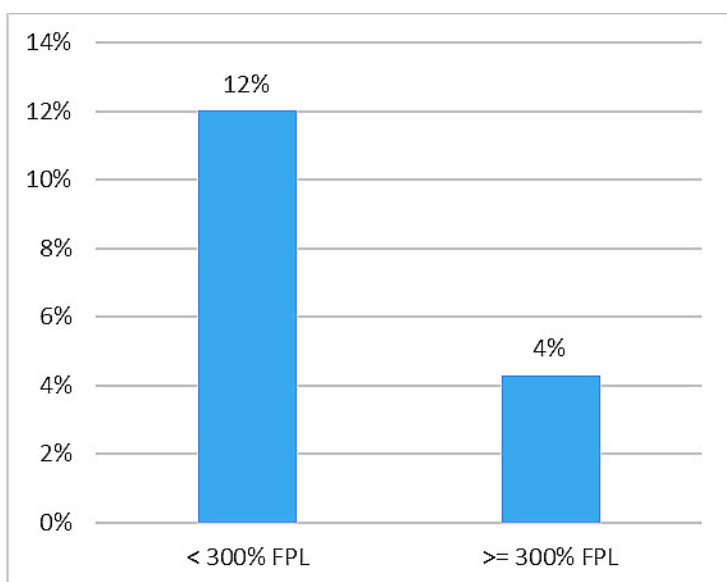
Percentage of adults in San Francisco that have ever reported being told by their healthcare provider that they had diabetes or sugar diabetes. Data for 2017 is not statistically stable, indicated by the asterisk.

Data source: California Health Interview Survey

Diabetes Prevalence

According to CHIS, from 2019-2021 approximately 6% of adults in San Francisco reported ever being diagnosed with diabetes, excluding during pregnancy. However, the prevalence of diabetes appears to be increasing. In 2018 6.8% of adults in San Francisco reported having ever been diagnosed with diabetes while in 2021 that percentage rose to 9.4% (Figure 21). However nationally, nearly 1 in 4 people living with diabetes are undiagnosed thus the true prevalence of type 2 diabetes in San Francisco is likely higher.

Figure 22. Percentage of Adults Reporting Having Diabetes, by Poverty Level, 2019-2021



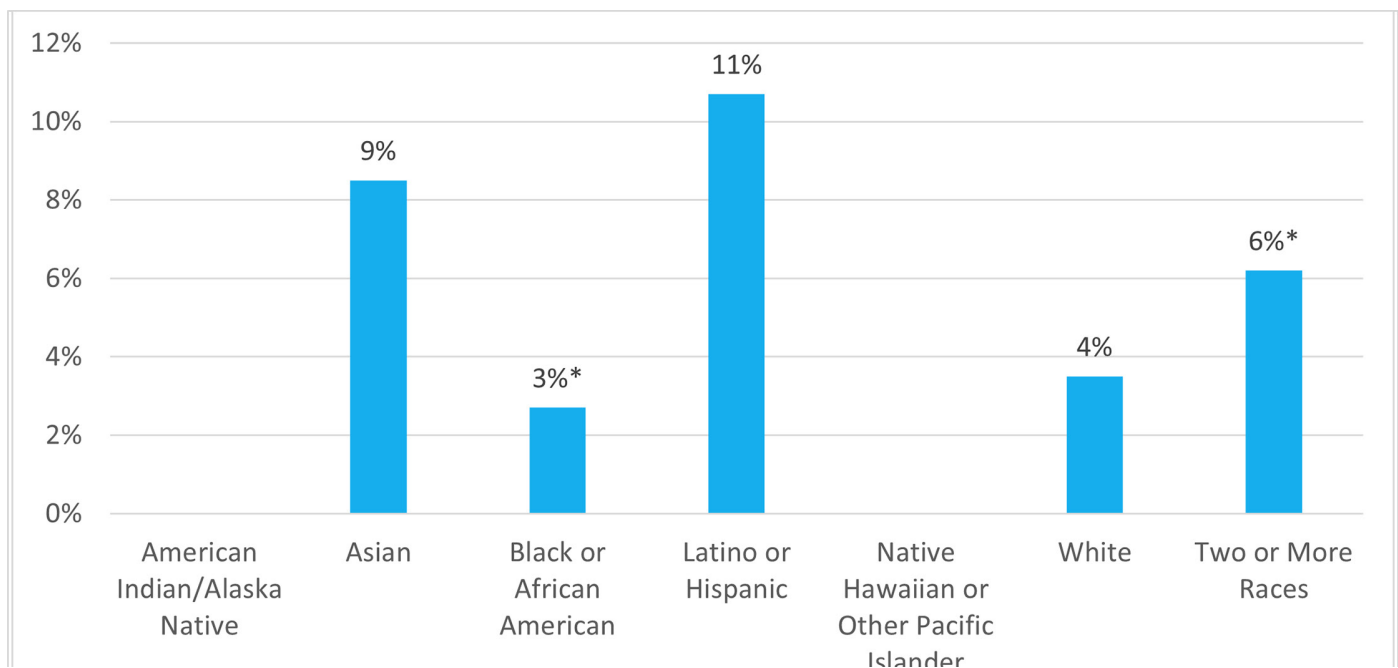
Note: Percentage of adults in San Francisco that have ever reported being told by their healthcare provider that they had diabetes or sugar diabetes. Data are pooled for three years, 2019-2021.

Data source: California Health Interview Survey



Nationally and locally, diabetes affects poorer residents to a greater extent¹⁴⁷; San Francisco residents living in household which earn less than 300% of the federal poverty level, are about 3 times as likely to have diabetes (Figure 22). By race/ethnicity, Latino/Hispanic and Asian residents had the highest rates of diabetes compared to White residents (11%, 9%, and 4% respectively). However, estimates were not statistically stable for Black/African American residents and were not available for American Indian/Alaska Native and Native Hawaiian or Other Pacific Islander residents due to the small number of respondents. Statewide, we know that the prevalence of diabetes is highest among Native Hawaiian or Other Pacific Islander, Black/African American, and Latino or Hispanic adults compared to White adults (20%, 15%, 12% and 9%, respectively) for 2019-2021.

Figure 23. Percentage of Adults Reporting Having Diabetes, by Race/Ethnicity, 2019-2021



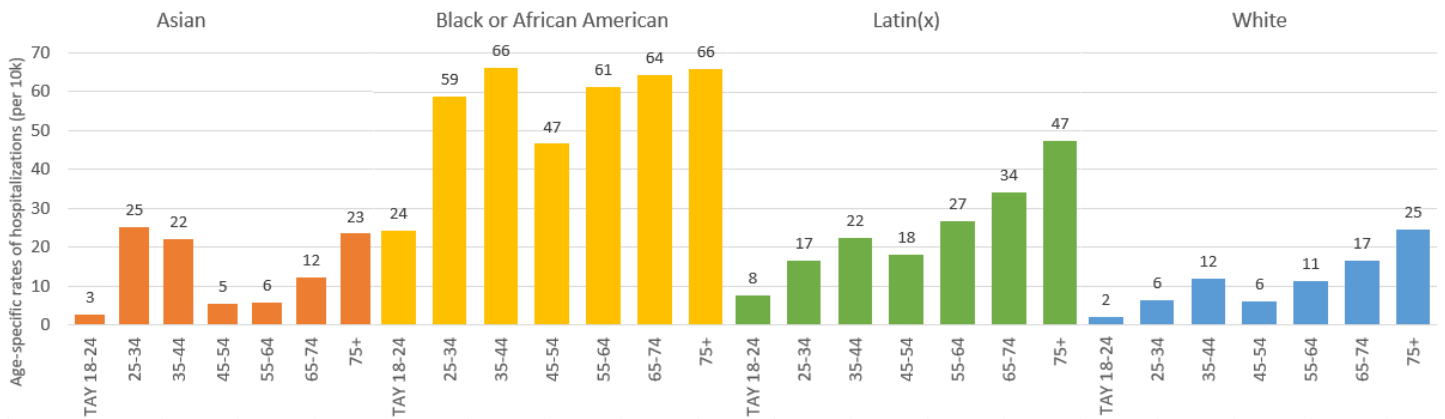
Note: Percentage of adults in San Francisco that have ever reported being told by their healthcare provider that they had diabetes or sugar diabetes. Data were not available for American Indian/Alaska Native or Native Hawaiian or Other Pacific Islander residents due to small sample sizes. Data are pooled for three years, 2019-2021.

Data source: California Health Interview Survey

Rates of hospitalizations and emergency room visits are markedly higher for Black/African American and Latinx residents than for White and Asian residents (Figure 24a and 24b) at all ages. Residents in the eastern zip codes (specifically 94102, 94103, 94124, 94130, and 94134) are more likely to be hospitalized due to diabetes than those living elsewhere in San Francisco.^{148,149}



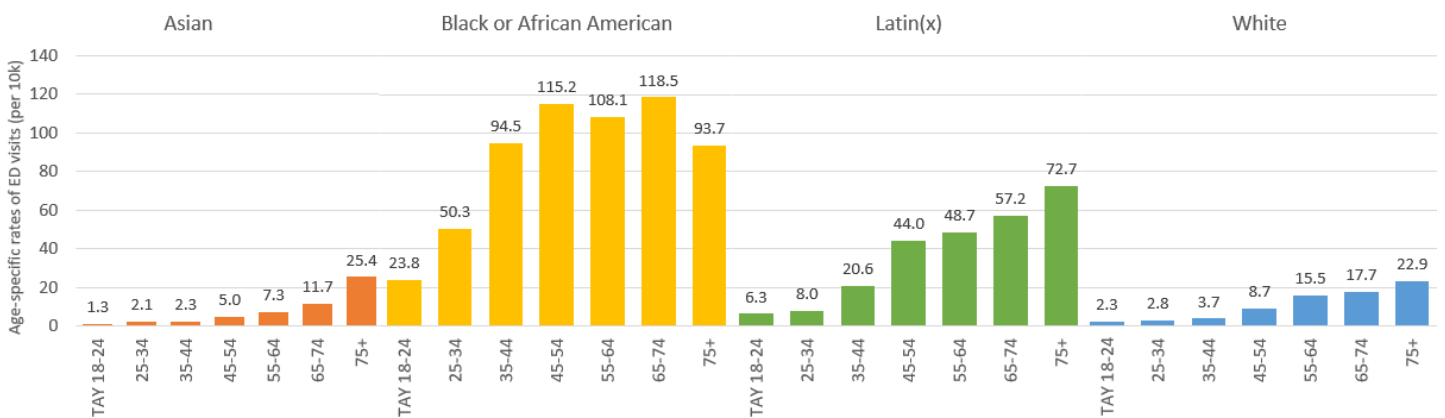
Figure 24a. Age-Specific Rates of Hospitalizations Due to Diabetes Among Adults, 2017-2021



Note: Data represent hospitalization discharges. Hospitalization rates for Native Hawaiian and Other Pacific Islanders and American Indian and Alaska Natives are not available because the population sizes are too small. Data are pooled 5-year estimates from 2017 to 2021.

Data source: California Department of Healthcare Access and Information

Figure 24b. Age-Specific Rates of Emergency Department Visits Due to Diabetes Among Adults, 2017-2021



Note: Data represent hospitalization discharges. Hospitalization rates for Native Hawaiian and Other Pacific Islanders and American Indian and Alaska Natives are not available because the population sizes are too small. Data are pooled 5-year estimates from 2017 to 2021.

Data source: California Department of Healthcare Access and Information

Gestational Diabetes

Data on gestational diabetes is provided by the Maternal, Child and Adolescent Health (MCAH) Section at SFDPH. An update on this indicator will be released June 2024. Since this is later than this report’s release, new data on this indicator will be included in the next version of this report.

As reported in the [2019 Sugary Drinks Distributor Tax Advisory Committee Report](#), the incidence rate of gestational diabetes in San Francisco increased in 2017 and 2018 compared to 2014 to 2016. Differences were seen by race/ethnicity and zip code. See [2019 Sugary Drinks Distributor Tax Advisory Committee Report](#) for more details on those findings.

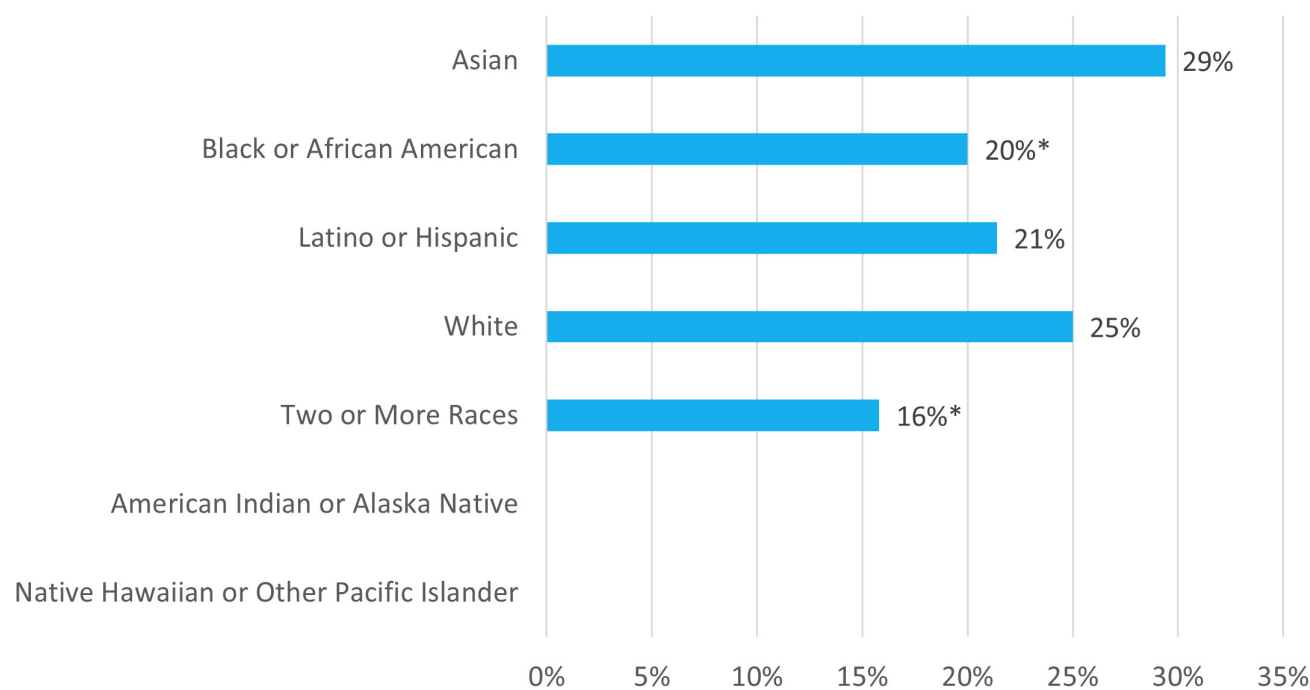


Hypertension

Hypertension, also called high blood pressure, is a condition in which the force of blood pushing against the vessel walls is higher than normal. This increased pressure damages blood vessel walls and can lead to complications such as cardiovascular disease (including heart attack and stroke), kidney disease, and blindness. Hypertension is the second leading cause of kidney failure. Along with diabetes, hypertension is the major risk factor and contributor to cardiovascular disease which is the leading cause of death in San Francisco and nationally.¹⁵⁰ Diet, physical activity, smoking, stress, family history, and genetics all contribute to the development and management of hypertension.

From 2019 through 2021 approximately 25% of surveyed San Franciscans reported ever being told they had high blood pressure or borderline high blood pressure on the CHIS survey. As with other chronic disease, disparities are seen across ethnicity and geography.¹⁵¹ Unfortunately, recent CHIS surveys have had difficulty reaching respondents that accurately represent San Francisco – thus even when pooling data from multiple years, estimates for certain racial/ethnic groups are either not reliable or not available. Still, data suggest increasing prevalence of hypertension for most adults but especially among men and persons in households earning less than 300% of the federal poverty level (Figures 25-29).

Figure 25. Percentage of Adults Reporting Having Hypertension, by Race/Ethnicity, 2019-2021

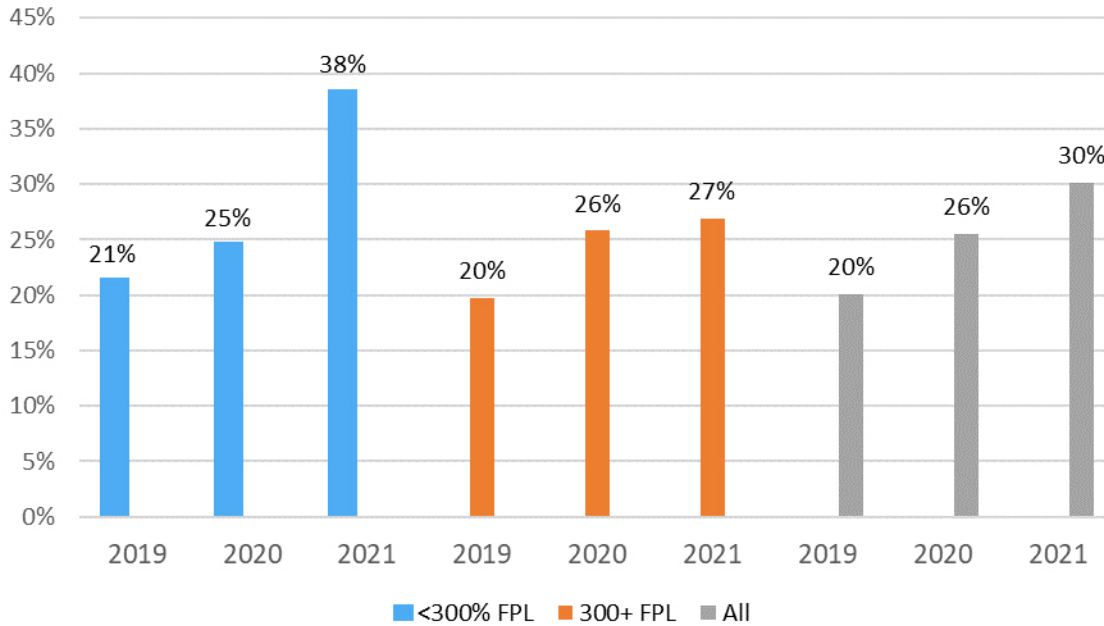


Note: Percentage of adults in San Francisco that have ever reported being told by their healthcare provider that they had high blood pressure or borderline high blood pressure. Data are pooled for three years, 2019-2021. Estimates were not available for American Indian or Alaska Native or Native Hawaiian or Other Pacific Islander populations due to small sample sizes. Estimates with an asterisk are statistically unstable.

Data source: California Health Interview Survey



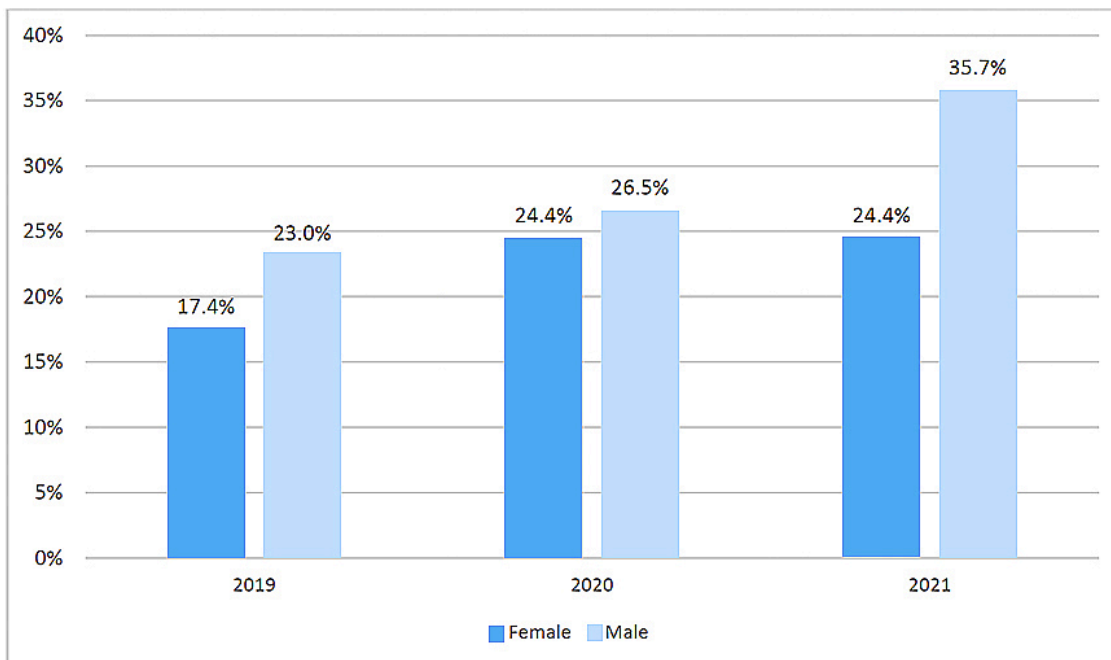
Figure 26. Percentage of Adults Reporting Having Hypertension, by Poverty Level, 2019 to 2021



Note: Percentage of adults in San Francisco that have ever reported being told by their healthcare provider that they had high blood pressure or borderline high blood pressure.

Data source: California Health Interview Survey

Figure 27. Percentage of Adults Reporting Having Hypertension, by Gender, 2019 to 2021

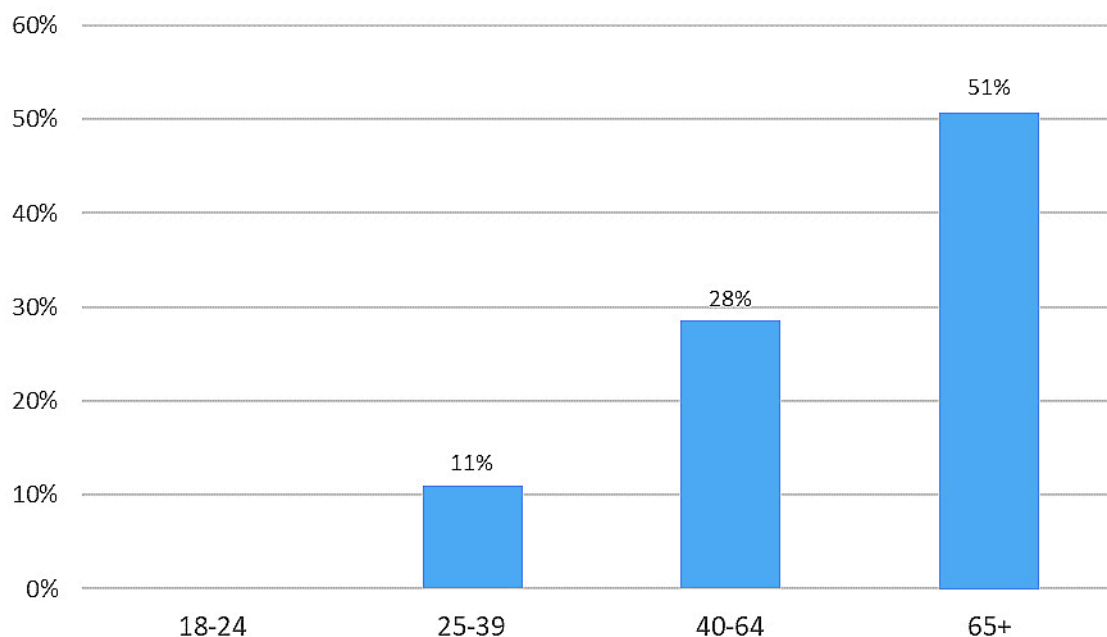


Note: Percentage of adults in San Francisco that have ever reported being told by their healthcare provider that they had high blood pressure or borderline high blood pressure.

Data source: California Health Interview Survey, 2019-2021



Figure 28. Percentage of Adults Reporting Having Hypertension, by Age, 2019-2021



Note: Percentage of adults in San Francisco that have ever reported being told by their healthcare provider that they had high blood pressure or borderline high blood pressure. Data are pooled for three years, 2019-2021
Data source: California Health Interview Survey

Cardiovascular Disease

Cardiovascular disease refers to a class of diseases that involve the heart and blood vessels and is the leading cause of death in San Francisco and nationally. Many of these diseases are attributed to atherosclerosis, a condition where excess plaque builds up in the inner walls of the arteries. This buildup narrows the arteries and constricts blood flow. Diet, physical inactivity, being overweight/obese, cigarette smoking, diabetes, stress, and hypertension all contribute to cardiovascular disease.¹⁵²

Common types of cardiovascular diseases include:

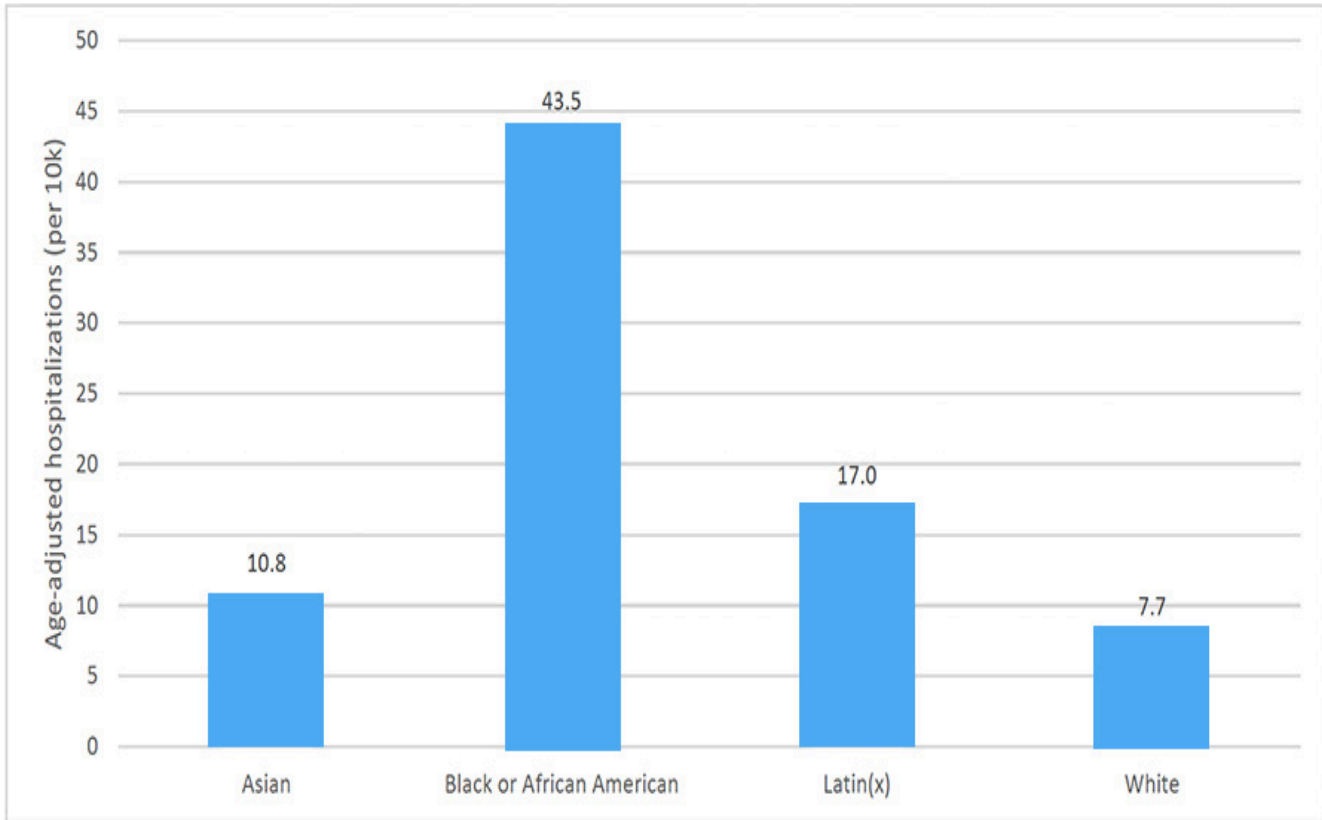
- Coronary heart disease which can lead to heart attack (when blood flow to the heart is blocked)
- Heart failure which is when the heart is not functioning at its full potential and the body is not receiving all of the blood and oxygen it requires.

- Stroke which occurs when not enough blood is getting to the brain which can be due to a blocked blood vessel or a burst blood vessel

In 2019-2021, 6.0% of adults living in San Francisco reported being told that they had any kind of heart disease. Hospitalization rates due to heart failure are highest among Black/African Americans. In 2021, Black/African American hospitalization rate (43.5 per 10,000 residents) for heart failure was more than five times higher than White San Franciscans (7.7 per 10,000 residents) (Figure 29). Hospitalization rates due to heart failure among Latinx (17 per 10,000 residents) was approximately 2.2 times that of White San Franciscans.



Figure 29. Age-Adjusted Rates of Hospitalization Due to Heart Failure, 2017 to 2021



Note: Data represent hospitalization discharges among all ages. Hospitalization rates for Native Hawaiian and Other Pacific Islanders and American Indian and Alaska Natives are not available because the population sizes are too small. Data are pooled 5-year estimates from 2017-2021.

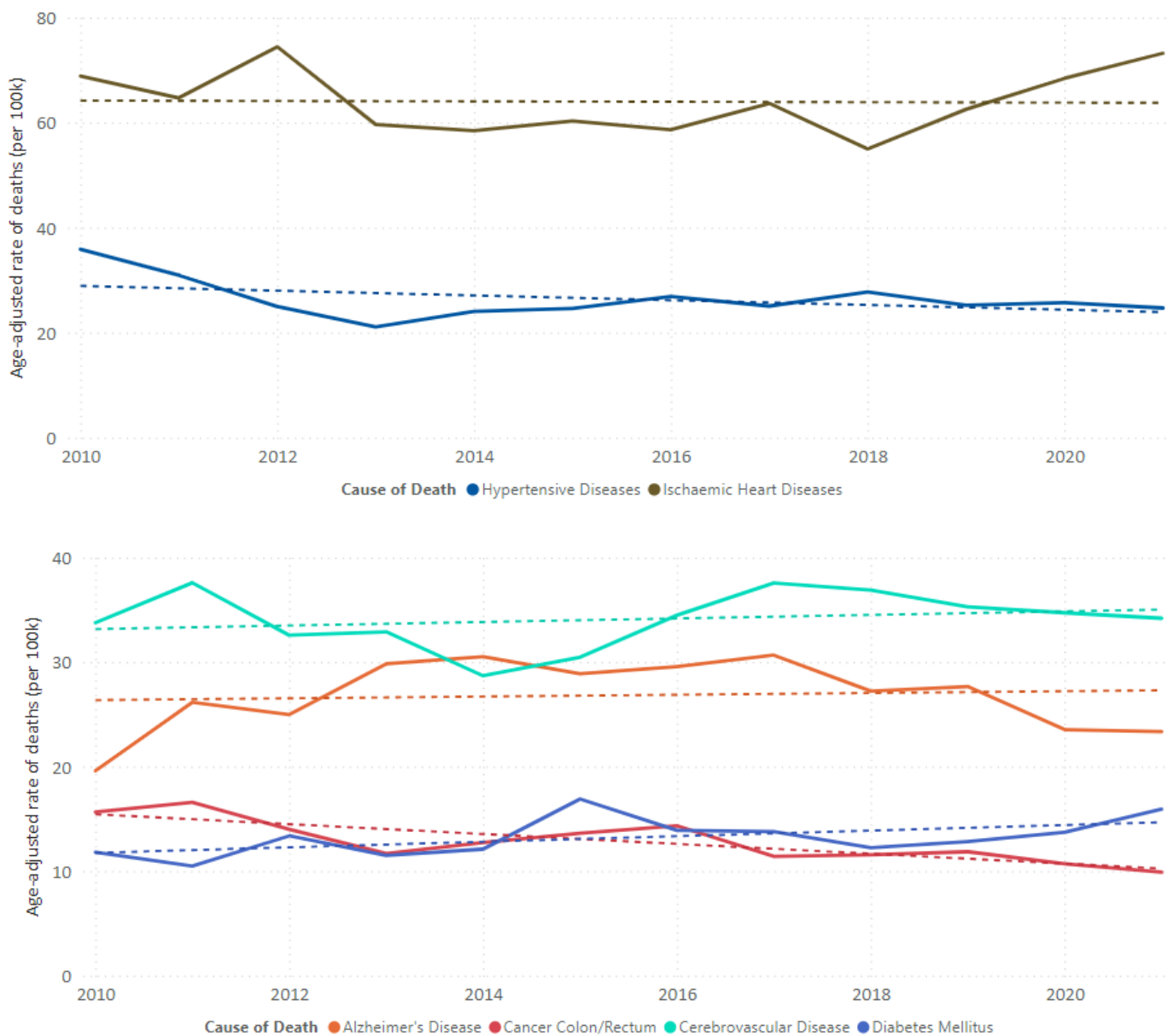
Data source: California Department of Healthcare Access and Information



MORTALITY DUE TO DIET-SENSITIVE DISEASE

In San Francisco, the leading 10 causes of death are predominately chronic diseases and the majority of these, 6, are diet-sensitive chronic diseases associated, directly or indirectly, with sugar consumption—Ischemic heart disease, cerebrovascular disease, Alzheimer’s, hypertension, diabetes, and colon cancer. Between 2010 and 2021, death rates due to Ischemic heart disease, hypertensive disease, and colon cancer decreased significantly, while rates due to and Alzheimer’s, diabetes, and cerebrovascular diseases increased (Figure 30).

Figure 30. Age-adjusted Mortality Rates for the Leading Causes of Death, Diet-Sensitive Diseases



Note: Data are split into two axes due to the large differences in rates between causes of death. Linear trends are shown as dotted lines.

Data source: California Department of Public Health, Vital Records Business Intelligence System (VRBIS) Death Statistical Master File, 2010-2021



Mortality rates for diet-sensitive diseases vary by race and ethnicity (Figure 32). For mortality overall, Black/African American residents experience the highest rates across most causes except for deaths due to Alzheimer's. Black/African American death rates due to diabetes are almost 2 times as high as that of the next highest group and 2.6 times as high for Hypertension. Years of life lost similarly show Black/African American residents experiencing the highest rates of death due to diet-sensitive diseases in San Francisco except for ischemic heart disease where Native Hawaiian and Other Pacific Islander residents experience the greatest years of life lost (Figure 32). Furthermore, trends for the population overall are not seen for all subgroups. While mortality rates due to ischemic heart diseases trended slightly downward from 2010 to 2018, since 2018 the mortality rate has increased – most notably for Black/African American residents and Asian or Pacific Islander residents. Overall, the mortality rate due to diabetes is increasing however this is mostly driven by increases seen among Black/African American and Asian or Pacific Islander residents. Notably, the rate of colon cancer is decreasing or remaining stable for most groups, and this is especially true for Black or African American residents (data not shown).

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What's happy about diabetes?

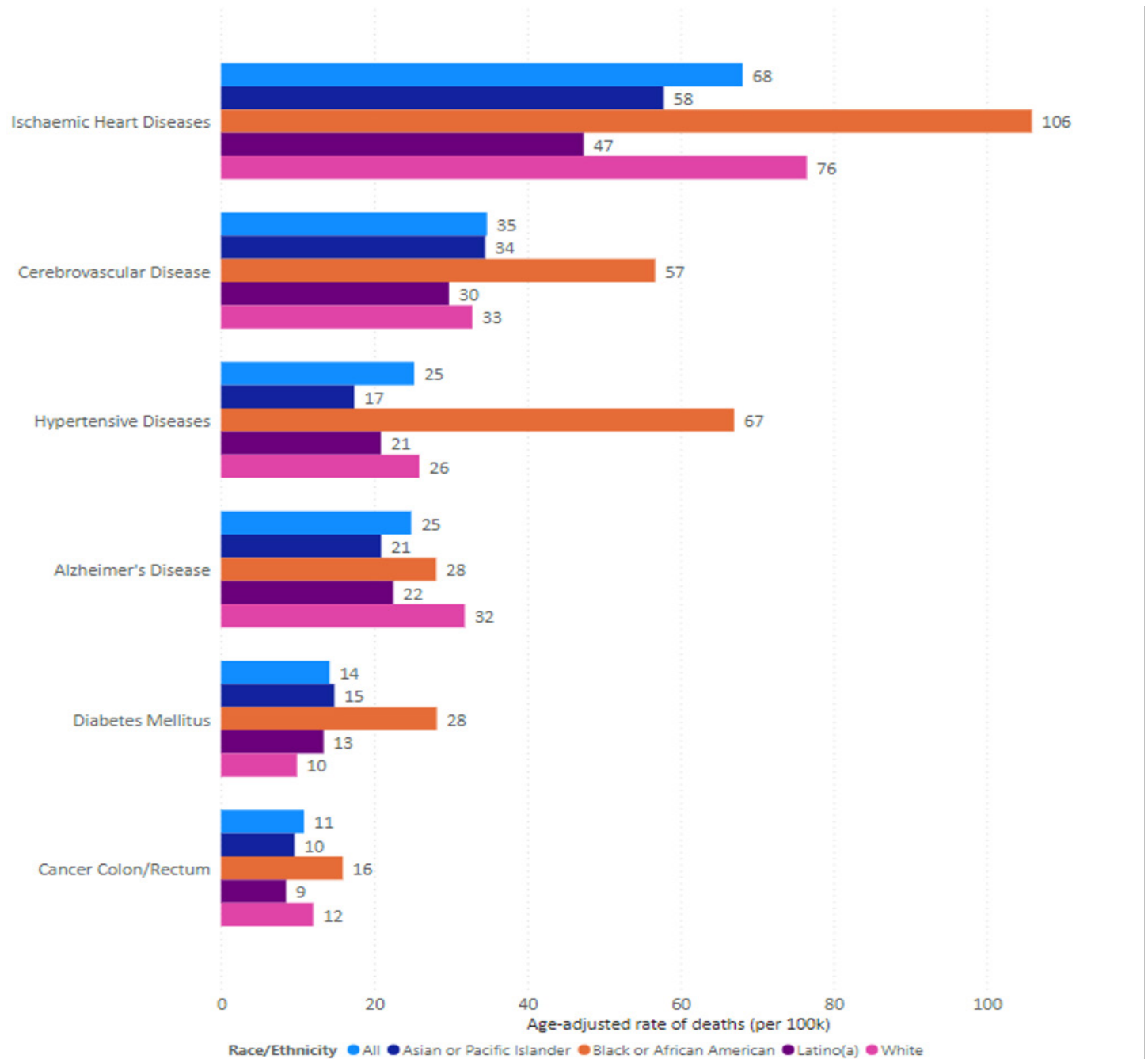


OPEN TRUTH  **SUGARY DRINKS ARE MAKING US SICK**
TAKE ACTION AT OPEN TRUTH NOW.ORG

Open Truth was developed by Shape Up San Francisco, with funding from Metta Fund.



Figure 31. Age-Adjusted Mortality Rates for the Leading Causes of Death, Diet Sensitive Diseases, by Race/Ethnicity, 2019-2021



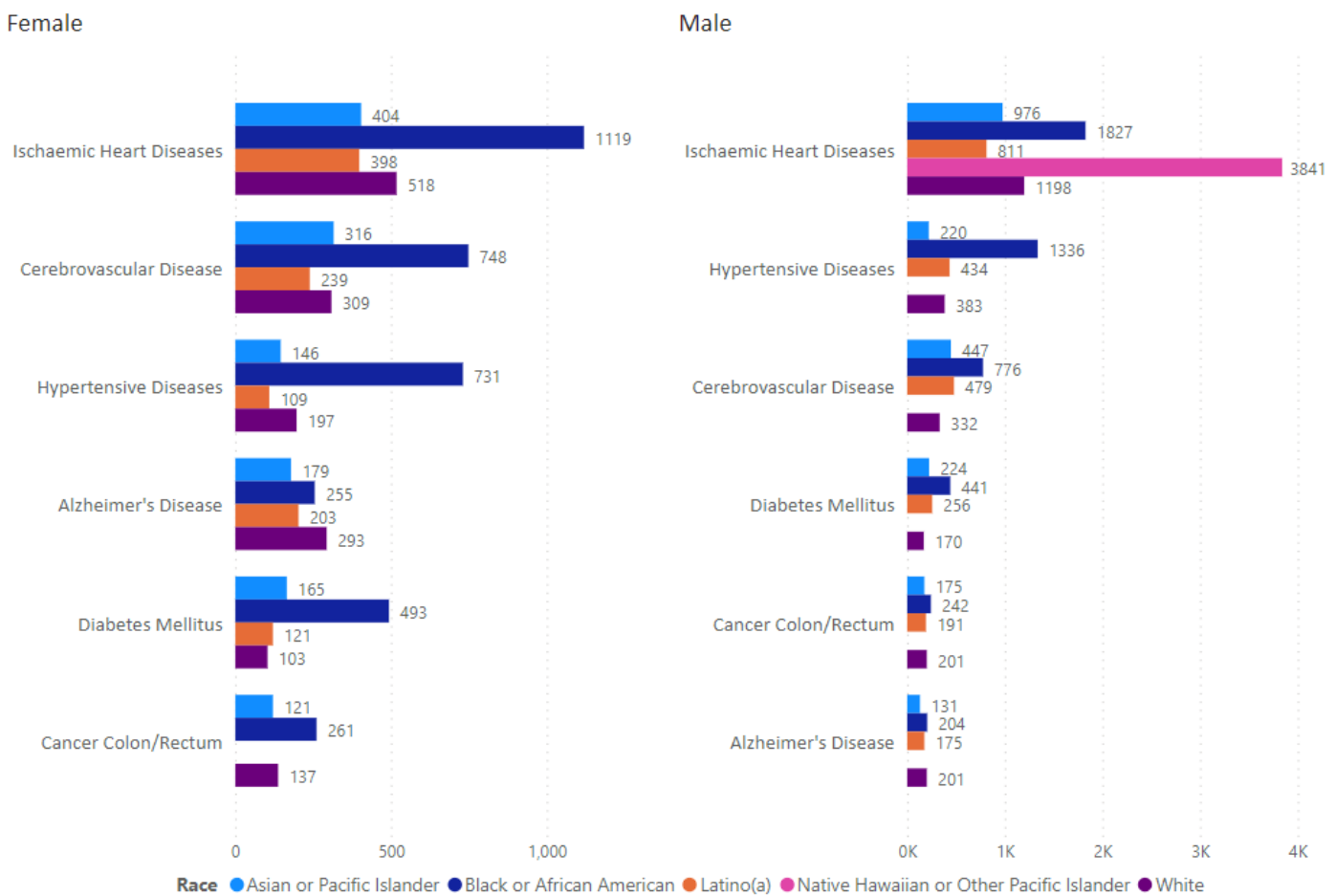
Note: Data on Native Hawaiian and Other Pacific Islander and American Indian or Alaska Native residents were not available because too few deaths were reported.

Data source: California Department of Public Health, Vital Records Business Intelligence System (VRBIS) Death Statistical Master File, 2019-2021



For both females and males across all race/ethnicities, the leading diet-sensitive cause of death by years of life lost is ischemic heart disease. While data is not available for Native Hawaiian or Other Pacific Islander residents for most causes of death, the age-adjusted years of life lost due to ischemic heart disease is 2 times as high among Native Hawaiian or other Pacific Islander residents as it is for the next highest group – Black/African American males (3,841 vs 1,826, respectively). Among females, Black/African American residents have double the years of life lost than other race/ethnicities for ischemic heart disease, cerebrovascular disease, and diabetes and nearly 5 times the years of life lost for hypertensive diseases. Males have greater years of life lost than females for every diet-sensitive cause of death except Alzheimer’s where females have 30% more years of life lost.

Figure 32. Years of Life Lost for Leading Diet-Sensitive Causes of Death, by Race/Ethnicity, 2019-2021



Note: The axes for female and male leading causes of years of life lost are on different scales. Data are suppressed when there are fewer than 11 deaths. Data are 3-year pooled estimates.

Data source: California Department of Public Health, Vital Records Business Intelligence System (VRBIS) Death Statistical Master File, 2016-2021



Figure 33. Life Expectancy at Birth

Race/Ethnicity	2016 to 2018			2019 to 2021		
	All	Female	Male	All	Female	Male
All	83.3	86.2	80.4	82.4	86.1	79.0
American Indian or Alaska Native	75.5	NA	NA	74.5	NA	NA
Asian or Pacific Islander	87.0	89.4	84.1	86.7	89.3	83.8
Black or African American	72.4	77.0	68.7	69.3	74.5	64.7
Latino(a)	85.6	88.7	82.7	83.1	87.8	78.9
Native Hawaiian or Other Pacific Islander	76.3	77.9	74.6	73.4	77.2	71.5
White	81.8	84.3	79.8	81.9	84.8	79.6

Note: Life expectancies for American Indian or Alaska Native residents by sex cannot be reported due to small numbers, indicated by “NA.” Data are 3-year pooled estimates.

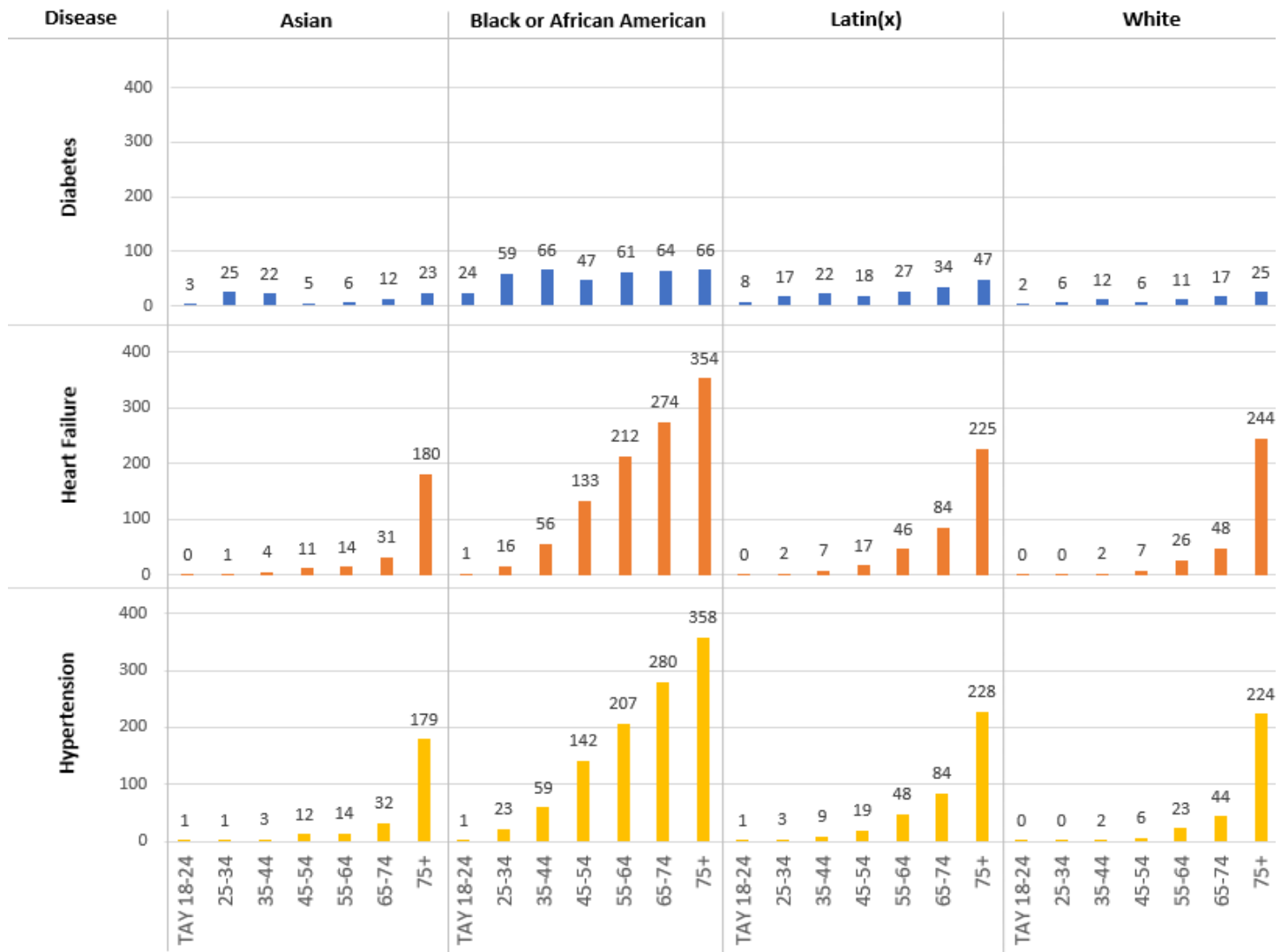
Data source: California Department of Public Health, Vital Records Business Intelligence System (VRBIS) Death Statistical Master File, 2016-2021

Given the disparities, seen not only in mortality rates and the most proximate risk factors for these diseases discussed in this report but also the social determinants of health discussed elsewhere, it is unfortunate though not surprising that Black/African American and Native Hawaiian or Other Pacific Islander residents have the lowest life expectancies in San Francisco (Figure 33).¹⁵³ Black/African American and Native Hawaiian or Other Pacific Islander residents, with an average life expectancy of 69 and 73 years, respectively, live 13-17 years less than Asian residents.

By definition, people are sick with chronic diseases for years to decades. While mortality data cannot tell us how long individuals experienced disease before dying, hospitalization data can provide insight into the burden of disease among the living. Hospitalization data for diabetes, heart failure and hypertension by race and age show that while rates for most groups starts to slowly creep up in the early 30s and 40s and only spike among the oldest, rates for Black/African American residents soar early (Figure 34).¹⁵⁴ Rates for Black or African Americans in their 30s and 40s are comparable to those of other race/ethnicities who are 30 or more years older. In fact, for diabetes, rates are higher among young Black/African American residents than they are for others at any age. For Asian residents, hospitalizations for diabetes tends to be highest among 25-34 year olds.



Figure 34. Age-Specific Rates of Hospitalization by Disease, per 10,000 Residents, 2017-2021



Note: Data represent hospitalization discharges. Hospitalization rates for Native Hawaiian and Other Pacific Islanders and American Indian and Alaska Natives are not available because the population sizes are too small. Data are pooled 5-year estimates from 2017 to 2021.

Data source: California Department of Healthcare Access and Information



ECONOMIC IMPACT OF DIET-SENSITIVE CHRONIC DISEASES

An update to this section is not available for this report but is planned for update in 2024. See [2019 Sugary Drinks Distributor Tax Advisory Committee Report](#) for past findings on the economic impact of diet-sensitive chronic diseases.

LIMITATIONS

Race/ethnicity classification: Data sources used in this report collect race/ethnicity data differently. This limits our ability to compare differences in trends across different race/ethnicity categories between data sources. It also means labels used in figures to classify individuals by race/ethnicity are inconsistent throughout the report. This report uses the language consistent with the data source rather than conforming that language to one standard because the language used to collect race and ethnicity affects how people identify their race and ethnicity.

Birth Statistical Master File, California Department of Public Health (CDPH)

The birth statistical master file contains birth certificate data for all births. This data provides insights on the health of new mothers and babies born and includes data on gestational diabetes and weight gain during pregnancy.

California Health Interview Survey

The California Health Interview Survey (CHIS) is an annual telephone survey that uses a random-digit-dial technique to landlines and cell-phones and asks respondents to answer health-related questions. In San Francisco, CHIS samples about 400 adults, which provides data for the county, but does not allow annual stratification across different demographic categories for all variables. Data results were obtained either through <http://ask.chis.ucla.edu/> or through analysis of the San Francisco-specific dataset. In the latter all weighting was done according to documentation provided by CHIS.

While CHIS asks a number of drink associated questions to children and teens, the sample size is insufficient to

get stable estimates in San Francisco. Sample sizes are sufficient among adults to get overall one-year estimates and multiple year pool estimate by poverty, race/ethnicity and gender. Among adults, CHIS asks, “[During the past month,] how often did you drink regular soda or pop that contains sugar? Do not include diet soda.” Results are converted to and presented as the soda consumption for an average week.

CHIS also included questions on respondents known chronic diseases. To ascertain diabetes status the question, “Has a doctor ever told you that you have diabetes or sugar diabetes?” is asked. For hypertension the survey asks, “Has a doctor ever told you that you have high blood pressure?”. Additional questions on heart failure, stroke, and prediabetes do not have enough power to produce stable estimates for San Francisco.

To assess food security, CHIS asks persons with incomes less than 200% of the federal poverty level to answer a series of questions. Questions asked are 1) “The food that {I/we} bought just didn’t last, and {I/we} didn’t have money to get more.”--Was that often true, sometimes true, or never true for you and your household in the last 12 months?”; 2) “{I/We} couldn’t afford to eat balanced meals.-- Was that often true, sometimes true, or never true for you and your household in the last 12 months?”; 3) “Please tell me yes or no. In the last 12 months, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn’t enough money for food? - How often did this happen -- almost every month, some months but not every month, or only in 1 or 2 months?” 4) “In the last 12 months, did you ever eat less than you felt you should because there wasn’t enough money to buy food?”; and 5) “In the last 12 months, were you ever hungry but didn’t eat because you couldn’t afford enough food?”.

Survey respondents answer two questions on height and weight from which BMI is calculated--“How tall are you without shoes?” and – “{When not pregnant, how/How} much do you weigh without shoes?”. A BMI of 30.0 or higher is labeled as obese, 25.0-29.99 as overweight, 18.5-24.99 as normal, and under 18.5 as underweight.

To determine if an adult walked regularly for transportation, fun or exercises. A series of questions were asked, “During



the past 7 days, did you walk to get some place that took you at least 10 minutes?"; "In the past 7 days, how many times did you do that?"; "- {How long did that walk take/On average, how long did those walks take}? "; "Sometimes you may walk for fun, relaxation, exercise, or to walk the dog. During the past 7 days did you walk for at least 10 minutes for any of these reasons? Please do not include walking for transportation."; "In the past 7 days, how many times did you do that?"; and "{How long did that walk take/On average, how long did those walks take}?".

California Office of Statewide Health Planning and Development (OSHPD)

Hospitalization and ER rates measure the number of discharges or visits, not the number of residents who are hospitalized. Admissions records may include multiple admissions by the same person.

Diabetes. ICD-10 codes for Diabetes are based on PQI 93: Prevention Quality Diabetes Composite (September 2017) technical specifications published by the Agency for Healthcare Research and Quality. A medical visit was determined to be primarily due to Diabetes if the primary diagnosis field contained on the identified ICD-9-CM (discharges prior to October 2015) or ICD-10 (October 2015 and later) codes. To identify visits where Diabetes was the primary cause, a co-morbidity, or coexisting with another primary cause, all 25 diagnosis fields were searched.

Hypertension: Agency for Healthcare Research and Quality's Clinical Classification Software versions 2017 (ICD-10) were used to identify hospitalizations with a primary diagnosis of hypertension.

Heart Failure: ICD-10 codes for heart failure were adapted from the PQI 08: Heart Failure Admission Rate (September 2017) technical specifications published by the Agency for Healthcare Research and Quality. The case definition used here varies from that in the PQI 08 in that records indicating cardiac procedures were not excluded. A medical visit was determined to be primarily due to heart failure if the primary diagnosis field contained the identified ICD-10 codes.

Hospitalization charges: Charges reflect the amount asked for health care services and goods. Charges do not necessarily reflect the expenses incurred by the provider to deliver health care services and goods. Furthermore, the actual amount paid may vary from both charges and costs. Not all hospitals report hospitalization charges to OSHPD.

Non-Traumatic Dental Conditions: ICD-10 codes for non-traumatic dental conditions were adopted by the Association of State and Territorial Dental Directors' Recommended Guidelines for Surveillance of Non-Traumatic Dental Care in Emergency Departments.

Information Resources Inc. (IRI)

To evaluate the effects of the SDDT on beverage purchases in San Francisco, retail scanner data were obtained from Information Resources, Inc. (IRI), a market research company. IRI collects the average price during the period (a weighted quantity), dollar sales, unit sales, and volume sales in ounces for products with UPC codes from a sample of 108 stores. Stores included in the sample are predominately chain stores and include groceries, pharmacies and mass merchandizers. Not included in the sample are corner stores and warehouses. Data, going back to 2015, are aggregated to 4-week periods.

IRI classifies UPCs into product categories. Beverage categories include-- regular soda, diet soda, sports drinks, energy drinks, juice and juice drinks, bottled water, club soda, milk, and teas and coffees. All analyses included in this report rely on IRI's product classification scheme and should be treated as preliminary. IRI categories are not based on the added sugar of a beverage and therefore preliminary analysis are not available for the following categories which combine SBB and non-SSBs-juice and juice drinks, and teas and coffees. Future analyses should examine nutrition facts panels and lists of ingredients for each UPC to determine whether each meets the definition of a taxable SSB under the municipal tax ordinances (Section 552 for San Francisco).

An appendix containing data on some beverages sold in San Francisco from 2015 through 2021 has been provided.



These data were bought from Information Resources, Inc. (IRI), a market research company, and include point-of-sale retail scanner data. The caveats and limitations mentioned below make it nearly impossible to understand the true trends in beverage sales over time, as such these data require **extreme caution when interpreting**.

Important caveats to understand when interpreting IRI data:

- Only about 10% of stores in San Francisco were included in the IRI dataset during any year. The stores included may change over time and/or make changes to their inventory that affect beverages sold in San Francisco.
- The IRI dataset only includes point-of-sale data on pre-packaged beverages and powders sold mostly at larger retailers and will not include beverages sold at many smaller corner stores. Made-to-order beverages such as boba, fountain soft drinks, and sugar-sweetened coffees and teas are also not included in this dataset.
- There are no data for the coffee/tea drink category after 2020.
- There are essentially no data (18 out of 20 4-week periods have zero data) for sugar-sweetened diet soft drinks after the middle of 2020, and prior years have sporadically missing data for 4-week periods.
- SSB categorization was performed by UCSF using a combination of Label Insight and manual searches. Spot-checking of a random sample of 1,000 UPCs found about a 10% error rate, disproportionately skewed towards misclassifying products as non-SSBs when they should have been categorized as SSBs.
- About 1% of UPCs do not have a SSB classification, which increased after 2018 to almost 5% by 2021.
- There are many data aberrations present in these data that we cannot explain.

Given the limitations stated above, we currently have not included IRI data in this report. Analyses included in

the appendix are not validated and are only provided to meet mandatory requirements. **The appendix is not a presentation on trends of beverages sold in San Francisco over time**— it is a presentation on the beverage data available from IRI.

Kindergarten Oral Health Screening Program

The San Francisco Unified School District (SFUSD) and the San Francisco Department of Public Health (SFDPH) Dental Services jointly run the Kindergarten Oral Health Screening Program which assesses all SFUSD kindergarteners for the experience of caries and treated caries.

Maternal and Infant Health Assessment

The Maternal and Infant Health Assessment (MIHA), is an annual, statewide-representative survey of women with a recent live birth in California. MIHA questions on mother's intention to breastfeed, food security during pregnancy, and more.

SFUSD FitnessGram

Measure of fitness and weight among San Francisco youth are captured by the FitnessGram® which SFUSD measures annually in grades 5, 7, and 9. The FitnessGram® assesses students in 6 areas-aerobic capacity, body composition, abdominal strength, trunk extension strength, upper body strength and flexibility. For each students are determined to be in the "Healthy Fitness Zone" or not. Body composition within the "Healthy Fitness Zone" is determined by BMI and a measure of body fat. Aerobic capacity testing includes the pacer, one mile run and the walk test.



Vital Records Business Intelligence Systems (VRBIS)

The California Department of Public Health maintains a dataset of all deaths in California. Each death has a recorded and coded primary cause of death. The analysis presented in this document examines only the indicated primary cause of death and cannot consider co-morbid or contributing causes of death. Specific cause-of-death categories were designed based on the World Health Organization Global Burden of Disease and Injury (WHO GBD) and the National Center for Health Statistics 113 Selected and 50 Rankable Causes of Death.^{155,156} Race/ethnicity was categorized according to San Francisco ethnicity data guidelines.¹⁵⁷

Youth Risk Behavior Surveillance Survey

The Youth Risk Behavior Surveillance Survey (YRBS) is a national biennial survey that asks students a range of health-related questions. The YRBS generally administers surveys to high schools on odd years and middle schools on even years. With respect to SSB consumption, the survey asks two questions:

“During the past 7 days, how many times did you drink a can, bottle, or glass of a sugar-sweetened beverage such as a soda, sports drink, energy drink, lemonade, sweetened tea or coffee drink, or flavored milk? Examples include Coke, Sprite, Gatorade, Red Bull, Arizona, Snapple, Sunny Delight, bubble tea, and agua fresca?” and

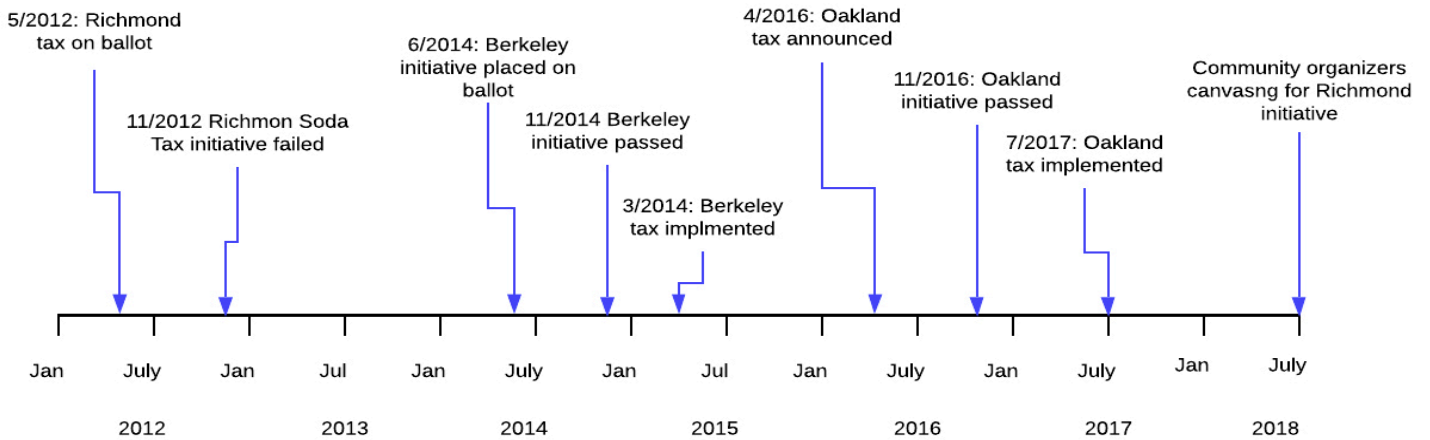
For middle school:

“Yesterday, how many times did you drink a can, bottle, or glass of a sugar-sweetened beverage such as a soda or pop (for example, Coke or Sprite), sports drink (for example, Gatorade or PowerAde), energy drink (for example, Red Bull or Jolt), 100% fruit juice (for example, orange juice), lemonade, sweetened tea or coffee drinks (for example, Arizona), flavored milk, Snapple, Sunny Delight, bubble tea, or agua fresca?”



SUGAR-SWEETENED BEVERAGE TAX TIMELINES FOR COMPARISON CITIES

Figure 35. Sugar-Sweetened Tax Initiatives Timeline for Comparison Cities





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Christina Goette, MPH, Healthy Eating Active Living (HEAL) Program Manager in the Community Health Equity and Promotion Branch, manages chronic disease prevention programs related to HEAL, including supporting the Shape Up SF Coalition, managing the community-based Sugary Drinks Distributor Tax (SDDT) grants, providing backbone support to the Sugary Drinks Distributor Tax Advisory Committee which includes the evaluating the impact of the SDDT which this report is a key element.

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Christopher Lee is an epidemiologist on the Health Equity team in the Center for Data Science - Population Health Division at the San Francisco Department of Public Health (SFDPH). Before working with the Health Equity team at SFDPH Christopher worked on the COVID-19 response for San Francisco and Santa Clara County where he co-led the development and maintenance of both internal and public reporting systems. Prior to Santa Clara County Christopher worked at the UCLA Center for Health Policy Research where he helped evaluate the efficacy of public health policy work.

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Jodi Stookey is currently a Senior Epidemiologist at San Francisco Department of Public Health, Maternal, Child & Adolescent Health. She has a PhD in Nutrition Epidemiology from the School of Public Health, UNC Chapel Hill, and was a postdoctoral fellow at Duke University Center for the Study of Aging and Human Development and the Stanford Prevention Research Center. As Assistant Staff Scientist at Children's Hospital Oakland Research Institute, she was the Principal Investigator on outpatient interventions to promote drinking water for weight management among adolescents and improve fruit, vegetable intake of lower income children. Over the past 20 years, she has worked on a variety of projects, including different population groups, social, behavioral, and biological risk factors, and short- and longer-term health outcomes. She has worked with data from randomized clinical studies as well as population-based surveys.



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Marianne Szeto, MPH, Healthy Eating Active Living Team Lead in the Community Health Equity and Promotion Branch of the San Francisco Department of Public Health. She is the backbone staff for the Shape Up SF Coalition, a multidisciplinary collaborative founded in 2006 to address the epidemic of chronic disease through primary prevention and environmental strategies, with an emphasis on physical activity and nutrition.

Melinda Martin, MPH

Melinda Martin, MPH, Healthy Eating Active Living Team in the Community Health Equity and Promotion Branch of the San Francisco Department of Public Health. She is the backbone staff for the Sugary Drinks Distributor Tax Advisory Committee. The advisory committee makes recommendations to the Mayor and the Board of Supervisors on the effectiveness of the Sugary Drinks Distributor Tax, evaluates the impact of the sugary drinks distributor tax and funding recommendations regarding potential establishment of programs to reduce the consumption of sugar-sweetened beverages in San Francisco.

Kim Wong, MPH

Kim Wong, MPH, Healthy Eating Active Living (HEAL) Team in the Community Health Equity and Promotion Branch of the San Francisco Department of Public Health. As the Soda Tax Grants Coordinator, Kim develops and manages the request for proposals (RFP) processes to distribute SDDT funds according to SDDTAC recommendations, manages contracts with SDDT grantees, and provides support to grantees through technical assistance and capacity building.



REFERENCES

1. Sohn W, Burt BA, Sowers MR. Carbonated soft drinks and dental caries in the primary dentition. *J Dent Res.* 2006;85(3):262-266. doi:10.1177/154405910608500311
2. Johnson RK, Appel LJ, Brands M, et al. Dietary sugars intake and cardiovascular health: a scientific statement from the American Heart Association. *Circulation.* 2009;120(11):1011-1020. doi:10.1161/CIRCULATIONAHA.109.192627
3. Wang J. Consumption of added sugars and development of metabolic syndrome components among a sample of youth at risk of obesity. *Appl Physiol Nutr Metab.* 2014;39(4):512-512. doi:10.1139/apnm-2013-0456
3. Malik VS, Hu FB. Sweeteners and Risk of Obesity and Type 2 Diabetes: The Role of Sugar-Sweetened Beverages. *Curr Diab Rep.* January 2012. doi:10.1007/s11892-012-0259-6
4. Malik VS, Li Y, Pan A, et al. Long-Term Consumption of Sugar-Sweetened and Artificially Sweetened Beverages and Risk of Mortality in US Adults. *Circulation.* 2019;139(18):2113-2125. doi:10.1161/CIRCULATIONAHA.118.037401
5. Mossavar-Rahmani Y, Kamensky V, Manson JE, et al. Artificially Sweetened Beverages and Stroke, Coronary Heart Disease, and All-Cause Mortality in the Women's Health Initiative. *Stroke.* 2019;50(3):555-562. doi:10.1161/STROKEAHA.118.023100
6. Mullee A, Romaguera D, Pearson-Stuttard J, et al. Association Between Soft Drink Consumption and Mortality in
7. European Countries. *JAMA Intern Med.* September 2019. doi:10.1001/jamainternmed.2019.2478
8. Sonnevile KR, Long MW, Ward ZJ, et al. BMI and Healthcare Cost Impact of Eliminating Tax Subsidy for Advertising Unhealthy Food to Youth. *Am J Prev Med.* 2015;49(1):124-134. doi:10.1016/j.amepre.2015.02.026
9. Puhl RM, Heuer CA. Obesity stigma: important considerations for public health. *Am J Public Health* 2010;100:1019–28.
10. Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a fundamental cause of population health inequalities. *Am J Public Health* 2013;103:813–21.
11. Puhl RM, Heuer CA. The stigma of obesity: a review and update. *Obesity (Silver Spring)* 2009; 17:941–64.



REFERENCES

12. Spahlholz J, Baer N, König HH, et al. Obesity and discrimination — a systematic review and meta-analysis of observational studies. *Obes Rev* 2016;17:43–55.
13. Seacat JD, Dougal SC, Roy D. A daily diary assessment of female weight stigmatization. *J Health Psychol* 2016;21:228–40.
14. Article 8: Sugary Drinks Distributor Tax Ordinance. [http://library.amlegal.com/nxt/gateway.dll/California/business/article8sugarydrinksdistributortaxordina?f=templates\\$fn=default.htm\\$3.0\\$vid=amlegal:sanfrancisco_ca\\$anc=JD_Article8](http://library.amlegal.com/nxt/gateway.dll/California/business/article8sugarydrinksdistributortaxordina?f=templates$fn=default.htm$3.0$vid=amlegal:sanfrancisco_ca$anc=JD_Article8). Accessed August 2, 2019.
15. Sohn W, Burt BA, Sowers MR. Carbonated soft drinks and dental caries in the primary dentition. *J Dent Res*. 2006;85(3):262-266. doi:10.1177/154405910608500311
16. Johnson RK, Appel LJ, Brands M, et al. Dietary sugars intake and cardiovascular health: a scientific statement from the American Heart Association. *Circulation*. 2009;120(11):1011-1020. doi:10.1161/CIRCULATIONAHA.109.192627
17. Wang J. Consumption of added sugars and development of metabolic syndrome components among a sample of youth at risk of obesity. *Appl Physiol Nutr Metab*. 2014;39(4):512-512. doi:10.1139/apnm-2013-0456
18. Malik VS, Hu FB. Sweeteners and Risk of Obesity and Type 2 Diabetes: The Role of Sugar-Sweetened Beverages. *Curr Diab Rep*. January 2012. doi:10.1007/s11892-012-0259-6
19. Malik VS, Li Y, Pan A, et al. Long-Term Consumption of Sugar-Sweetened and Artificially Sweetened Beverages and Risk of Mortality in US Adults. *Circulation*. 2019;139(18):2113-2125. doi:10.1161/CIRCULATIONAHA.118.037401
20. Mossavar-Rahmani Y, Kamensky V, Manson JE, et al. Artificially Sweetened Beverages and Stroke, Coronary Heart Disease, and All-Cause Mortality in the Women’s Health Initiative. *Stroke*. 2019;50(3):555-562. doi:10.1161/STROKEAHA.118.023100
21. Mullee A, Romaguera D, Pearson-Stuttard J, et al. Association Between Soft Drink Consumption and Mortality in 10 European Countries. *JAMA Intern Med*. September 2019. doi:10.1001/jamainternmed.2019.2478
22. Zheng M, Allman-Farinelli M, Heitmann BL, et al. Liquid versus solid energy intake in relation to body composition among Australian children. *J Hum Nutr Diet Off J Br Diet Assoc*. 2015;28 Suppl 2:70-79. doi:10.1111/jhn.12223
23. Wang J. Consumption of added sugars and development of metabolic syndrome components among a sample of youth at risk of obesity. *Appl Physiol Nutr Metab*. 2014;39(4):512-512. doi:10.1139/apnm-2013-0456



24. Malik VS, Hu FB. Sweeteners and Risk of Obesity and Type 2 Diabetes: The Role of Sugar-Sweetened Beverages. *Curr Diab Rep*. January 2012. doi:10.1007/s11892-012-0259-6
25. Colchero MA, Salgado JC, Unar-Munguia M, Ng S, Molina M, Rivera-Dommarco JA. Changes in Prices After an Excise Tax to Sweetened Sugar Beverages Was Implemented in Mexico: Evidence from Urban Areas. <https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0144408>. Accessed May 20, 2019.
26. Colchero MA, Popkin BM, Rivera JA, Ng SW. Beverage purchases from stores in Mexico under the excise tax on sugar sweetened beverages: observational study. *The BMJ*. 2016;352. doi:10.1136/bmj.h6704
27. Sánchez-Romero LM, Penko J, Coxson PG, et al. Projected Impact of Mexico's Sugar-Sweetened Beverage Tax Policy on Diabetes and Cardiovascular Disease: A Modeling Study. *PLoS Med*. 2016;13(11):e1002158. doi:10.1371/journal.pmed.1002158
28. Lee MM, Falbe J, Schillinger D, Basu S, McCulloch CE, Madsen KA. Sugar-Sweetened Beverage Consumption 3 Years After the Berkeley, California, Sugar-Sweetened Beverage Tax. *Am J Public Health*. 2019;109(4):637-639. doi:10.2105/AJPH.2019.304971
29. Long MW, Gortmaker SL, Ward ZJ, et al. Cost Effectiveness of a Sugar-Sweetened Beverage Excise Tax in the U.S. *Am J Prev Med*. 2015;49(1):112-123. doi:10.1016/j.amepre.2015.03.004
30. Global Food Research Program, University of North Carolina at Chapel Hill. Multi-country obesity prevention initiative: resources. 2019. Available at <http://globalfoodresearchprogram.web.unc.edu/multi-country-initiative/resources>.
31. Silver LD, Pardon AA, Li, L, Simard BJ, Greenfield TK (2023) Changes in sugar-sweetened beverage consumption in the first two years (2018 - 2020) of San Francisco's tax: A prospective longitudinal study. *PLOS Glob Public Health* 3(1): e0001219. <https://doi.org/10.1371/journal.pgph.0001219>
32. <https://www.who.int/news/item/13-12-2022-who-calls-on-countries-to-tax-sugar-sweetened-beverages-to-save-lives>
33. Brownell, K.D., Farley, T., Willet, W.C. Popkin, B.M., Chaloupka, F.J., Thompson, J.W. & Ludwig, D.S. (2009). The public health and economic benefits of taxing sugar-sweetened beverages. *New England Journal of Medicine*, 361(16), 1599-1605. doi:10.1056/NEJMp0905723
34. WHO | Social determinants of health. WHO. http://www.who.int/social_determinants/en/. Accessed August 20, 2019.
35. Definitions | Social Determinants of Health | NCHHSTP | CDC. <https://www.cdc.gov/nchhstp/socialdeterminants/definitions.html>. Published April 30, 2019. Accessed August 20, 2019.



36. World Health Organization. Preamble to the Constitution of the World Health Organization, as Adopted by the International Health Conference. New York; 1946:19-22. <http://www.who.int/about/who/en/definition.html>.
37. California Planning Roundtable. The Social Determinants of Health for Planners: Live, Work, Plan, Learn! https://cproundtable.org/static/media/uploads/publications/sdoh/cpr_sdoh_final_1-26-16.pdf.
38. National Research Council (US), Institute of Medicine (US). U.S. Health in International Perspective: Shorter Lives, Poorer Health. (Woolf SH, Aron L, eds.). Washington (DC): National Academies Press (US); 2013. <http://www.ncbi.nlm.nih.gov/books/NBK115854/>. Accessed August 20, 2019. 2023
39. City and County of San Francisco Department of Public Health. 2019 San Francisco Community Health Needs Assessment. 2019 San Francisco Community Health Needs Assessment. <http://www.sfhip.org/>. Accessed August 16, 2019.
40. Rosinger A, Herrick K, Gahche J, Park S. Sugar-sweetened Beverage Consumption Among U.S. Youth, 2011-2014. NCHS Data Brief. 2017;(271):1-8.
41. Ogden CL, Kit BK, Carroll MD, Park S. Consumption of sugar drinks in the United States, 2005-2008. NCHS Data Brief. 2011;(71):1-8.
42. Bleich SN, Vercammen KA, Koma JW, Li Z. Trends in Beverage Consumption Among Children and Adults, 2003-2014. Obesity. 2018;26(2):432-441. doi:10.1002/oby.22056
43. LaComb R, Sebastian R, Wilkinson Enns C, Goldman J. Beverage Choices of U.S. Adults. What We Eat in America, NHANES 2007-2008. Food Surveys Research Group; 2011. https://www.ars.usda.gov/ARSUserFiles/80400530/pdf/DBrief/6_beverage_choices_adults_0708.pdf.
44. San Francisco Food Security Task Force. San Francisco takes a stand and declares food is a basic human right. 2018 Assessment of Food Security. <https://www.sfdph.org/dph/files/mtgsGrps/FoodSecTaskFrc/docs/FSTF-2018-Assessment-Of-FoodSecurity.pdf>. Published 2018. Accessed August 12, 2019.
45. Knowles M, Rabinowich J, Ettinger de Cuba S, Cutts DB, Chilton M. "Do You Wanna Breathe or Eat?": Parent Perspectives on Child Health Consequences of Food Insecurity, Trade-Offs, and Toxic Stress. Matern Child Health J. 2016;20(1):25-32. doi:10.1007/s10995-015-1797-8
46. Seligman HK, Laraia BA, Kushel MB. Food insecurity is associated with chronic disease among low-income NHANES participants. J Nutr. 2010;140(2):304-310. doi:10.3945/jn.109.112573
47. Laraia BA. Food Insecurity and Chronic Disease. Adv Nutr. 2013;4(2):203-212. doi:10.3945/an.112.003277



48. Berkowitz SA, Basu S, Meigs JB, Seligman HK. Food Insecurity and Health Care Expenditures in the United States, 2011-2013. *Health Serv Res.* 2018;53(3):1600-1620. doi:10.1111/1475-6773.12730
49. Jyoti DF, Frongillo EA, Jones SJ. Food insecurity affects school children's academic performance, weight gain, and social skills. *J Nutr.* 2005;135(12):2831-2839. doi:10.1093/jn/135.12.2831
50. Knowles M, Rabinowich J, Ettinger de Cuba S, Cutts DB, Chilton M. "Do You Wanna Breathe or Eat?": Parent Perspectives on Child Health Consequences of Food Insecurity, Trade-Offs, and Toxic Stress. *Matern Child Health J.* 2016;20(1):25-32. doi:10.1007/s10995-015-1797-8
51. U.S. Census Bureau. Table B17002. American FactFinder. <https://data.census.gov/table?t=Poverty&g=050XX00US06075&tid=ACSDT1Y2021.B17002>.
52. Chilton M, Black MM, Berkowitz C, et al. Food insecurity and risk of poor health among US-born children of immigrants. *Am J Public Health.* 2009;99(3):556-562. doi:10.2105/AJPH.2008.144394
2023
53. Food Research and Action Center and Children's HealthWatch. Food Insecurity among Immigrants, Refugees, and Asylees in the United States. http://org2.salsalabs.com/o/5118/p/salsa/web/common/public/content?content_item_KEY=13089. Published February 2016. Accessed August 8, 2019.
54. U.S. Census Bureau. Table B05010. American FactFinder. <https://data.census.gov/table?q=b05010&g=050XX00US06075&tid=ACSDT5Y2021.B05010>.
55. City and County of San Francisco Department of Homelessness and Supportive Housing. San Francisco Homeless Point in Time Count Reports. <https://hsh.sfgov.org/wp-content/uploads/2022/08/2022-PIT-Count-Report-San-Francisco-Updated-8.19.22.pdf>.
56. UCLA Center for Health Policy Research, Los Angeles, CA. AskCHIS 2021. Food Security (San Francisco), Available at <https://ask.chis.ucla.edu>. Exported on September 21, 2023
57. San Francisco Department of Aging and Adult Services. Program data. Fiscal year 2022-2023.
58. The Geography of Poverty and Nutrition: Food Deserts and Food Choices Across the United States. Stanford Graduate School of Business. <https://www.gsb.stanford.edu/faculty-research/working-papers/geography-poverty-nutrition-food-deserts-food-choices-across-united>. Accessed August 8, 2019.
59. United States Department of Agriculture Economic Research Service. Food Environment Atlas. September 10, 2020. Accessed September 27, 2023. <https://www.ers.usda.gov/data-products/food-environment-atlas/data-access-and-documentation-downloads/>
60. Schwarz EB, Nothnagle M. The Maternal Health Benefits of Breastfeeding. *Am Fam Physician.* 2015;91(9):602-604.



61. Patro-Gołab B, Zalewski BM, Kołodziej M, et al. Nutritional interventions or exposures in infants and children aged up to 3 years and their effects on subsequent risk of overweight, obesity and body fat: a systematic review of systematic reviews. *Obes Rev Off J Int Assoc Study Obes*. 2018;19(11):1620. doi:10.1111/obr.12745
62. Rouw E, von Gartzten A, Weißenborn A. [The importance of breastfeeding for the infant]. *Bundesgesundheitsblatt Gesundheitsforschung Gesundheitsschutz*. 2018;61(8):945-951. doi:10.1007/s00103-018-2773-4
63. Furman L. Breastfeeding: What Do We Know, and Where Do We Go From Here? *Pediatrics*. 2017;139(4). doi:10.1542/peds.2017-0150
64. Schwarz EB, Nothnagle M. The Maternal Health Benefits of Breastfeeding. *Am Fam Physician*. 2015;91(9):602-604.
65. Nutrition and Weight Status | Healthy People 2020. <https://www.healthypeople.gov/2020/topics-objectives/topic/nutrition-and-weight-status>. Accessed August 12, 2019.
66. Micha R, Peñalvo JL, Cudhea F, Imamura F, Rehm CD, Mozaffarian D. Association Between Dietary Factors and Mortality From Heart Disease, Stroke, and Type 2 Diabetes in the United States. *JAMA*. 2017;317(9):912-924. doi:10.1001/jama.2017.0947
2023
67. BRFSS Prevalence & Trends Data: Explore by Topic | DPH | CDC. https://nccd.cdc.gov/BRFSSPrevalence/rdPage.aspx?rdReport=DPH_BRFSS.ExploreByTopic&irbLocationType=StatesAndMMSA&islClass=CLASS06&islTopic=TOPIC60&islYear=2015&rdRnd=67664. Accessed August 8, 2019.
68. Physical Activity Guidelines - health.gov. <https://health.gov/PAGuidelines/>. Accessed August 6, 2019.
69. Shape America-Society of Health and Physical Educators. *Active Start: A Statement of Physical Activity Guidelines for Children from Birth to Age 5*. 2nd ed. American Alliance for Health, Physical Education, Recreation, and Dance; 2009.
70. World Health Organization (WHO). Physical activity. <https://www.who.int/news-room/fact-sheets/detail/physical-activity>. Accessed August 6, 2019.
71. Robert Wood Johnson Foundation. *Active Education: Growing Evidence on Physical Activity and Academic Performance | Active Living Research*. <https://activelivingresearch.org/ActiveEducationBrief>. Published 2015. Accessed August 6, 2019.
72. Basch CE. Physical activity and the achievement gap among urban minority youth. *J Sch Health*. 2011;81(10):626-634. doi:10.1111/j.1746-1561.2011.00637.x



73. Green G, Henry J, Power J. Physical Fitness Disparities in California School Districts. USC Price School of Public Policy; 2015. <https://www.cityprojectca.org/blog/archives/37752>. Accessed August 6, 2019.
74. Physical Activity Alliance, The 2022 United States Report Card on Physical Activity for Children and Youth, 2022. <https://paamovewithus.org/wp-content/uploads/2022/10/2022-US-Report-Card-on-Physical-Activity-for-Children-and-Youth.pdf> Accessed September 18, 2023.
75. US Department of Health and Human Services, Office of Disease Prevention and Health Promotion, Physical Activity | Healthy People 2030. <https://health.gov/healthypeople/objectives-and-data/browse-objectives/physical-activity/increase-proportion-adults-who-do-enough-aerobic-and-muscle-strengthening-activity-pa-05>. Accessed September 18, 2023.
76. Sherwood NE, Jeffery RW. The Behavioral Determinants of Exercise: Implications for Physical Activity Interventions. *Annu Rev Nutr.* 2000;20(1):21-44. doi:10.1146/annurev.nutr.20.1.21
77. Transportation Research Board and Institute of Medicine. Does the Built Environment Influence Physical Activity/ Examining the Evidence. Washington, D.C.: The National Academies Press; 2005.
78. Institute of Medicine (US) and National Research Council (US) Committee on Childhood Obesity Prevention Actions for Local Governments. Local Government Actions to Prevent Childhood Obesity. (Parker L, Burns AC, Sanchez E, eds.). Washington (DC): National Academies Press (US); 2009. <http://www.ncbi.nlm.nih.gov/books/NBK219692/>. Accessed August 6, 2019.
79. Boston 677 Huntington Avenue, Ma 02115 +1495-1000. Environmental Barriers to Activity. Obesity Prevention Source. <https://www.hsph.harvard.edu/obesity-prevention-source/obesity-causes/physical-activity-environment/>. Published October 21, 2012. Accessed August 6, 2019.
80. Allender S, Cowburn G, Foster C. Understanding participation in sport and physical activity among children and adults: a review of qualitative studies. *Health Educ Res.* 2006;21(6):826-835. doi:10.1093/her/cyl063
81. Rangul V, Holmen TL, Bauman A, Bratberg GH, Kurtze N, Midthjell K. Factors predicting changes in physical activity through adolescence: the Young-HUNT Study, Norway. *J Adolesc Health Off Publ Soc Adolesc Med.* 2011;48(6):616-624. doi:10.1016/j.jadohealth.2010.09.013
82. Seefeldt V, Malina RM, Clark MA. Factors affecting levels of physical activity in adults. *Sports Med Auckl NZ.* 2002;32(3):143-168. doi:10.2165/00007256-200232030-00001
83. Lindsay AC, Greaney ML, Wallington SF, Mesa T, Salas CF. A review of early influences on physical activity and sedentary behaviors of preschool-age children in high-income countries. *J Spec Pediatr Nurs JSPN.* 2017;22(3). doi:10.1111/jspn.12182



84. Institute of Medicine (US) and National Research Council (US) Committee on Childhood Obesity Prevention Actions for Local Governments. Local Government Actions to Prevent Childhood Obesity. (Parker L, Burns AC, Sanchez E, eds.). Washington (DC): National Academies Press (US); 2009. <http://www.ncbi.nlm.nih.gov/books/NBK219692/>. Accessed August 6, 2019.
85. Rangul V, Holmen TL, Bauman A, Bratberg GH, Kurtze N, Midthjell K. Factors predicting changes in physical activity through adolescence: the Young-HUNT Study, Norway. *J Adolesc Health Off Publ Soc Adolesc Med.* 2011;48(6):616-624. doi:10.1016/j.jadohealth.2010.09.013
86. Chung SJ, Ersig AL, McCarthy AM. The Influence of Peers on Diet and Exercise Among Adolescents: A Systematic Review. *J Pediatr Nurs.* 2017;36:44-56. doi:10.1016/j.pedn.2017.04.010
87. Sherwood NE, Jeffery RW. The behavioral determinants of exercise: implications for physical activity interventions. *Annu Rev Nutr.* 2000;20:21-44. doi:10.1146/annurev.nutr.20.1.21
88. Sherwood NE, Jeffery RW. The behavioral determinants of exercise: implications for physical activity interventions. *Annu Rev Nutr.* 2000;20:21-44. doi:10.1146/annurev.nutr.20.1.21
89. Yazdani S, Yee CT, Chung PJ. Factors predicting physical activity among children with special needs. *Prev Chronic Dis.* 2013;10:E119. doi:10.5888/pcd10.120283
90. Hesketh KR, Lakshman R, van Sluijs EMF. Barriers and facilitators to young children's physical activity and sedentary behaviour: a systematic review and synthesis of qualitative literature. *Obes Rev Off J Int Assoc Study Obes.* 2017;18(9):987-1017. doi:10.1111/obr.12562
91. World Health Organization. Oral Health Programme. Oral Health. http://www.who.int/oral_health/en/. Accessed August 13, 2019.
92. Bleich SN, Vercammen KA. The negative impact of sugar-sweetened beverages on children's health: an update of the literature. *BMC Obes.* 2018;5. doi:10.1186/s40608-017-0178-9
93. Park S, Lin M, Onufrak S, Li R. Association of Sugar-Sweetened Beverage Intake during Infancy with Dental Caries in 6-year-olds. *Clin Nutr Res.* 2015;4(1):9-17. doi:10.7762/cnr.2015.4.1.9
2023 Data Report 72 | Page
94. Kim S, Park S, Lin M. Permanent tooth loss and sugar-sweetened beverage intake in U.S. young adults. *J Public Health Dent.* 2017;77(2):148-154. doi:10.1111/jphd.12192
95. Chi DL, Scott JM. Added Sugar and Dental Caries in Children: A Scientific Update and Future Steps. *Dent Clin North Am.* 2019;63(1):17-33. doi:10.1016/j.cden.2018.08.003
96. 2014 California Children's Report Card (Children Now). AfterSchool Network. <https://www.afterschool-network.org/post/2014-california-childrens-report-card-children-now>. Accessed August 13, 2019.



97. Seirawan H, Faust S, Mulligan R. The Impact of Oral Health on the Academic Performance of Disadvantaged Children. *Am J Public Health*. 2012;102(9):1729-1734. doi:10.2105/AJPH.2011.300478
98. Pourat N, Nicholson G. Unaffordable dental care is linked to frequent school absences. *Policy Brief UCLA Cent Health Policy Res*. 2009;(PB2009-10):1-6.
99. World Health Organization. Oral Health Programme. Oral Health. http://www.who.int/oral_health/en/. Accessed August 13, 2019.
100. Fluoride varnishes for preventing dental caries in children and adolescents | Cochrane. https://www.cochrane.org/CD002279/ORAL_fluoride-varnishes-for-preventing-dental-caries-in-children-and-adolescents. Accessed August 13, 2019.
101. Wright JT, Tampi MP, Graham L, et al. Sealants for preventing and arresting pit-and-fissure occlusal caries in primary and permanent molars: A systematic review of randomized controlled trials-a report of the American Dental Association and the American Academy of Pediatric Dentistry. *J Am Dent Assoc* 1939. 2016;147(8):631-645.e18. doi:10.1016/j.adaj.2016.06.003
102. California Department of Health Care Services. Health Assessment Guidelines. Guideline # 18. Oral Health.; 2016. <https://www.dhcs.ca.gov/services/chdp/Documents/HAG/18OralHealth.pdf>.
103. Healthy People 2020. Children with dental caries experience in the primary or permanent teeth. <https://www.healthypeople.gov/2020/data/Chart/4993?category=1&by=Total&fips=-1>. Published 2014 2013. Accessed August 13, 2019.
104. City and County of San Francisco Department of Public Health. San Francisco Sugary Drinks Distributor Tax Advisory Committee: March 2019 Report.
105. Puhl RM, Heuer CA. Obesity stigma: important considerations for public health. *Am J Public Health* 2010; 100:1019-28.
106. Hatzenbuehler ML, Phelan JC, Link BG. Stigma as a fundamental cause of population health inequalities. *Am J Public Health* 2013;103:813-21.
107. Puhl RM, Heuer CA. The stigma of obesity: a review and update. *Obesity (Silver Spring)* 2009; 1:941-64.
108. Spahlholz J, Baer N, Konig HH, et al. Obesity and discrimination - a systematic review and meta-analysis of observational studies. *Obes Rev* 2016;17:43-55.
109. Seacat JD, Dougal SC, Roy D. A daily dairy assessment of female weight stigmatization. *J Health Psychol* 2016;21:228-40.
110. Luger M, Lafontan M, Bes-Rastrollo M, Winzer E, Yumuk V, Farpour-Lambert N. Sugar-Sweetened Beverages and Weight Gain in Children and Adults: A Systematic Review from 2013 to 2015 and a Comparison with Previous Studies. *Obes Facts*. 2017;10(6):674-693. doi:10.1159/000484566



111. Malik VS, Schulze MB, Hu FB. Intake of sugar-sweetened beverages and weight gain: a systematic review. *Am J Clin Nutr.* 2006;84(2):274-288.
112. Adult Obesity Causes & Consequences | Overweight & Obesity | CDC. <https://www.cdc.gov/obesity/adult/causes.html>. Published February 7, 2019. Accessed August 12, 2019.
113. Abramowitz MK, Hall CB, Amodu A, Sharma D, Androga L, Hawkins M. Muscle mass, BMI, and mortality among adults in the United States: A population-based cohort study. *PloS One.* 2018;13(4):e0194697. doi:10.1371/journal.pone.0194697
114. Grover SA, Kaouache M, Rempel P, et al. Years of life lost and healthy life-years lost from diabetes and cardiovascular disease in overweight and obese people: a modelling study. *Lancet Diabetes Endocrinol.* 2015;3(2):114-122. doi:10.1016/S2213-8587(14)70229-3
115. Grover SA, Kaouache M, Rempel P, et al. Years of life lost and healthy life-years lost from diabetes and cardiovascular disease in overweight and obese people: a modelling study. *Lancet Diabetes Endocrinol.* 2015;3(2):114-122. doi:10.1016/S2213-8587(14)70229-3
116. Defining Adult Overweight and Obesity | Overweight & Obesity | CDC. <https://www.cdc.gov/obesity/adult/defining.html>. Published February 7, 2019. Accessed August 12, 2019.
117. WIC. California WIC Program Manual: Determining Anthropometric Nutrition Need for All Categories, 2010.; 2010.
118. Defining Childhood Obesity | Overweight & Obesity | CDC. <https://www.cdc.gov/obesity/childhood/defining.html>. Published July 24, 2019. Accessed August 12, 2019.
119. FITNESSGRAM: Healthy Fitness Zone Charts - Physical Fitness Testing (PFT) (CA Dept of Education). <https://www.cde.ca.gov/TA/tg/pf/healthfitzones.asp>. Accessed August 12, 2019.
120. Weight Gain During Pregnancy - ACOG. <https://www.acog.org/Clinical-Guidance-and-Publications/Committee-Opinions/Committee-on-Obstetric-Practice/Weight-Gain-During-Pregnancy>. Accessed August 12, 2019.
121. Li N, Liu E, Guo J, et al. Maternal prepregnancy body mass index and gestational weight gain on pregnancy outcomes. *PloS One.* 2013;8(12):e82310. doi:10.1371/journal.pone.0082310
122. Simas TAM, Waring ME, Liao X, et al. Prepregnancy weight, gestational weight gain, and risk of growth affected neonates. *J Womens Health* 2002. 2012;21(4):410-417. doi:10.1089/jwh.2011.2810
123. Mamun AA, Mannan M, Doi S a. R. Gestational weight gain in relation to offspring obesity over the life course: a systematic review and bias-adjusted meta-analysis. *Obes Rev Off J Int Assoc Study Obes.* 2014;15(4):338-347. doi:10.1111/obr.12132



124. Poston L. Maternal obesity, gestational weight gain and diet as determinants of offspring long term health. *Best Pract Res Clin Endocrinol Metab.* 2012;26(5):627-639. doi:10.1016/j.beem.2012.03.010
125. Johnson J, Clifton RG, Roberts JM, et al. Pregnancy outcomes with weight gain above or below the 2009 Institute of Medicine guidelines. *Obstet Gynecol.* 2013;121(5):969-975. doi:10.1097/AOG.0b013e31828aea03
126. Sparano S, Ahrens W, De Henauw S, et al. Being macrosomic at birth is an independent predictor of overweight in children: results from the IDEFICS study. *Matern Child Health J.* 2013;17(8):1373-1381. doi:10.1007/s10995-012-1136-2
127. Ornoy A. Prenatal origin of obesity and their complications: Gestational diabetes, maternal overweight and the paradoxical effects of fetal growth restriction and macrosomia. *Reprod Toxicol Elmsford N.* 2011;32(2):205-212. doi:10.1016/j.reprotox.2011.05.002
128. Singh AS, Mulder C, Twisk JWR, van Mechelen W, Chinapaw MJM. Tracking of childhood overweight into adulthood: a systematic review of the literature. *Obes Rev Off J Int Assoc Study Obes.* 2008;9(5):474-488. doi:10.1111/j.1467-789X.2008.00475.x
129. The NS, Suchindran C, North KE, Popkin BM, Gordon-Larsen P. Association of adolescent obesity with risk of severe obesity in adulthood. *JAMA.* 2010;304(18):2042-2047. doi:10.1001/jama.2010.1635
130. Experts: Obesity Is Biologically “Stamped In,” Diet and Exercise. Healthline. <https://www.healthline.com/health-news/obesity-is-biologically-stamped-in-diet-and-exercise-wont-cure-it-021215>. Accessed August 13, 2019.
131. Fryar C, Carroll M, Ogden C. Prevalence of Overweight and Obesity Among Children and Adolescents: United States, 1963–1965 Through 2011–2012. Centers for Disease Control and Prevention https://www.cdc.gov/nchs/data/hestat/obesity_child_11_12/obesity_child_11_12.htm. Accessed August 12, 2019.
132. Appropriate body-mass index for Asian populations and its implications for policy and intervention strategies. *The Lancet.* 2004;363(9403):157-163. doi:10.1016/S0140-6736(03)15268-3
133. 500 Cities Project: Local data for better health | Home page | CDC. <https://www.cdc.gov/500cities/index.htm>. Published May 21, 2019. Accessed August 5, 2019.
134. Basics | Diabetes | CDC. <https://www.cdc.gov/diabetes/basics/diabetes.html>. Published June 11, 2019. Accessed August 5, 2019.
135. Malik VS, Popkin BM, Bray GA, Després J-P, Hu FB. Sugar Sweetened Beverages, Obesity, Type 2 Diabetes and Cardiovascular Disease risk. *Circulation.* 2010;121(11):1356-1364. doi:10.1161/CIRCULATION-AHA.109.876185



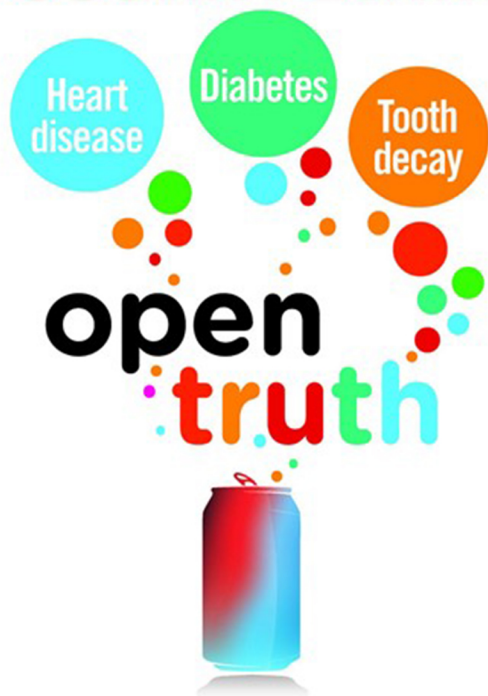
136. Schillinger D, Tran J, Mangurian C, Kearns C. Do Sugar-Sweetened Beverages Cause Obesity and Diabetes? Industry and the Manufacture of Scientific Controversy. *Ann Intern Med.* 2016;165(12):895-897. doi:10.7326/L16-0534
137. Gestational diabetes mellitus: an opportunity of a lifetime - *The Lancet.* <https://www.thelancet.com/journals/lancet/article/PIIS0140673609609582/fulltext>. Accessed August 5, 2019.
2023 Data Report 75 | Page
138. Tabák AG, Herder C, Rathmann W, Brunner EJ, Kivimäki M. Prediabetes: A high-risk state for developing diabetes. *Lancet.* 2012;379(9833):2279-2290. doi:10.1016/S0140-6736(12)60283-9
139. Babey S, Wolstein J, Diamant A, Goldstein H. Prediabetes in California: Nearly Half of California Adults on Path to Diabetes. UCLA Center for Health Policy Research; 2016. <http://healthpolicy.ucla.edu/publications/search/pages/detail.aspx?PubID=1472>. Accessed August 5, 2019.
140. Babey S, Wolstein J, Diamant A, Goldstein H. Prediabetes in California: Nearly Half of California Adults on Path to Diabetes. UCLA Center for Health Policy Research; 2016. <http://healthpolicy.ucla.edu/publications/search/pages/detail.aspx?PubID=1472>. Accessed August 5, 2019.
141. Malik VS, Hu FB. Sweeteners and Risk of Obesity and Type 2 Diabetes: The Role of Sugar-Sweetened Beverages. *Curr Diab Rep.* January 2012. doi:10.1007/s11892-012-0259-6
142.
142. CDC. Prediabetes - Your Chance to Prevent Type 2 Diabetes. Centers for Disease Control and Prevention. <http://bit.ly/2hMpYrt>. Published May 30, 2019. Accessed August 5, 2019.
143. Cardiovascular Disease and Diabetes. www.heart.org. <https://www.heart.org/en/health-topics/diabetes/why-diabetes-matters/cardiovascular-disease--diabetes>. Accessed August 5, 2019.
144. Cardiovascular Disease and Diabetes. www.heart.org. <https://www.heart.org/en/health-topics/diabetes/why-diabetes-matters/cardiovascular-disease--diabetes>. Accessed August 5, 2019.
145. Foley RN, Collins AJ. End-stage renal disease in the United States: an update from the United States Renal Data System. *J Am Soc Nephrol JASN.* 2007;18(10):2644-2648. doi:10.1681/ASN.2007020220
146. City and County of San Francisco Board of Supervisors Budget and Legislative Analyst. Updated Study of the Health and Financial Impacts Caused by Consumption of Sugar-Sweetened Beverages. City and County of San Francisco, Board of Supervisors; 2013.
147. Gaskin DJ, Thorpe RJ, McGinty EE, et al. Disparities in Diabetes: The Nexus of Race, Poverty, and Place. *Am J Public Health.* 2014;104(11):2147-2155. doi:10.2105/AJPH.2013.301420
148. Office of Statewide Health Planning and Development. Patient Discharge Dataset.



149. Office of Statewide Health Planning and Development. Emergency Department Dataset.
150. High Blood Pressure & Kidney Disease | NIDDK. National Institute of Diabetes and Digestive and Kidney Diseases. <https://www.niddk.nih.gov/health-information/kidney-disease/high-blood-pressure>. Accessed August 5, 2019.
151. 500 Cities Project: Local data for better health | Home page | CDC. <https://www.cdc.gov/500cities/index.htm>. Published May 21, 2019. Accessed August 5, 2019.
152. What is Cardiovascular Disease? www.heart.org. <https://www.heart.org/en/health-topics/consumer-healthcare/what-is-cardiovascular-disease>. Accessed August 5, 2019.
153. City and County of San Francisco Department of Public Health. 2019 San Francisco Community Health Needs Assessment. 2019 San Francisco Community Health Needs Assessment. <http://www.sfhip.org/>.
154. Accessed August 16, 2019.

Office of Statewide Health Planning and Development. Patient Discharge Dataset.
155. WHO | The global burden of disease: 2004 update. WHO. https://www.who.int/healthinfo/global_burden_disease/2004_report_update/en/. Accessed August 16, 2019.
156. Instruction Manuals. https://www.cdc.gov/nchs/nvss/instruction_manuals.htm. Published March 4, 2019. Accessed August 16, 2019.
157. San Francisco Department of Public Health. Principles for Collecting, Coding, and Reporting Social Identity Data – Ethnicity Guidelines.; 2011. https://www.sfdph.org/dph/files/PoliciesProcedures/COM3_EthnicityGuidelines.pdf.

SUGARY DRINKS ARE MAKING US SICK



The sugary drinks industry targets young people, parents, and communities of color to increase profits and brand loyalty despite scientific evidence that links sugary drinks to chronic diseases including **type 2 diabetes, heart disease, kidney diseases, non-alcoholic liver disease, tooth decay, and gout.**

THIS PROJECT WAS MADE POSSIBLE WITH FUNDING BY WWW.SODATAX-SF.ORG



San Francisco
Sugary Drinks Distributor Tax
Advisory Committee

2023 DATA REPORT



Appendix C

SDDT FY 22-23 Evaluation Report



San Francisco Sugary Drinks Distributor Tax (SDDT) EVALUATION REPORT 2022-2023



Letter of Introduction

DEAR MAYOR LONDON BREED, SAN FRANCISCO BOARD OF SUPERVISORS, AND SAN FRANCISCO RESIDENTS,

We are excited to share the evaluation findings from work supported by the Sugary Drinks Distributor Tax (SDDT) during fiscal year 2022- 2023, and more importantly recognize the 5-year anniversary of the tax in San Francisco, which has provided funding for priority populations and places targeted by the sugary drinks industry. Since 2018, the sugary drinks tax has funded a range of programs, services, and structural interventions dedicated to addressing health inequities. Revenue from the tax has resulted in collaboration between community members, the San Francisco Department of Public Health, academic researchers, and policy leaders embedded in the Sugary Drinks Distributor Tax Advisory Committee (SDDTAC)'s structure with seats dedicated to community leaders, community members, public health experts, subject matter experts, and researchers. The role of the SDDTAC has been critical in informing funding priorities and ensuring that the SDDT funding is accountable and aligned with key values for decreasing sugary drink intake and increasing healthy eating and active living.

This evaluation report highlights the impact of multi-year funding from the last five years and recommendations to sustain and support programs, initiatives, policies, and more. For example, findings include:

1. Over the past five years, SDDT revenues have been invested in priority populations and places most targeted by the beverage industry.
2. Over the past five years, SDDT investments have accelerated structural and systemic changes, especially in access to healthy food.
3. Over the past five years, SDDT investments have improved cultural norms related to drinking more water, drinking fewer sugary drinks, and increasing fruit and vegetable consumption.

4. SDDT investments have increased economic opportunity and strengthened resident leadership within communities most burdened by inequities.

We are especially excited that this report documents some of the positive outcomes of work supported with SDDT funds, as well as of the impact that the tax has had on the purchase and consumption of sugary drinks in San Francisco. With great confidence we can conclude that Collaboration + Effective Tax + the SDDTAC = Community Change. We would like to strongly support continuing the SDDTAC beyond the 2028 timeframe to ensure continued collaboration for addressing health inequities. The SDDTAC is part of a global effort to reduce sugar sweetened beverage consumption and here in San Francisco, our committee remains committed to making community-and results-driven recommendations to ensure the soda tax keeps working for all of us.

Sincerely,



Abby Cabrera
Co-Chair, Sugary Drinks Distributor Tax Advisory Committee

SDDTAC Co-Chair Marna Armstead was involved in the review of this report. The absence of her signature signifies that when this letter was finalized, she was on leave and unable to review the co-chair letter.

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View down Market St. to the bay

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Executive Summary

SAN FRANCISCO'S SUGARY DRINKS DISTRIBUTOR TAX (SDDT)

In November 2016, San Francisco voters passed Proposition V, a tax on the distribution of sugar-sweetened beverages. Proposition V established a one-cent per fluid ounce fee on the distribution of sugar-sweetened beverages, syrups, and powders within the City and County of San Francisco; which went into effect on January 1, 2018.

IN FY 2022-23,

72,981
people + **23,007**
students

(at minimum)
participated in SDDT-
funded grant programs

were enrolled at schools
supported with SDDT funds
(46% of all enrolled
SFUSD students)

At least **8% of BIPOC San Franciscans (and possibly as high as 13%)** participated in SDDT-funded programming in FY 2022-23¹

86% of SDDT-funded program participants believe that drinks with added sugar can harm their health.

Since participating in an SDDT-funded program, **81% of all participants now drink water more often.**

In FY 2022-23, 430 people were paid with SDDT funds as staff or stipended-positions:

91% of these people are BIPOC compared to 72% of employees of the City & County of San Francisco.

80% were residents of San Francisco compared to 42% of employees of the City & County of San Francisco.

The report aligns with the 2020-2025 SDDTAC Strategic Plan (for more information, please see www.sf.gov/sddtac).

1. This calculation was made by dividing SDDT's total number of BIPOC participants in FY 2022-23 by the total number of BIPOC residents in the city. The population-level demographic data is from the U.S. Census Bureau's American Community Survey 5-Year Estimates 2017-2021.

Overview of Findings

The following evaluation findings were generated for SDDT funding in Fiscal Year 2022–2023 (FY 2022–23), which includes July 1, 2022 through June 30, 2023.

Finding 1: Over the past five years, SDDT revenues have been invested in priority populations and places most targeted by the beverage industry.

Finding 2: Over the past five years, SDDT investments have accelerated structural and systemic changes, especially in access to healthy food.

Finding 3: Over the past five years, SDDT investments have improved cultural norms related to drinking more water, drinking fewer sugary drinks, and increasing fruit and vegetable consumption.

Finding 4: SDDT investments have increased economic opportunities and strengthened resident leadership within communities most burdened by inequities.

VideoVoice is a participatory approach to storytelling that combines words and images. Watch the full videos at www.sodatax-sf.org/data-overview/#videovoice or scan the QR code below.



“The most important part of the work that we do is giving a second chance to formerly incarcerated individuals. Getting out, starting over, looking for work, looking for opportunities is hard. For Farming Hope to give us opportunities, it’s big and life-changing.”

Recommendations

1. Continue to encourage San Franciscans to drink tap water (especially among populations that are reticent about the safety of tap water).
2. Continue to increase awareness about the negative impacts of sugary drinks and to reduce SSB consumption, especially among priority populations and places.
3. Ensure SDDT funding promotes policies and structural changes that encourage active lifestyles and physical activity.
4. Continue to support efforts to reduce health inequities in oral health outcomes.
5. Support residents from priority populations with economic and leadership opportunities.
6. Support SDDT-funded entities to increase their capacity to collect demographic participant data.
7. Continue to support SDDT evaluation efforts.
8. Encourage the use of braided funding to leverage SDDT funds for greater impact.
9. Ensure the SDDT Advisory Committee (SDDTAC) exists beyond the current 2028 end-date.
10. Share best practices, lessons learned, and evaluation findings from the San Francisco SDDT with other cities to highlight how local sugary drinks taxes can support health equity.



Overview of the Report

In early 2020, the SDDTAC and San Francisco Department of Public Health (SFDPH) contracted with Raimi + Associates to conduct the evaluation of SDDT funding allocations. This report is the fourth evaluation report and presents evaluation findings for the programs and agencies that received SDDT funding for FY 2022–23 as well as data dating back to FY 2018–19. The report aligns with the 2020-2025 SDDTAC Strategic Plan (for more information, please see www.sf.gov/sddtac).

The report is organized into the following main sections:

Introduction: Explains the background and purpose of SDDT and the SDDTAC, and describes the people and places more burdened by diet-sensitive chronic diseases.

Findings #1-4: Presents the four main evaluation findings and data for FY 2022–23.

Recommendations: Outlines recommendations for consideration during future years of SDDT funding allocation.

Data Sources

This report presents both quantitative and qualitative evaluation data provided from SDDT-funded City agencies, SFUSD, and community-based grantees, as well as collected by Raimi+Associates through a survey of participants of SDDT-funded programs.

Program Participant Survey

Between March and June 2023, the SDDT evaluation team coordinated with nearly all organizations and programs that received SDDT-funds to administer surveys to program participants. The only programs that did not administer participant surveys for the SDDT evaluation were those that serve entire schools (i.e., Student Nutrition Services, SFUSD hydration stations) and school-based oral health services. Participants could complete the survey either online or via SMS (automated, opt-in text message format), in English, Spanish, traditional Chinese, simplified Chinese, Filipino, Vietnamese, or Arabic. Different programs invited their participants to complete a specific version of the survey aligned with their program’s relevant SDDT outcomes. All versions of the survey included questions about sugar-sweetened beverage (SSB) consumption, perceived health harms of SSB consumption, water consumption, and demographics. Some versions also included questions about fruit and vegetable consumption, physical activity, sense of hope and sense of belonging, and food security.

A total of 1,037 surveys were completed

Where Are We Now?

Since the SDDT was implemented in January 2018, San Franciscans' purchasing and consumption of sugary drinks has greatly decreased. Additionally, individual programs supported with SDDT funding have begun to demonstrate success in most other outcomes. Green check marks (✓) represent substantial change and orange check marks (✓) represent some change.

IMPROVE BEHAVIORAL OUTCOMES

- ▼ Decrease in sugary drink consumption ✓
 - ▲ Increase in fruit/vegetable consumption ✓
 - ▲ Increase in physical activity ✓
 - ▲ Increase in breastfeeding ✓
 - ▲ Increase in tap water consumption ✓
- ## IMPROVE ECONOMIC CONDITIONS FOR INDIVIDUAL WORKERS/FAMILIES AND LOCAL BUSINESSES
- ▲ Increase in food security ✓
 - ▲ Increase in economic opportunity and stability ✓

**نريد أن نسمع عن تجربتك مع
the Healthy Corner Store Coalition**

من خلال إجراء هذا الاستطلاع سنساعدنا في التعرف على عدد العائلات التي تشتري فيها سكاك فرانيسكو المشروبات السكرية وما إذا كنت تفرغ البرامجة المعبأة بالغاز من "خدمة الموزة" (خدمة موز المشروبات السكرية) على سعة المشاركين في البرنامج. إننا نحتاج معرفة رأيك حتى نتمكن من تحسين البرنامج.

احصل على بطاقة هدية!
سيحصل أول 50 من المشاركين الذين أكملوا الاستطلاع على بطاقة هدايا بقيمة 25 دولارًا.

من المفترض إن يستغرق استكمال هذا الاستطلاع من 3 إلى 5 دقائق.

اسم البرنامج: **استطلاع الاستجابة السريعة (موزة) ها أو**
surveymonkey.com/SDDT4-arabic

أو

استطلاع كامل من خلال الرسائل القصيرة / النصية
سيستخدم رقم هاتفك هذا لإرسال رسائل خدمة الاستطلاع
SF Soda Tax 4 Health

To take the survey in English, text VEGGIES to
→ 1-844-965-2932 ←

والس 25 برنامجًا تدعم المشاركين فيها إكمال هذا الاستطلاع. هذا SF Soda Tax يدعم الاستطلاع وهو جزء من الاستطلاع مساندة من المشاركين في البرنامج. إننا نحتاج معرفة رأيك حتى نتمكن من تحسين البرنامج.
www.sodtax.sf.org

¡Queremos que nos cuente SU experiencia con el Instituto Familiar de la Raza!

Al responder esta encuesta, usted nos ayudará a saber con qué frecuencia está consumiendo bebidas azucaradas los residentes de San Francisco y el los programas financiados con el dinero del "impuesto sobre los refrescos" de San Francisco (el impuesto sobre los distribuidores de bebidas azucaradas) están afectando y de qué manera la salud de los participantes en los programas. Sus respuestas son anónimas y nadie sabrá lo que usted respondió.

¡recibe una tarjeta de regalo!
Los primeros 140 participantes que respondan a la encuesta recibirán una tarjeta de regalo de \$25.

Particpe en la encuesta EN LÍNEA en inglés o español.
Escanea el código QR aquí o visita: surveymonkey.com/zh/sddt4-veggies

Esta encuesta tardará entre 3 y 5 minutos en responderla.

0

Responda a la encuesta a través de mensajes SMS/de texto
Su número de teléfono SOLO se utilizará para enviar mensajes de texto para la encuesta del impuesto sobre los refrescos para la salud en SF.

To take the survey in English, text VEGGIES to
→ 1-844-965-2932 ←

Para tomar la encuesta en Español, envía VEGGIES a
→ 1-844-965-2932 ←

El impuesto sobre los refrescos de San Francisco apoya a 25 programas que están invitando a sus participantes a responder esta encuesta. Esta encuesta es una oportunidad para escuchar directamente a los participantes en los programas, así que cuéntenos su experiencia. Más información en www.sodtax.sf.org.

We want to hear about YOUR experience with the Bayview Clinic!

By taking this survey, you will help us learn about how often San Franciscans are drinking sugary beverages and if/how programs supported with money from the San Francisco "Soda Tax" (the Sugary Drinks Distributor Tax) are affecting the health of program participants. Your answers are anonymous and no one will know how you answer.

Receive a gift card!
The first 80 participants who complete the survey will receive a \$25 gift card.

Participate in the survey ONLINE in English or Spanish.
Scan the QR code here, or visit: surveymonkey.com/zh/sddt4-smiles

This survey should take 3-5 minutes to complete.

OR

Complete survey through SMS/text messages
Your phone number will ONLY be used to send text messages for the SF Soda Tax 4 Health survey.

To take survey in English, text SMILES to
→ 1-844-965-2932 ←

Para tomar la encuesta en Español, envía SONRISAS a
→ 1-844-965-2932 ←

The SF Soda Tax supports 25 programs that are inviting their participants to complete this survey. This survey is an opportunity to hear directly from program participants, so please tell us about your experience. Learn more at www.sodtax.sf.org.

我們想聽聽您對 Chinatown Task Force on Children's Oral Health (NICOS Chinese Health Coalition) 的體驗!

透過這項調查的參與，您將協助我們了解舊金山市民飲用含糖飲料的頻率，以及舊金山汽水稅（含糖飲料分銷商稅）資助的計畫是否/如何影響計畫參與者的健康。您會以匿名作答，沒有人會知道您作答內容。

收到一張禮物卡!
前 80 名完成調查的參與者將獲得價值 25 美元的禮物卡。

以英文、西班牙文、簡體或繁體中文參與調查。請掃描此 QR 碼，或前往：
zh.surveymonkey.com/SDDT4-chinese-traditional 或掃描此 QR 碼

完成此調查需要 3-5 分鐘。

或者

透過簡訊/文字訊息完成調查
您的手機號碼將僅用於發送「舊金山汽水稅與健康」調查的簡訊。

以繁體中文參與調查，請發送簡訊 (GRINS) 至
→ 1-844-965-2932 ←

To take the survey in English, text SMILES to
→ 1-844-965-2932 ←

舊金山汽水稅資助 25 項計畫，這些計畫會邀請計畫參與者完成這項調查。這項調查是獲得直接聽取計畫參與者意見的機會，所以請告訴我們您的經驗。在 www.sodtax.sf.org 了解更多資訊。

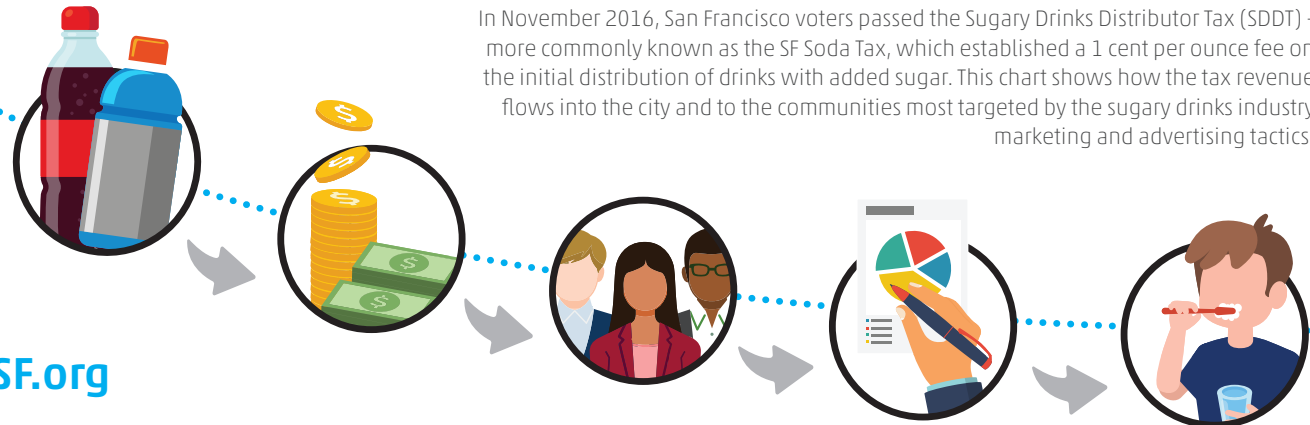
Background



Sugary Drinks Distributor Tax (SDDT): How it Works

In November 2016, San Francisco voters passed the Sugary Drinks Distributor Tax (SDDT) - more commonly known as the SF Soda Tax, which established a 1 cent per ounce fee on the initial distribution of drinks with added sugar. This chart shows how the tax revenue flows into the city and to the communities most targeted by the sugary drinks industry marketing and advertising tactics.

Learn more at
www.SodaTax-SF.org



1. Sugary Drink Distributors are Taxed

The SF Soda Tax is not a sales tax. Distributors are responsible for paying the tax. Merchants may choose to pass the cost of the tax along to consumers.

2. Revenue is Collected

The SF Soda Tax collects about \$15-16 million each year. The revenue goes into the City's General Fund. About 22% is set aside for specific, voter-approved projects. The Tax Advisory Committee makes recommendations to the mayor on how to spend the remaining 78%.

3. Tax Committee Recommends Investments

The Committee talks to community members to learn about how the tax revenue could benefit people, especially low-income people and people of color who are most targeted by the beverage industry's advertising. The Committee then submits their funding recommendations to the Mayor.

4. City Budget Process Finalizes Investments

The Mayor submits a budget proposal to the Board of Supervisors, including recommendations for the SF Soda Tax funds. The Board of Supervisors votes on the budget and the Mayor signs it.

5. SF Soda Tax Funds Programs!

SF Soda Tax funds go to City departments who either implement programs and services directly or issue grants to community-based organizations to fund their important work.



SDDT Advisory Committee Values



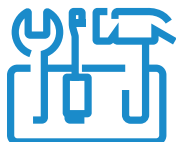
Supporting community-led and culturally relevant work.

Community-led work should be led by communities that are disproportionately impacted by marketing for and consumption of sugary beverages from the beverage industry and diet-sensitive chronic diseases (i.e., SDDTAC's priority populations), and culturally relevant work should be responsive to these communities and populations. This objective can be achieved by investing in priority communities and ensuring funded work is culturally responsive, linguistically relevant, and trauma informed.



Building strong collaborations and partnerships to increase capacity and effectiveness.

Funding should support existing and new community-based partnerships and collaborations that align resources to increase capacity, effectiveness, and the impact of strategies, programs, and services. Eliminating structural inequities and achieving equity.



Equity (including health equity and racial equity) means that everyone has a fair and just chance to reach their full potential and be healthy. The root causes of structural inequities and health disparities (e.g., systems of oppression, intentionally and unintentionally/implicitly biased policies, and resource allocation) need to be addressed in order to achieve equity. This goal is done by mitigating health harms and holding the soda industry accountable.



Prioritizing results and long-term impacts. Funding should support policy, systems, and environmental changes that include programming and go beyond programming, to change the structures in which we work, live, learn, and play. Adopting a Policy, Systems, and Environmental (PSE) change approach can help create sustainable, comprehensive measures to improve community health, as well as enrich and expand the reach of current health preventive efforts and engage diverse stakeholders with the goal of improving health.



Foodwise Teens participants during a culinary training

Priority Populations

Using public health data and evidence, the SDDTAC identified communities who are targeted by the soda industry, who consume sugary drinks at high rates, and who experience disproportionate levels of diet-sensitive chronic diseases. Diet-sensitive chronic diseases include tooth decay, cavities, Type 2 diabetes, hypertension (high blood pressure), and cardiovascular disease.

Specifically, the SDDTAC identified the following populations as those who should be prioritized in SDDT funding recommendations:

- Low-income San Franciscans
- Children, youth, and young adults 0-24 years old
- Community members who identify as any of the following:
 - » Asian
 - » Black/African American
 - » Latinx
 - » Native American/Indigenous
 - » Pacific Islander

Although these priority populations are distinct, there is also considerable overlap between them, with many community members belonging to more than one of these communities and, thus, experiencing multiple intersecting and cumulative inequities.

SDDT funds have been used to support programs within both community-based organizations and government agencies that focus on the neighborhoods and populations most impacted by diet-sensitive chronic diseases and other health inequities.



Black/African American residents have rates of emergency room visits due to diabetes that are 25 times higher than rates among White and Asian residents.²



Black/African American residents who die from diabetes die 3-9 years younger than residents of other racial/ethnic groups who die from diabetes.³

2. Source: California Office of Statewide Health Planning and Development: Age-Adjusted Rates of Hospitalizations as reported in "San Francisco Sugary Drinks Distributor Tax Advisory Committee: September 2023 Data Report."

3. Source: California Department of Public Health, VRBIS Death Statistical Master File 2010-2021 as reported in "San Francisco Sugary Drinks Distributor Tax Advisory Committee: September 2023 Data Report."

Jiu Jin Shan Chinese Chorus performance at the SDDT 5-Year Celebration

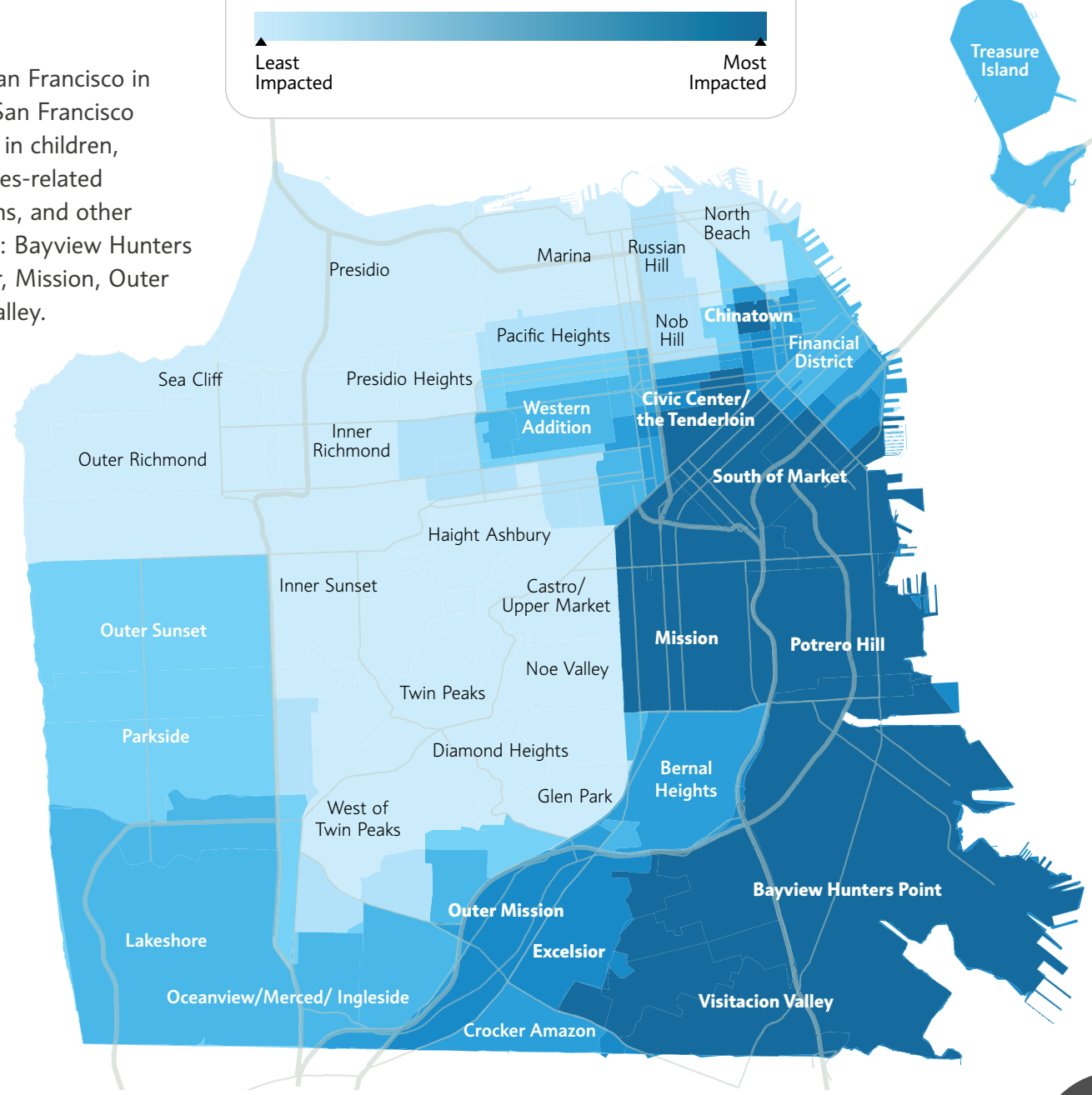


San Francisco Neighborhoods Most Impacted by Diet-Sensitive Chronic Diseases

Health inequities exist between neighborhoods in San Francisco in addition to existing between demographic groups. San Francisco neighborhoods that have the highest rates of caries in children, diagnosed diabetes, diagnosed hypertension, diabetes-related hospitalizations, hypertension-related hospitalizations, and other indicators of diet-related chronic disease burden are: Bayview Hunters Point, Chinatown, Tenderloin/Civic Center, Excelsior, Mission, Outer Mission, Potrero Hill, South of Market, Visitacion Valley.

The following neighborhoods (or in some cases, a portion of the neighborhood) also have higher rates of some diet-sensitive chronic diseases than other neighborhoods: Bernal Heights, Crocker Amazon, Financial District, Lakeshore, Oceanview/Merced/Ingleside, Outer Sunset, Parkside, Treasure Island, Western Addition.

Neighborhoods Most Impacted by Diet-Sensitive Chronic Diseases



To explore the data summarized in this map, visit www.sodatax-sf.org/contextual-maps/

SDDT Evaluation Logic Model

The SDDT evaluation logic model, presented below, aligns with the SDDT Advisory Committee’s strategic plan. In 2023, the SDDT evaluation team made some updates to the strategies and values in the SDDT evaluation logic model to address feedback from funded entities that some of the strategies from SDDTAC strategic plan were overlapping and to ensure the intent of the values was clear.



Long-Term Outcomes

- Improve health outcomes
 - » Decrease in diet-sensitive chronic diseases (e.g., dental caries, heart disease, hypertension, stroke, Type 2 Diabetes)

Desired Impact:
Eliminate health disparities and achieve equity, especially among priority populations.



Mission Children's Oral Health Taskforce's second biannual event



Government Agencies that Received Funding in FY 2022-23

San Francisco Department of Public Health

- Children's Oral Health Community Task Forces
- Healthy Food Purchasing Supplement Grants
- School-Based Sealant Application
- SDDTAC Infrastructure/Backbone Support
- SDDT Healthy Communities Multi-Year Grants for Small Community-Based Organizations
- SDDT Healthy Communities Policy, Systems, & Environment (PSE) Multi-Year Grants

San Francisco Office of Economic and Workforce Development

- Healthy Retail Initiative

San Francisco Recreation and Parks Department

- Peace Parks
- Recreation Scholarships/Requity

San Francisco Unified School District

(via San Francisco Department on Children, Youth, and their Families)

- Grants to Community-Based Organizations
- Student Nutrition Services
- Wellness Policy Implementation and Student Action

Community-Based Organizations that Received SDDT Funding in FY 2022-23

Healthy Food Purchasing Supplement Grants

- EatSF/Vouchers 4 Veggies (UCSF)
- Heart of the City Farmers Market

SDDT Healthy Communities Multi-Year Grants for Small Community-Based Organizations - Cohort 1

- 3rd Street Youth Center & Clinic*
- Bayview Hunters Point Community Advocates
- Bounce Back and Healthy Generations Project/BBG
- Community Grows
- Community Well
- Farming Hope**
- Instituto Familiar de la Raza**
- San Francisco African American Faith-Based Coalition
- SisterWeb San Francisco Community Doula Network***
- SOMCAN (South of Market Community Action Network)
- Urban Sprouts

Children's Oral Health Community Task Forces****

- Chinatown Task Force on Children's Oral Health (NICOS Chinese Health Coalition)
- Mission Children's Oral Health Task Force (CARECEN)

SDDT Healthy Communities Policy, Systems, & Environment (PSE) Change Multi-Year Grants - Cohort 1

- 18 Reasons
- Central American Resource Center (CARECEN)
- Marin City Health and Wellness Center—Bayview Clinic
- Southeast Asian Development Center (SEADC)
- Tenderloin Neighborhood Development Corporation (supporting two programs: Healthy Corner Store Coalition and Kain Na)

SFUSD Grants to Community-Based Organizations

- Snack Squad (Health Initiatives for Youth)

* In FY 2022-23, the Third Street Youth Center and Clinic took the lead on the ParkRx program that had previously been led by BMAGIC.

** Grantee that also received Food Security Fund grant funds. The San Francisco African American Faith Based Coalition was also awarded this grant but did not submit reimbursable expenses.

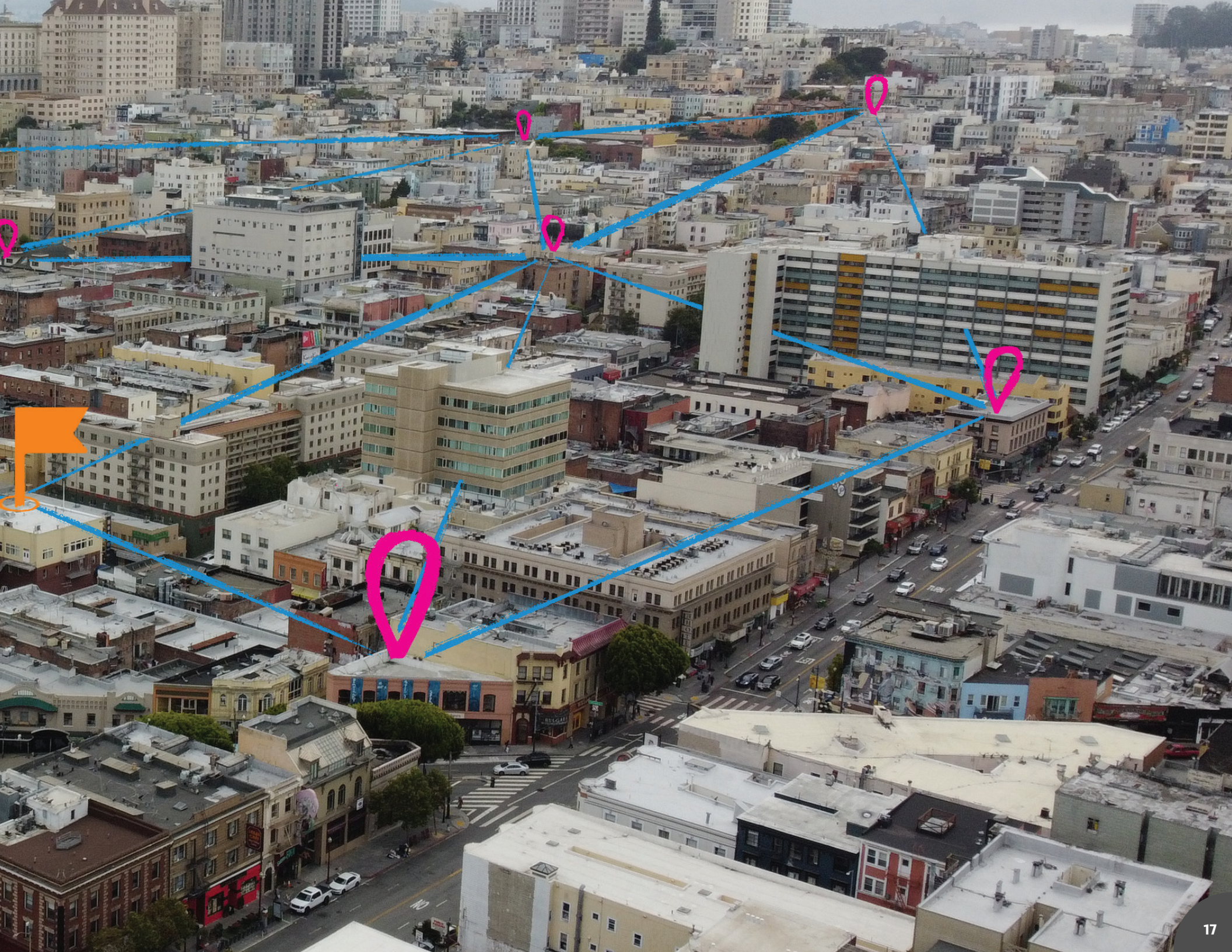
*** Also received funding to support lactation support and training (from the FY 2021-22 SDDT allocation for a Breastfeeding Coalition Pilot). That allocation also provided some funding UCSF's Preterm Birth Initiative to support a San Francisco lactation landscape scan and initial coordination related to the coalition--that work is continuing in FY 2023-24.

**** The organization that had served as the lead for the District 10 Children's Oral Health Task Force was unable to do so in FY 2022-23 and a contract for a new lead organization was adopted in late June 2023.

An aerial photograph of a city, likely San Francisco, showing a dense urban landscape with various building heights and colors. A large blue semi-transparent box is overlaid on the left side of the image, containing white text. Several pink and blue annotations are present: a large green scribble in the upper right, a pink teardrop shape pointing to a building, and several blue arrows pointing to different areas of the city.

Finding 1

Over the past five years, SDDT revenues have been invested in priority populations and places most targeted by the beverage industry.



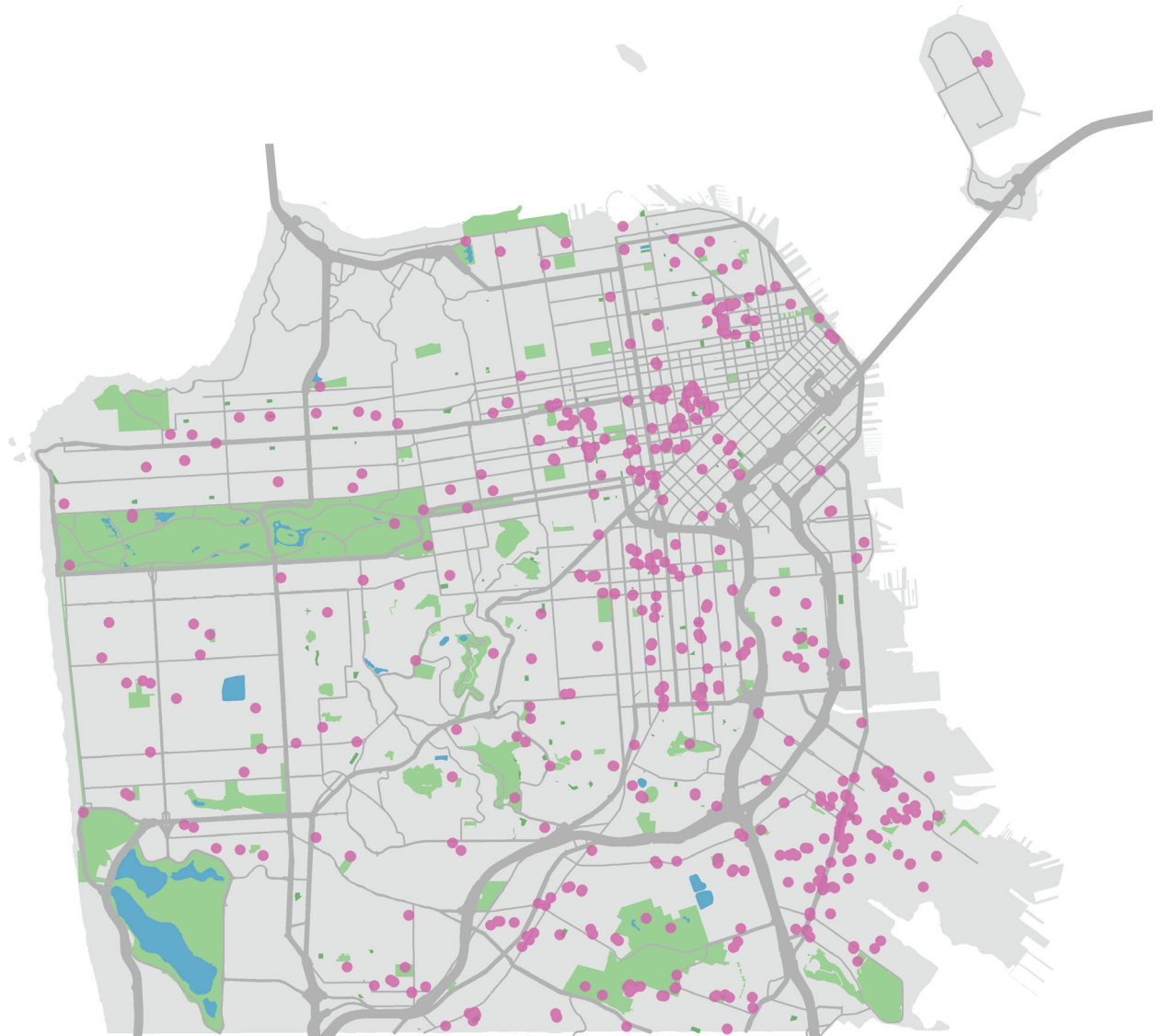
SDDT FY 2022-23 Funding Reached People and Places Targeted by the Sugar-Sweetened Beverage Industry

Across SDDT-funded entities, SDDT-funded work occurred in every neighborhood and every supervisorial district in San Francisco. At the same time, SDDT funds concentrated services, programs, and education in the neighborhoods most impacted by diet-sensitive chronic diseases and targeted by the sugar-sweetened beverage industry.

Location of Funded Programming and Services Since FY 2018-19

The dots represent:

1. Where SDDT-funded entities are located (e.g., main office, clinic) and where SDDT-funded programming and/or community engagement happened (e.g., classes, oral health services, congregations participating in an SDDT-funded coalition),
2. Sites where SDDT-funded benefits were distributed and used to purchase produce, or
3. Location of SDDT-funded facilities improvements (e.g., hydration stations, kitchen upgrades).



IN FY 2022–23,

72,981
people

(at minimum) participated in SDDT-funded grant programs

+

23,007
students

were enrolled at schools supported with SDDT funds (46% of all enrolled SFUSD students)



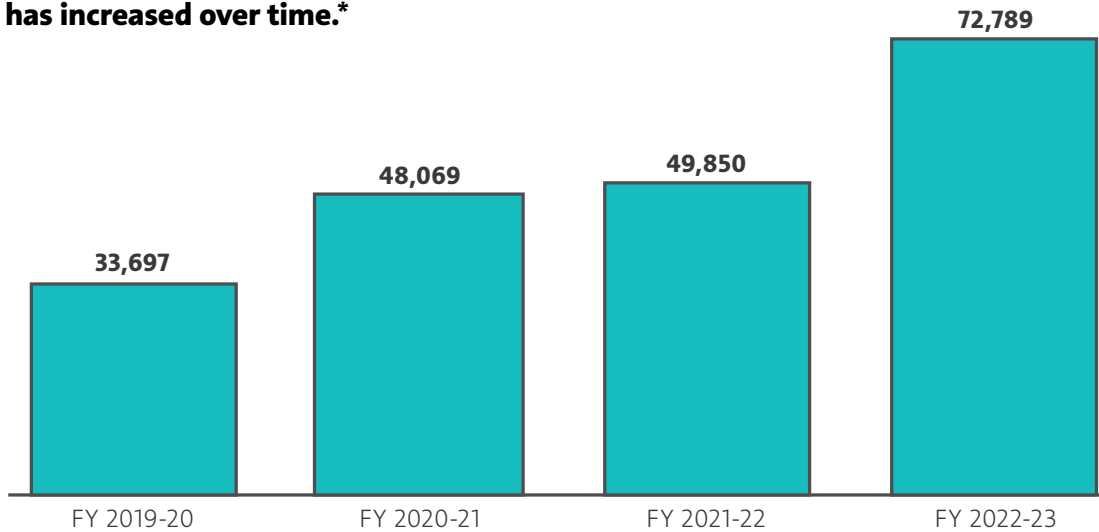
Aerial view of the Mission District

SAN FRANCISCO NEIGHBORHOODS WITH THE HIGHEST BURDEN OF DIET-SENSITIVE CHRONIC DISEASE

Neighborhoods	Neighborhoods where SDDT-funded entities offered in-person programming during FY 2022–23	Neighborhoods where participants of FY 2022–23 programming lived	Neighborhoods where people paid with SDDT funds live
Bayview Hunters Point	✓	✓	✓
Chinatown	✓	✓	✓
Civic Center/the Tenderloin	✓	✓	✓
Excelsior	✓	✓	✓
Mission	✓	✓	✓
Outer Mission	✓	✓	✓
Potrero Hill	✓	✓	✓
South of Market	✓	✓	✓
Visitacion Valley	✓	✓	✓

As shown by the table to the left, the following neighborhoods received strategically concentrated amounts of in-person, culturally-responsive services from SDDT-funded entities. Culturally-responsive services are those that are shaped and informed by the languages, cultural practices, traditional knowledge, perspectives, and expressions reflective of the communities being served. Additionally, culturally-responsive services are often provided by staff with relevant lived experience and/or who are residents of the neighborhood they are serving.

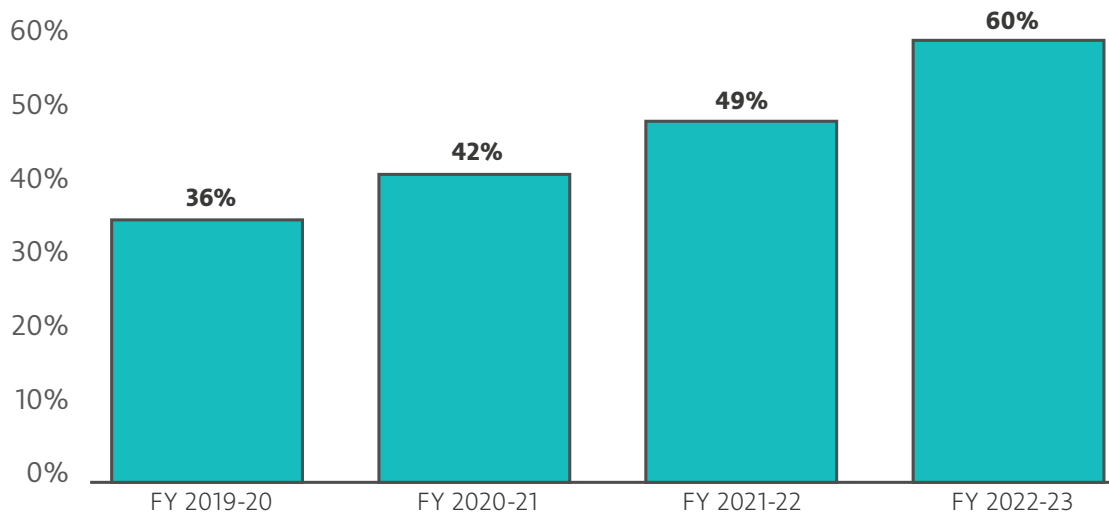
The number of unduplicated participants in SDDT-funded programs has increased over time.*



72,789
participants

** Please note in fiscal years 2019-20 and 2020-21, most (but not all) funded programs reported data on unduplicated participants. Therefore, the numbers presented to the left are an undercount. Additionally, not all funded programs provided demographic data on their participants in fiscal years 2019-20 and 2020-21.*

The percentage of participants in SDDT-funded programs who are BIPOC has increased over time.*



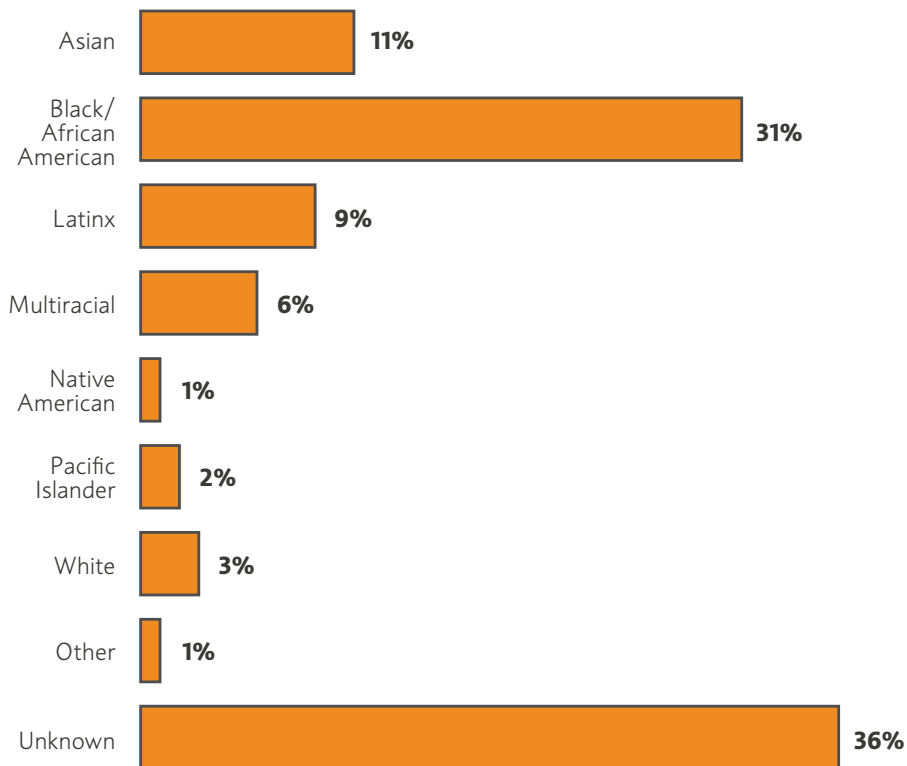
Children participating in a SF Recreation and Parks Department program

SDDT investments are successfully engaging BIPOC community members.

8-13% of all BIPOC city residents participated in SDDT-funded programming

At least 8% of BIPOC San Franciscans (and possibly as high as 13%) participated in SDDT-funded programming in FY 2022-23⁴

Race/ethnicity of FY 2022-23 SDDT-funded program participants (n=72,981)



* Multiple funded entities did not collect and/or submit race/ethnicity data for all of their participants.



Staff from Instituto Familiar de la Raza (IFR) receive an award at SFPD's celebration event for Healthy Communities grantees

4. This calculation was made by dividing SDDT's total number of BIPOC participants in FY 2022-23 by the total number of BIPOC residents in the city. The population-level demographic data is from the U.S. Census Bureau's American Community Survey 5-Year Estimates 2017-2021.

People paid with SDDT funds are more likely to be San Francisco residents than civil servants (employees of the City & County of San Francisco)

Languages spoken by people paid with SDDT funds

Afaan Oromo • Amharic • Arabic • Cambodian • Cantonese • English • French • Hindi • Hokkien • Ilokano • Japanese • Malay • Mayan-K'iche' • Mayan-Mam • Mayan-Yucateco • Mandarin • Russian • Spanish • Swahili • Tagalog • Toishanese • Vietnamese

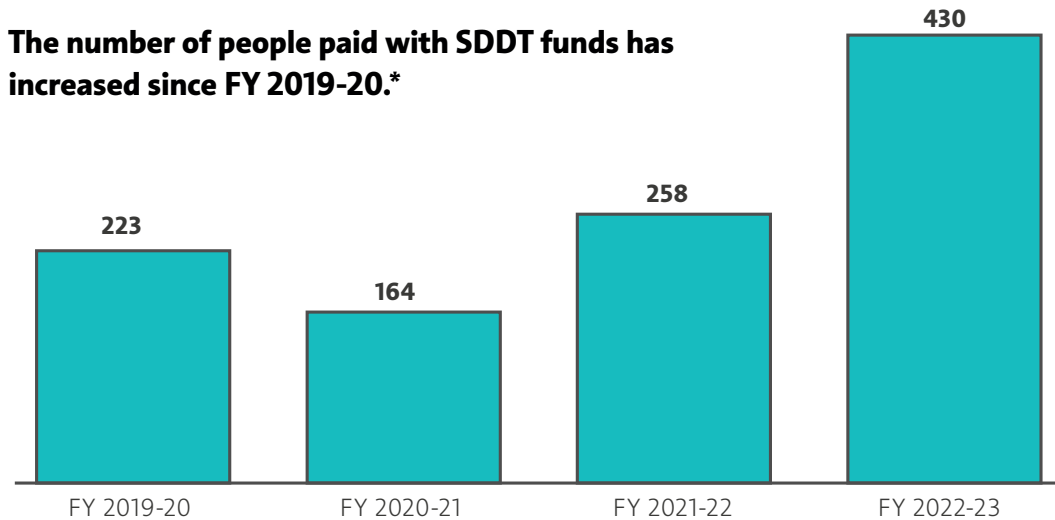
SDDT-funded entities offered services in these languages

Arabic • Cantonese • English • Mandarin • Russian • Spanish • Tagalog • Vietnamese

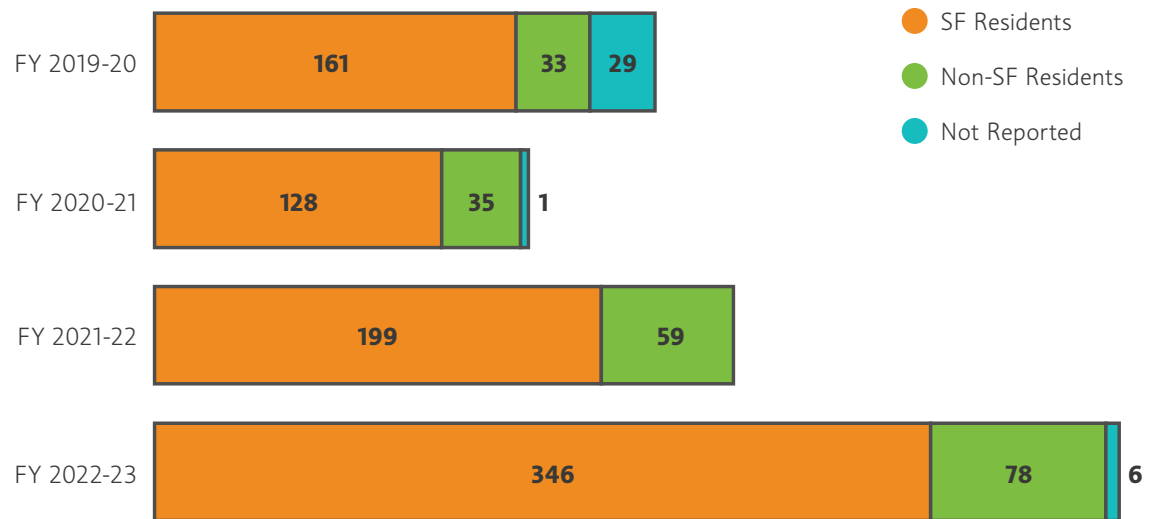
The vast majority of people paid with SDDT funds live in San Francisco.

A total of 430 people were paid with SDDT funds as staff or stipended-positions in FY 2022–23. Of the 430 people paid with SDDT funds, 346 (80%) were residents of San Francisco. This proportion (80%) is notably higher than the proportion of City and County of San Francisco employees who live in the city (42%)⁵.

The number of people paid with SDDT funds has increased since FY 2019-20.*



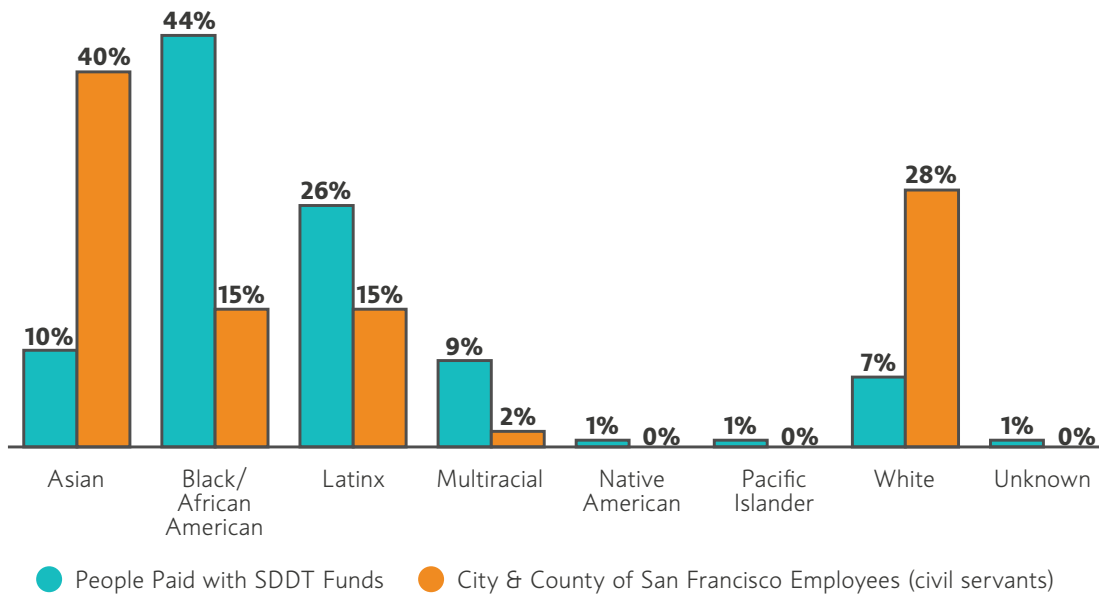
* Please note in fiscal years 2019-20 and 2020-21, most (but not all) funded programs reported data on people paid with SDDT funds. Therefore, the numbers presented to the left are an undercount.



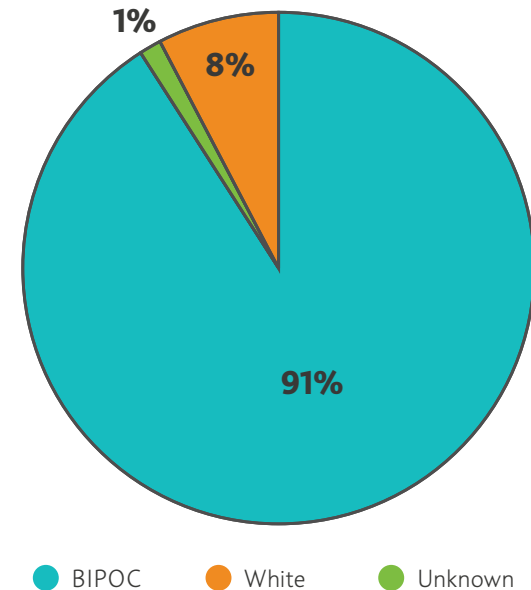
People paid with SDDT funds are more likely than civil servants to be Black/ African American, Latinx, Multiracial, Native American, and Pacific Islander

A total of 430 people were paid with SDDT funds as staff or stipended-positions in FY 2022–23. Of the 430 people paid with SDDT funds, 346 (80%) were residents of San Francisco. This proportion (80%) is notably higher than the proportion of City and County of San Francisco employees who live in the city (42%)⁵. Of the 430 people paid with SDDT funds in FY 2022–23, 391 (91%) were BIPOC. This 91% is higher than the proportion of City and County of San Francisco employees who are BIPOC (72%).

Race/Ethnicity of City/County Staff and People Paid with SDDT Funds (FY 2022–23)⁶



Race/Ethnicity of People Paid with SDDT Funds (FY 2022–23)



5. City and County of San Francisco. 2023. Citywide Workforce Demographics. Retrieved from: <https://sfdhr.org/residency>.

6. City and County of San Francisco. 2023. Citywide Workforce Demographics. Retrieved from: <https://sfdhr.org/race-ethnicity-and-avg-hourly-rate>.

70–91%

of people paid with SDDT funds in each of the last five years are BIPOC



Finding 2

Over the past five years, SDDT investments have accelerated structural and systemic changes, especially in access to healthy food.



IN ADDITION TO FUNDING CULTURALLY-RESPONSIVE PROGRAMS, SERVICES, AND EDUCATION, SDDT REVENUES ARE ALSO DEDICATED TO FUNDING STRUCTURAL CHANGES.

SDDT's prior and current investments in structural changes through SFUSD's Student Nutrition Services, hydration stations, the Healthy Food Purchasing Supplement program, and preventive oral health treatments have led to important positive changes in access to healthy food, access to water, improved nutritional behaviors, and improved oral health. Through these interventions, SDDT funding has invested in structural changes that address long-standing health inequities.



Staff of SDDT-funded entities and other stakeholders participate in a workshop as part of SFDPH's Sugar Decolonality series

Structural Changes

Structural changes intervene in the policies and systemic practices that shape where we live, learn, work, and play—and therefore have the potential to interrupt inequities and create healthier opportunities.⁷ Decades of public health research have demonstrated that structural changes that address the social determinants of health also improve health outcomes for communities, resulting in much larger and more sustainable impacts than individually-focused health promotion or medical interventions.^{8,9} Despite their large impact, structural changes that increase equity often require significant effort to implement and also typically require longer periods of time to see measurable health improvements (relative to individually-focused health promotion or medical interventions).¹⁰

Social Determinants of Health

The social determinants of health are a broad range of socioeconomic and environmental factors that influence health outcomes at the individual and community levels.¹¹ Examples of social determinants of health include air and water quality, economic opportunities, access to healthy foods, and protections against institutionalized forms of racism and discrimination. As a result of structural inequities, people from historically disenfranchised populations and neighborhoods encounter barriers to good health, such as a lack of access to healthy foods, that influence their health behaviors and, thus, affect their health outcomes.

7. Pastor, M., Ito, J., & Wander, M. (2020). A Primer on Community Power, Place, And Structural Change. Retrieved from: https://dornsife.usc.edu/assets/sites/1411/docs/Primer_on_Structural_Change_web_lead_local.pdf.
8. McGinnis, J. M., & Foege, W. H. (1993). Actual causes of death in the United States. *Journal of the American Medical Association*, 270(18), 2207-2212.
9. Williams, D. R., Costa, M. V., Odunlami, A. O., & Mohammed, S. A. (2008). Moving upstream: how interventions that address the social determinants of health can improve health and reduce disparities. *Journal of Public Health Management and Practice*, 14(6), S8-S17.
10. Pastor, M., Ito, J., & Wander, M. (2020). A Primer on Community Power, Place, And Structural Change. Retrieved from: https://dornsife.usc.edu/assets/sites/1411/docs/Primer_on_Structural_Change_web_lead_local.pdf.
11. Let's Get Healthy California. (2023). Social Determinants of Health. Retrieved from: <https://letsgethealthy.ca.gov/sdoh/>.

Structural Interventions Result in Healthy Behaviors

SFUSD STUDENT NUTRITION SERVICES

SFUSD's Student Nutrition Services (SNS) department is tasked with providing over 37,000 meals per day at 136 schools across San Francisco during the school year.¹² As a result of SDDT investments in kitchen facility upgrades and staff development during FY 2019-20 and FY 2020-21, many SFUSD middle and high schools began to transition to the Refresh model in Spring 2020 and are now able to prepare healthy school meals with fresh and mostly local ingredients. During FY 2022-23, SDDT funds were used to provide staff trainings, update menu signage, and build SNS's communications capacity.

Winter 2019 to Spring 2020:

Leveraging SDDT funding, school kitchen improvements were made at many SFUSD middle and high schools.

July 2021:

To address food insecurity exacerbated by the COVID-19 pandemic, SFUSD begins to offer *free school meals to all students regardless of income*.

August 2022:

- SFUSD continues to offer free school meals regardless of income with new State funding for universal school meals.
- Refresh expands to 100% scratch cooking at 19 middle and high schools.

12. SFUSD. 2023. Student Nutrition Services. Retrieved from: <https://www.sfusd.edu/departments/student-nutrition-services>.

SFUSD SNS has two main models for their school kitchens: 1) Heat and Serve, and 2) Refresh.

1) Heat & Serve is the traditional model in which schools are reliant on pre-made meals, because they have limited-to-no kitchen space and have outdated/inadequate equipment. In FY 2022–23, the Heat & Serve model was used at all elementary schools as well as smaller middle and high schools.

2) Refresh is the newer model in which schools prepare meals on site from scratch, because they have dedicated kitchen space and upgraded facilities (e.g., new equipment and serving lines) and their dining staff have received professional development trainings. In FY 2022–23, the Refresh model was used at larger middle and high schools.

• **Regional Kitchen.** Additionally, SNS also has a regional kitchen at McAteer that adopted the Refresh model and prepares meals from scratch for SFUSD's early education sites on independent campuses throughout the city.

Addressing Food Insecurity Among Students

When food-insecure and low-income students choose not to participate in the free school lunch program, it means either 1) they are not eating (which negatively impacts academic performance and achievement)^{13,14} and/or 2) their parents/caregivers are spending limited funds on alternative lunch options instead of housing, transportation, medicines, and other essential needs.

SDDT's ongoing investments in structural and environmental changes at SFUSD schools is encouraging students to participate in school meals. **Since Fall 2019, student participation in school lunch has increased from 38% to 49%.**

This increased school lunch participation has led to positive nutritional benefits through increased fruit/vegetable consumption and reduced food insecurity.

School lunch participation at schools supported with SDDT investments has increased **11 percentage points** since FY 2019-20.

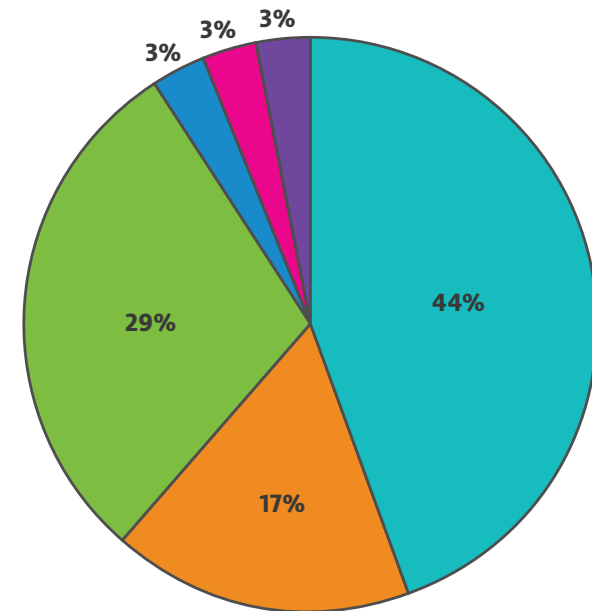
SFUSD's School Nutrition Services (SNS) department has been effective in leveraging SDDT funds to secure external state and federal funding, including the U.S. Department of Agriculture's Supply Chain Assistance Funds and the State of California's Kitchen Infrastructure and Training Funds. **By leveraging SDDT funds to secure other funding sources, SFUSD has increased its ability to provide meals with healthy and local ingredients.**

13. Food Research & Action Center. August 2019. School Meals are Essential for Student Health and Learning. Retrieved from: <https://frac.org/research/resource-library/school-meals-are-essential-for-student-health-and-learning>.

14. The Brookings Institute. May 2017. How the quality of school lunch affects students' academic performance. Retrieved from: <https://www.brookings.edu/blog/brown-center-chalkboard/2017/05/03/how-the-quality-of-school-lunch-affects-students-academic-performance/>.

80% of SFUSD middle and high school students in FY 2022-23 attended schools serving meals made the same day with healthy and local ingredients.

Sources of SNS Funding



- National School Lunch Program (NSLP)
- Child Adult Care Food Program (CACFP)
- Universal School Meals Program
- Kitchen Infrastructure and Food Staff Training
- Supply Chain Assistance
- SDDT Funding

SDDT Increasing Access to Hydration Stations

SDDT funding has also increased the number of SFUSD water hydration stations, where students, school employees, and school visitors can refill water bottles. Since FY 2018-2019, SFUSD has installed new hydration stations at 22 SFUSD schools, and sixteen (73%) of them are located in neighborhoods most or moderately impacted by diet-sensitive chronic diseases (although the other sites also serve residents of SDDT priority neighborhoods).

Through this environmental intervention, SDDT is increasing the availability of filtered and temperature-regulated water and providing students with a free and convenient alternative to sugar-sweetened beverages. Peer-reviewed research has found that installing hydration stations increases water consumption among children and youth and that adequate hydration significantly improves cognitive function among children and youth.^{15, 16, 17} By investing in this structural intervention, SDDT is improving access to drinking water among students.

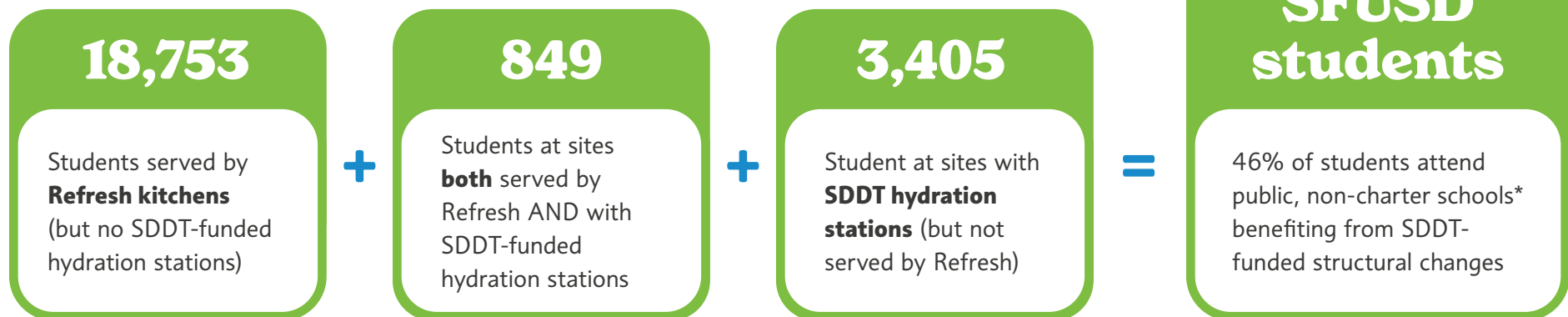
15. Lawman, H. G., Grossman, S., Lofton, X., Tasian, G., & Patel, A. I. (2020). Hydrate Philly: an intervention to increase water access and appeal in recreation centers. *Preventing Chronic Disease*, 17, E15.

16. D'Anci, K. E., Constant, F., & Rosenberg, I. H. (2006). Hydration and cognitive function in children. *Nutrition Reviews*, 64(10), 457-464.

17. Perry III, C. S., Rapinett, G., Glaser, N. S., & Ghetti, S. (2015). Hydration status moderates the effects of drinking water on children's cognitive performance. *Appetite*, 95, 520-527.

SFUSD and SDDT funding has been ahead of the curve. In Fall 2022, the California Legislature passed a series of bills and Governor Newsom signed them into law to 1) require all newly constructed K-12 public schools, as well as any schools undergoing modernization, to provide on-site water bottle filling stations, and 2) to provide funding and technical assistance for schools in disadvantaged communities to install hydration stations.

SDDT Funding Reaches Large Numbers of SFUSD Students



* Since there is limited enrollment data for SFUSD's early education (i.e., PreK and TK) schools, and since early education schools on independent campuses are provided meals from scratch by the district's Central Kitchen at McAteer, these figures are an underestimate of SDDT's true impact in reaching SFUSD students with healthy meals and tap water.

Healthy Food Purchasing Supplement (HFPS) Grants Leverage SDDT Funding to Make Produce Accessible to Low-Income San Franciscans and Increase Food Security

When people do not have the resources to meet basic needs, they are forced to make hard decisions often between food, childcare, transportation, and housing costs. The Healthy Food Purchasing Supplement (HFPS) is a grant program that increases the food budget for participating low-income San Franciscans while simultaneously incentivizing fruit and vegetable consumption. Currently, the two HFPS grantees are Heart of the City Farmers Market, which manages the Market Match program, and EatSF, which manages San Francisco's Vouchers4Veggies program. In fiscal years 2019-20 and 2020-21, HFPS also funded Market Match at Alemany Farmers Market.

Market Match

Heart of the City Farmers Market (HOCFM) operates Market Match* to provide up to \$30 per month in incentives to match participants' use of their CalFresh nutrition assistance benefits at HOCFM.

20,672
unduplicated people received Market Match incentives/supplements

Vouchers4Veggies

Vouchers4Veggies is operated by EatSF and it provides \$20-\$40 per month, based on household size, in fruit and vegetable vouchers for six months. Participants can redeem vouchers at local food retailers including corner stores, grocery stores, and farmers markets.

3,847
unduplicated people received Vouchers4Veggies

Although HOCFM participants live in almost every neighborhood of the city, the neighborhoods most represented are Civic Center/Tenderloin (13%) and SOMA (9%). Additionally, 8% of Market Match participants were unhoused.

8%
of Market Match participants were unhoused

Over 50% of participants who received HFPS supplements at HOCFM were served in a language other than English and/or using non-verbal communication due to a language barrier.

Of the 3,847 people who received Vouchers4Veggies, 2,405 were pregnant people. SDDT funding supported EatSF in reaching a majority of low-income pregnant people in San Francisco with increased fruit and vegetable access. **Of the 2,405 pregnant people who received Vouchers4Veggies, 92% were BIPOC.**

92%
of the 2,405 pregnant people who received Vouchers4Veggies were BIPOC

* Market Match is a program of the Ecology Center and is funded in part through the California Department of Food and Agriculture and the USDA's National Institute of Food and Agriculture.

Since pregnancy is a critical period of time for supporting food security and maternal nutrition, because of the long-term impacts on the developing fetus, SDDT and EatSF are making important strides in improving health outcomes for pregnant people and their children, especially among BIPOC residents.

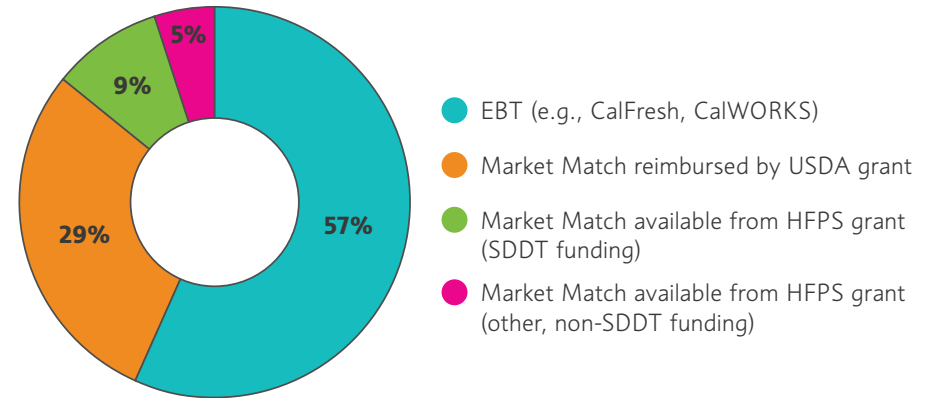
Both HFPS programs are examples of structural interventions that increase access to healthy food options that low-income residents have in San Francisco. By helping low-income residents to regularly integrate fruits and vegetables into their diet, HFPS programs have been shown to change long-term healthy nutritional behaviors and, thus, address health inequities.^{18,19} For example, a recent evaluation of the Vouchers4Veggies program found that on average participants consumed one additional serving of fruits and vegetables per day 3-6 months after having stopped receiving Vouchers4Veggies compared to before they started on the program.¹⁹ These evaluation findings led to a change in federal policy which increased WIC fruit and vegetable benefits nationwide.

The HFPS grantees have been effective in leveraging SDDT funds to secure external public and private funds, including the U.S. Department of Agriculture’s Gus Schumacher Nutrition Incentive Program and the State of California’s Women, Infants, and Children (WIC) program. **By leveraging SDDT funds to secure other funding sources, HFPS grantees have increased their capacity and had greater impact in increasing access to fresh fruits and vegetables.**

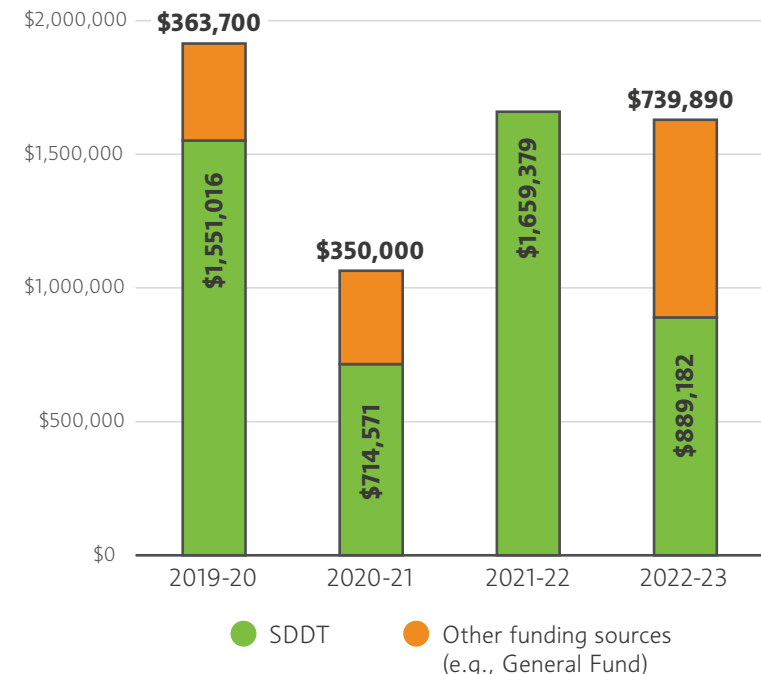
The success of the HFPS grant program has motivated other City and County of San Francisco departments to also invest in healthy food vouchers, including the SF Human Services Agency, which invested \$2.9 million in grocery vouchers during FY 2022-23.

18. Ecology Center. (2023). Market Match: Impact. Retrieved from: <https://marketmatch.org/impact/>.
 19. EatSF. (2021). Vouchers4Veggies Impact Report. Retrieved from: https://eatsfvoucher.org/wp-content/uploads/2021/08/impact-report_final-1-1.pdf.

FY2019-2020 to FY 2022-2023: \$12.8 Million in Market Match + Leveraged Funding Sources that Supported Heart of the City Farmers Market Vendors



Funding Sources Distributed to Healthy Food Purchasing Supplement (HFPS) Grantees



SDDT-Funded Dental Sealants at SFUSD Schools Prevent Cavities

Peer-reviewed research has found that poor oral health in children is significantly associated with absenteeism and poor academic performance.²⁰ Racial and income health inequities in oral health outcomes are particularly pronounced.²¹ Asian, Black, and Latinx children in San Francisco have cavities at rates three times higher than White children. Similarly, the rate of cavities is nearly three times higher at SFUSD schools with a high percentage of children who are low-income compared to SFUSD schools with a low percentage of children who are low-income.

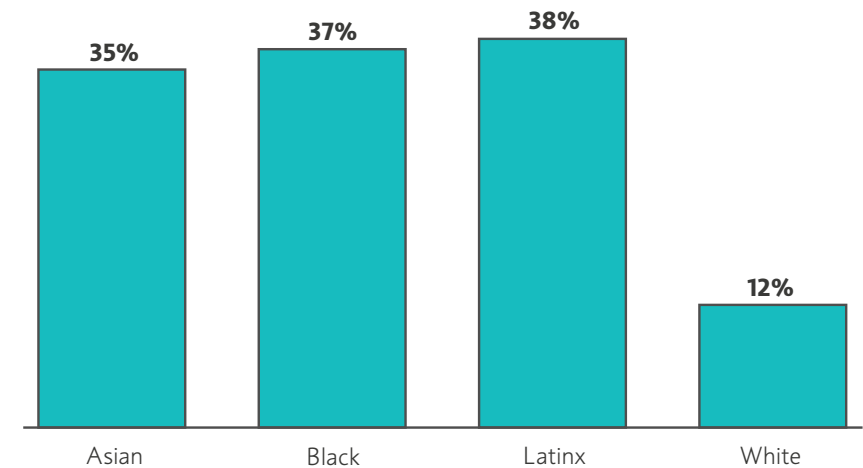
There are also large oral health inequities in access to oral healthcare. About 55% of children in San Francisco aged 0-5 years old on Medi-Cal do not see a dentist at least once a year.²¹ Closing the gap in access to preventive oral health, such as dental sealant application (see box to the right), will make a significant difference in reducing racial inequities in cavity rates.

20. Ruff RR, Senth S, Susser SR, Tsutsui A. Oral health, academic performance, and school absenteeism in children and adolescents: A systematic review and meta-analysis. *J Am Dent Assoc.* 2019 Feb;150(2):111-121.e4. doi: 10.1016/j.adaj.2018.09.023. Epub 2018 Nov 23. PMID: 30473200.

21. CavityFree SF Initiative. December 2019. San Francisco Children's Oral Health Strategic Plan 2020-2025.

22. Centers for Disease Control and Prevention. 2023. Dental Sealant FAQs. Retrieved from: https://www.cdc.gov/oralhealth/dental_sealant_program/sealants-FAQ.htm

Cavity Rates Among San Francisco Children by Race/Ethnicity



Dental sealants prevent cavities for up to 4 years!

Dental sealants are thin coatings that when painted on the chewing surfaces of the back teeth (molars) can prevent cavities and tooth decay) for many years. Sealants protect the chewing surfaces from cavities by covering them with a protective shield that blocks out germs and food. According to the Centers for Disease Control and Prevention, sealants protect against 80% of cavities for 2 years and continue to protect against 50% of cavities for up to 4 years.²²

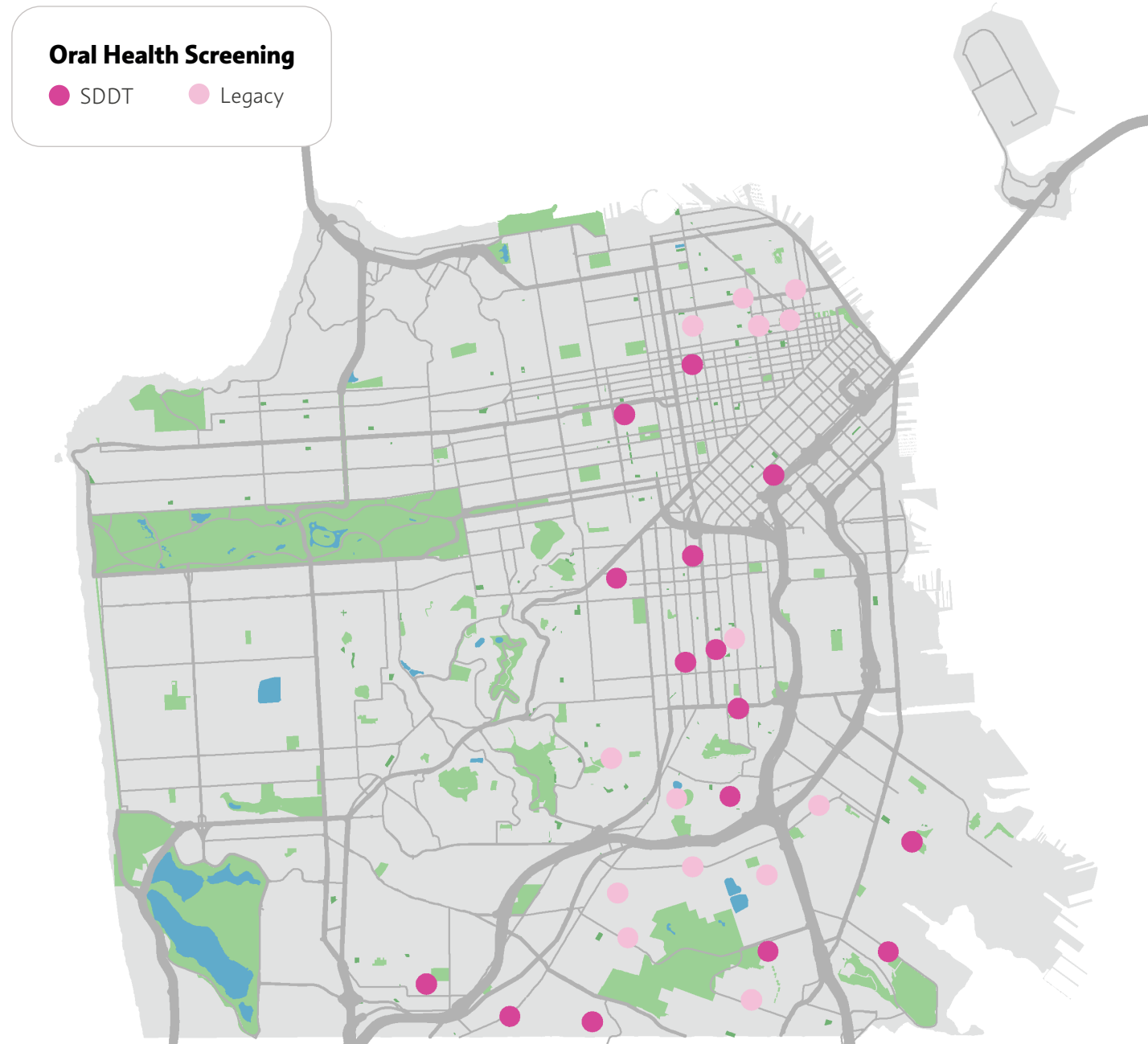
SDDT EXPANDED ACCESS TO DENTAL SEALANTS IN PRIORITY NEIGHBORHOODS

During FY 2022-23, SDDT funds helped SFDPH to expand their school-based oral health program from 14 SFUSD elementary schools ("legacy schools") to a total of 29 schools. Before 2nd and 5th grade students can receive an oral health screening or sealants, the oral health team needs active parent/guardian consent. In 2022-23, 40% of 2nd and 5th graders at legacy schools had completed parent/guardian consent forms, compared to 26% at SDDT schools.

As shown by the map on the right, the oral health screenings were all focused in SDDT's priority neighborhoods.

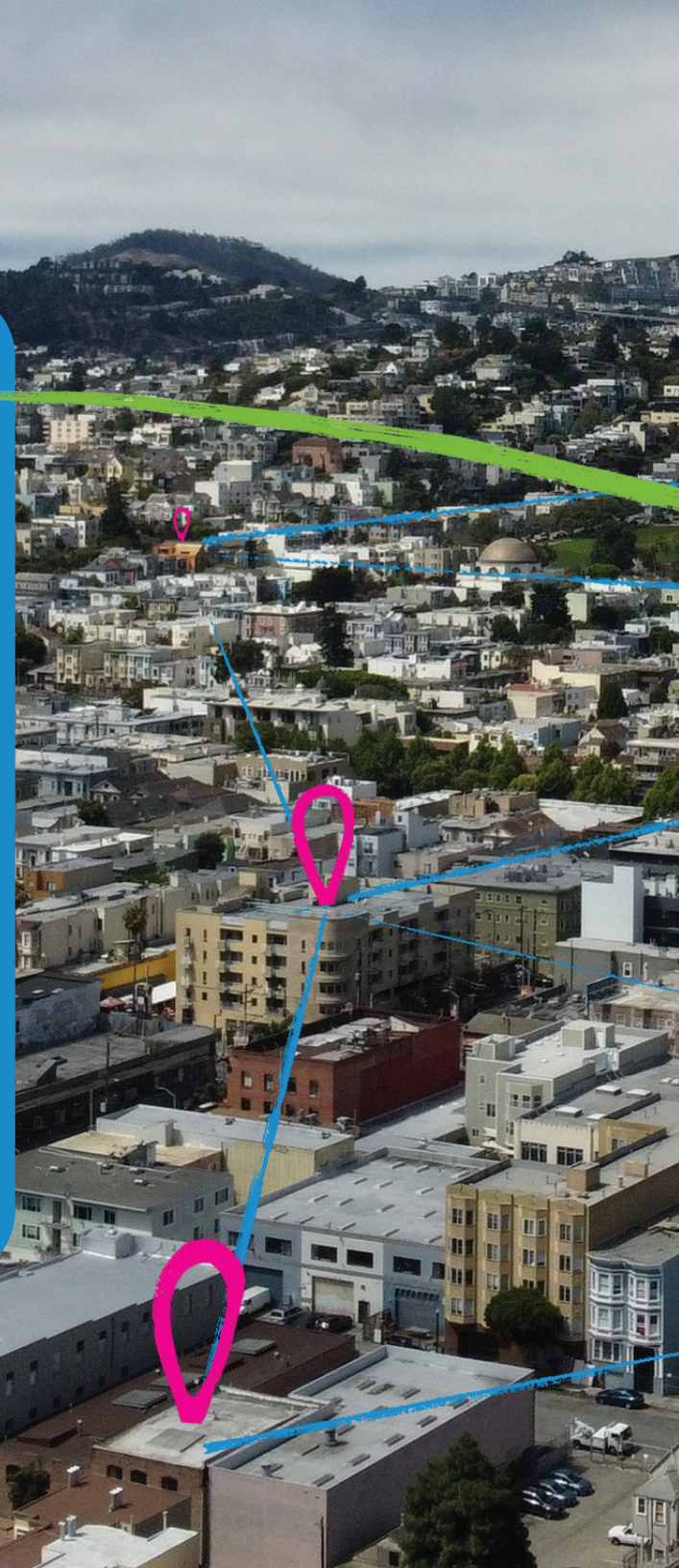
In total, 459 students at participating SFUSD elementary schools obtained parent/guardian consent to receive oral health screenings and sealants at school.

- 316 students received one or more dental sealants—including 14 who were referred for urgent or emergency dental services on other teeth.
- 143 students did not receive dental sealants for a variety of reasons (e.g., student already had sealants, teeth required filling before having a sealant applied, student was absent on the day of the oral health screenings). Data on which reasons were most common were not available.



Finding 3

Over the past five years, SDDT investments have improved cultural norms related to drinking more water, drinking fewer sugary drinks, and increasing fruit and vegetable consumption.





SDDT program participants show changing attitudes toward sugary drinks

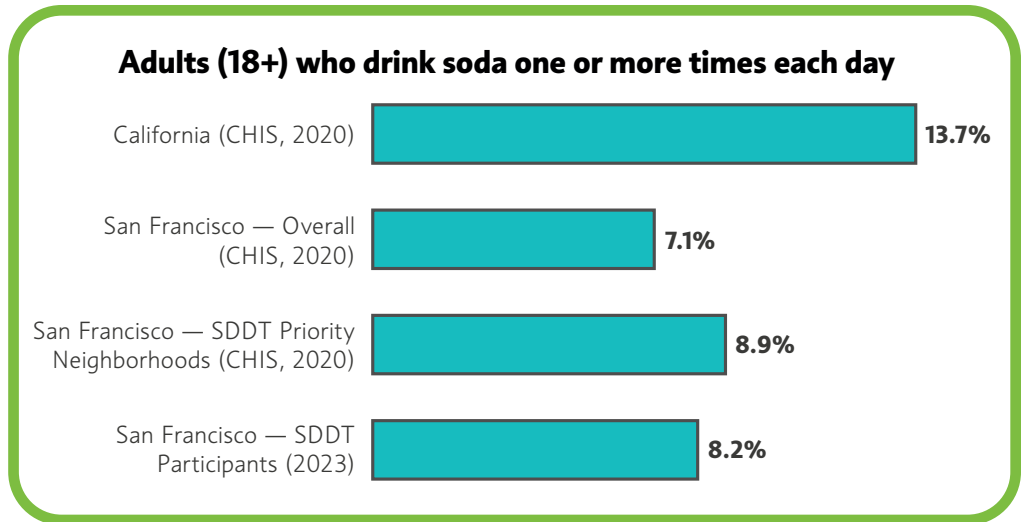
In 2020, the California Health Interview Survey (CHIS) asked a representative sample of California residents about their regular soda consumption. The survey found:

- 13.7% of all California residents drank at least one soda per day
- 7.1% of all San Francisco residents drank at least one soda per day
- 8.9% of residents from neighborhoods targeted by the beverage industry drank at least one soda per day

As part of the 2023 SDDT participant survey (see Overview), there were also questions regarding sugar-sweetened beverage attitudes and consumption. Among all SDDT program participants, **8.2% reported consuming at least one can, bottle, or glass of regular soda that contained sugar (does not include diet soda) per day.**

SDDT program participants reported a lower average daily soda consumption than a representative sample of residents from SDDT's priority neighborhoods.

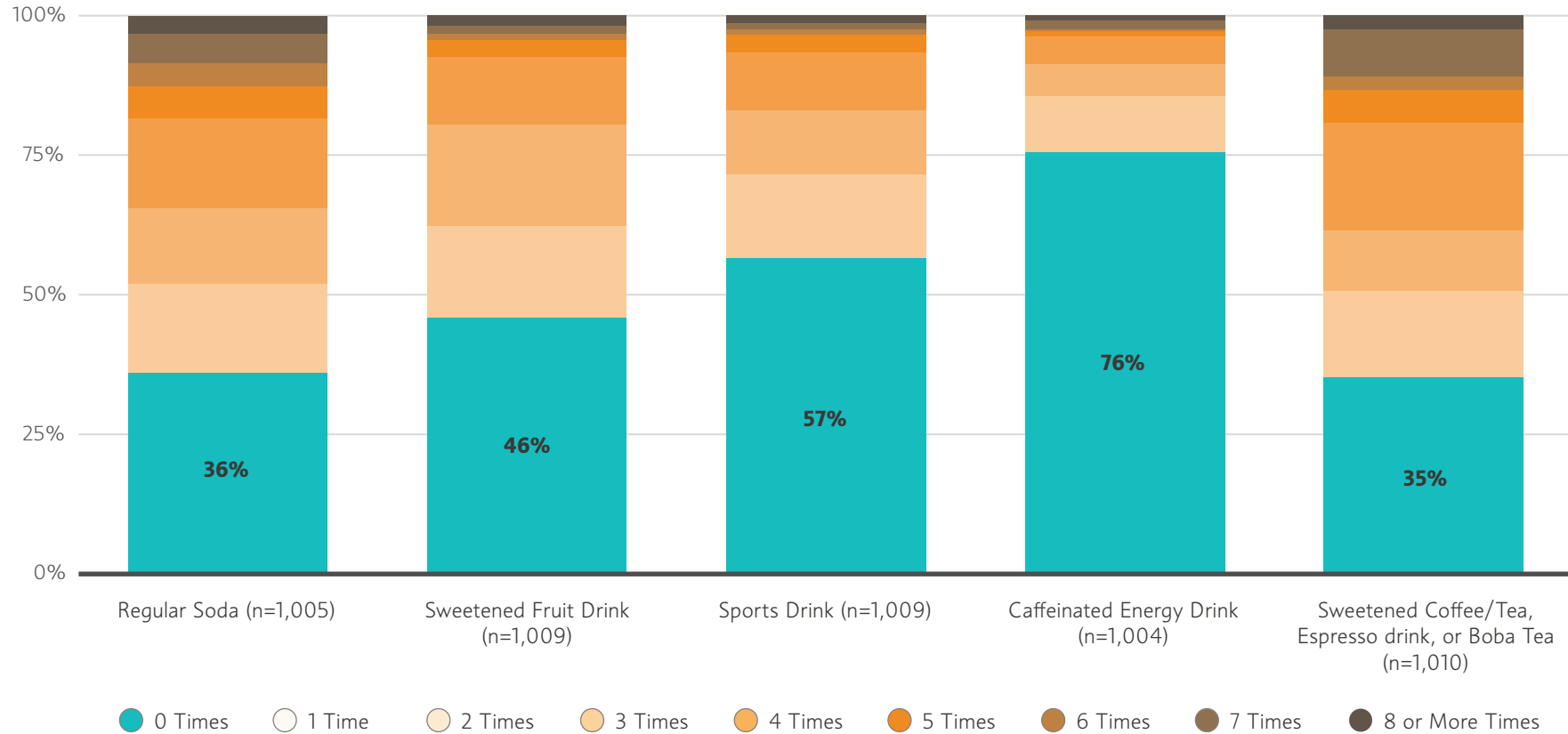
These results suggest that SDDT is making progress in reducing sugar-sweetened beverage consumption in the neighborhoods most targeted by the beverage industry, but there continues to remain a gap between SDDT program participants and the overall city average.



86% of SDDT-funded program participants believe that drinks with added sugar can harm their health



SDDT-Funded Program Participants' SSB Weekly Consumption



- The majority of SDDT program participants do not drink caffeinated energy drinks (76%) and sports drinks (57%) in a typical week.
- Sweetened coffee/tea had the highest percentage of participants (11%) drinking on average at least one drink per day (two darkest brown categories).

- Among SSBs, caffeinated energy drinks had the lowest consumption rates (24% of program participants drank at least one per week), while sweetened coffee/tea had the highest consumption rates (65% of program participants drank at least one per week).

Decrease in SDDT Revenue Suggests Decreasing Demand for Sugary Drinks

Over the past few years, tax revenues from SDDT and San Francisco's general sales tax have followed a similar trend. During the first (FY 2019–20) and second (FY 2020–21) years of the COVID-19 pandemic, there was a large decrease in both SDDT and sales tax revenues, but in FY 2021–22 and FY 2022–23 there was a small increase in both SDDT and sales tax revenues. However, SDDT revenue (a proxy for sugar-sweetened beverage sales and consumption) decreased more than sales tax AND has had a smaller aggregated increase in the past two years compared to the increase in sales tax revenue; suggesting a decreased demand for sugary drinks.

**Between FY 2018–19
and 2022–23:**

**SALES TAX
REVENUE
6%**



**SDDT
REVENUE
20%**

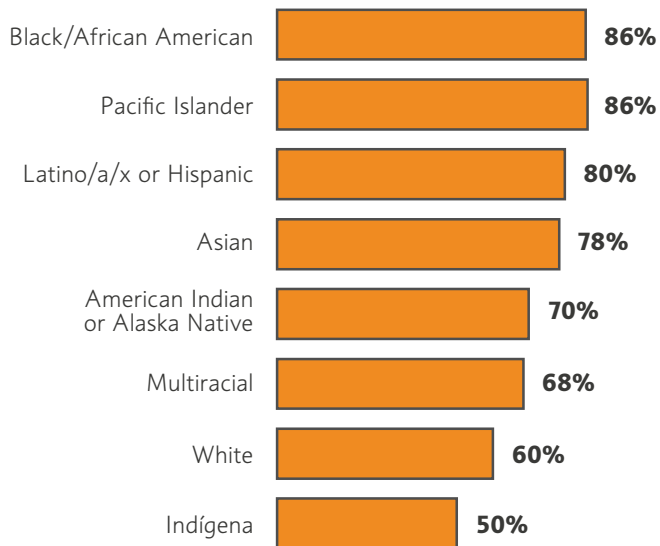


Child participating in SF Recreation & Parks Department activity

STRUCTURAL CHANGES AFFECTING WATER CONSUMPTION AND SDDT EFFECTIVENESS

As part of the FY 2022–23 SDDT participant survey (see Overview), respondents were asked about their water consumption behaviors. **Since participating in an SDDT-funded program, 81% of all participants now drink water more often. The percentage of SDDT program participants drinking more water is especially high among Black, Latinx, and Pacific Islander community members** (see chart below). These results suggest that SDDT-funded entities have been effective in reaching BIPOC community members and encouraging them to adopt healthy behaviors, including drinking more water.

Increased Water Consumption Since Participating in SDDT



Concerns related to tap water consumption

Despite the increase in water consumption among Black, Latinx, and Pacific Islander participants of SDDT programming, there are ongoing concerns about the perceived safety of tap water, especially tap water delivered to public housing. These concerns are a nationwide trend and they partially originate from the well-publicized stories of contaminated water in public water systems as a result of structural racism and inequities in public investments. Peer-reviewed research using data from the Centers for Disease Control and Prevention has found persistent disparities in tap water consumption by race/ethnicity that have grown since the Flint Water Crisis that started in 2014.²³

23. Rosinger AY, Patel AI, Weaks F. Examining recent trends in the racial disparity gap in tap water consumption: NHANES 2011-2018. *Public Health Nutr.* 2022 Feb;25(2):207-213. doi: 10.1017/S1368980021002603. Epub 2021 Jun 11. PMID: 34114536; PMCID: PMC8664888.

During FY 2022-23, CARECEN conducted focus groups with Spanish-speaking Latinx residents and gathered their perspectives on tap water consumption. One participant shared the following:

“ One of the concerns is that, for example, many buildings or houses... the pipes are very old and that they may contain lead... I work in different parts of the city and there are places where the taste is horrible... or [the water looks] dirty... that’s what worries me. Why would I drink tap water if I see that when I wash the dishes it’s coming out yellow?”

SFUSD Wellness Policy has Promoted Healthy Behaviors on School Campuses

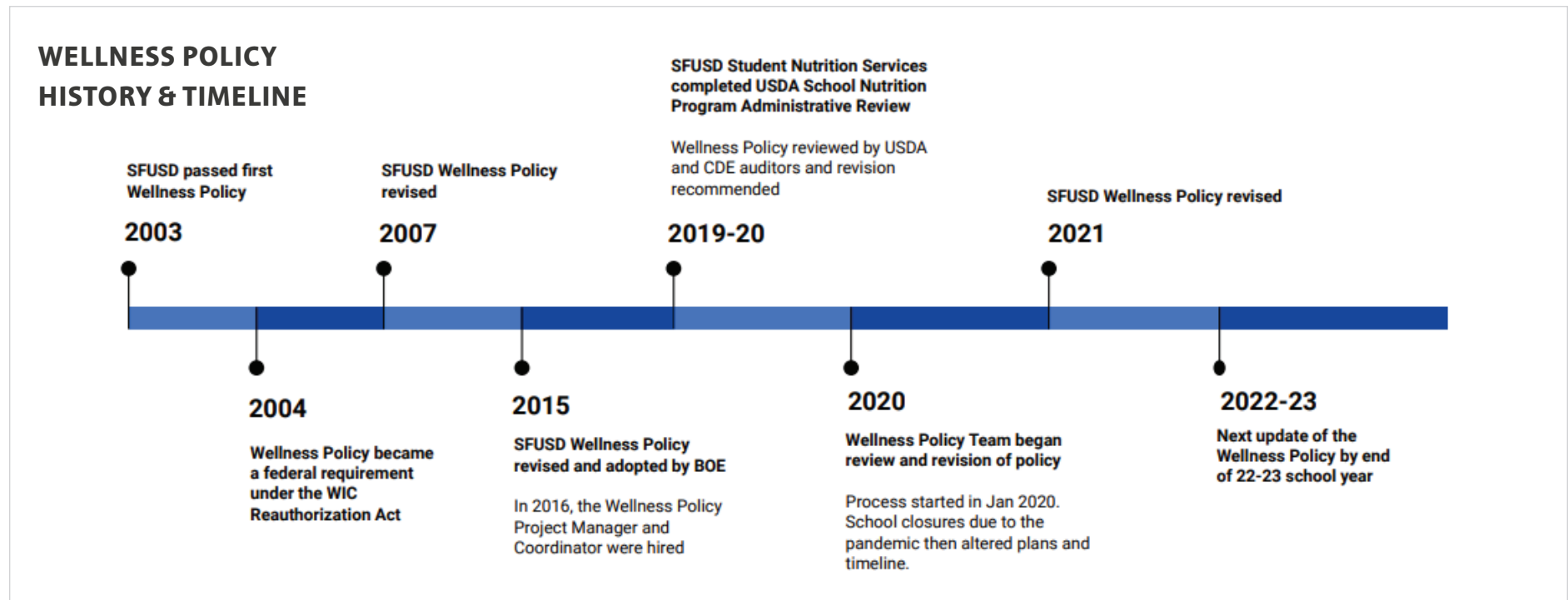
Twenty years ago, SFUSD adopted a district wellness policy to promote an environment that makes the healthy choice the easy and most desirable choice for all students, staff, and families. The policy includes nutritional guidelines for foods in classroom celebrations and fundraisers, goals for nutrition education and physical activity, and guidance to staff on modeling healthy behaviors. In FY 2022-23, SFUSD administered the Health Education Accountability Tool (HEAT) to survey staff on wellness practices, modeling wellness for students, and adherence to policy. SDDT's ongoing funding in SFUSD's implementation of the wellness policy is contributing to a cultural shift among students, staff, and families.

100% of SFUSD teachers provided at least 1 unit on nutrition and physical activity

95% of teachers provided a lesson on healthy hydration

96% of respondents indicated they drink water in front of students to encourage hydration

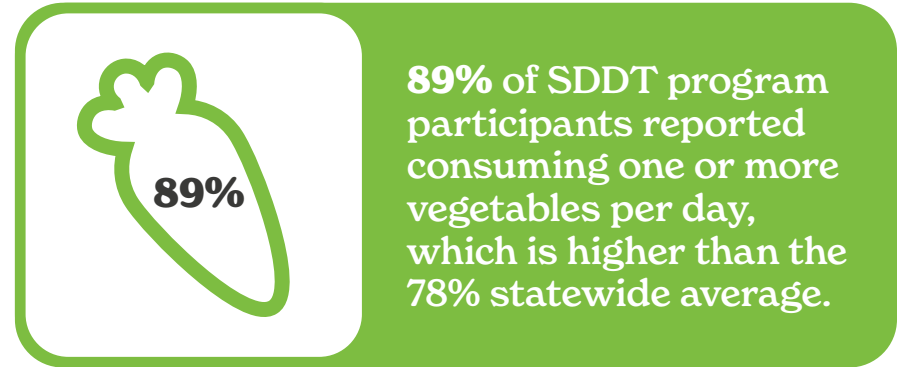
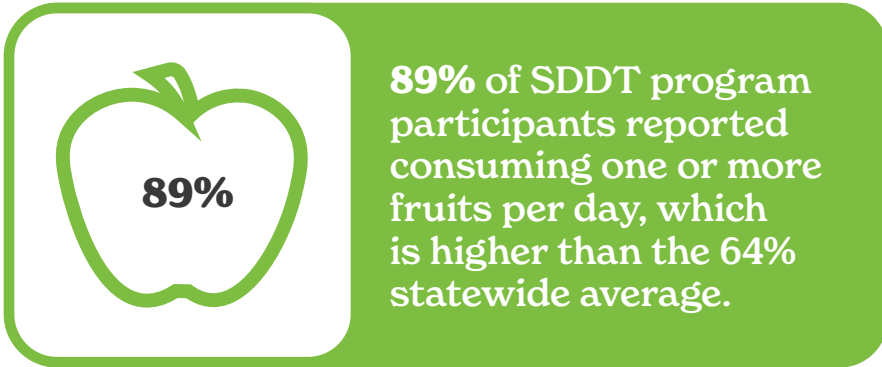
80% do not drink soda in front of students



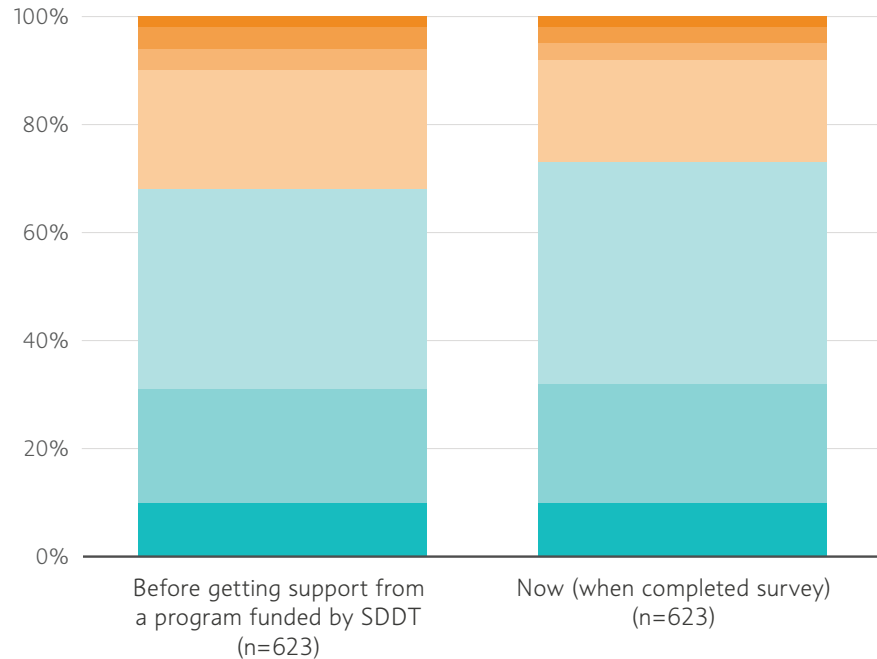
Source: SFUSD

SDDT IS SEEDING A CULTURE CHANGE AROUND FRUIT AND VEGETABLE CONSUMPTION

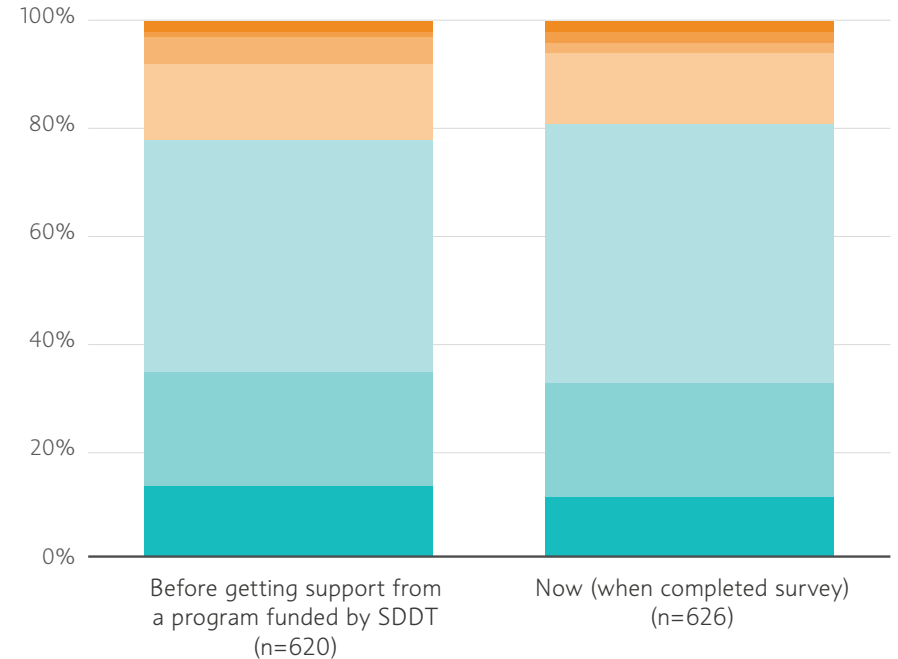
As shown by the charts below, SDDT program participants report a slight increase in fruit and vegetable consumption since participating in SDDT-funded programs. Although the increase is small, SDDT program participants' fruit and vegetable consumption is significantly higher than a representative sample of California residents as of 2021, based on a survey conducted by the Centers for Disease Control and Prevention.



Times a Day Respondents Reported Eating Fruit (Fresh, Frozen, or Canned, but Excluding Fruit Juice) in a Typical Week



Times a Day Respondents Reported Eating Vegetables (Fresh, Frozen, Canned, or Cooked) in a Typical Week



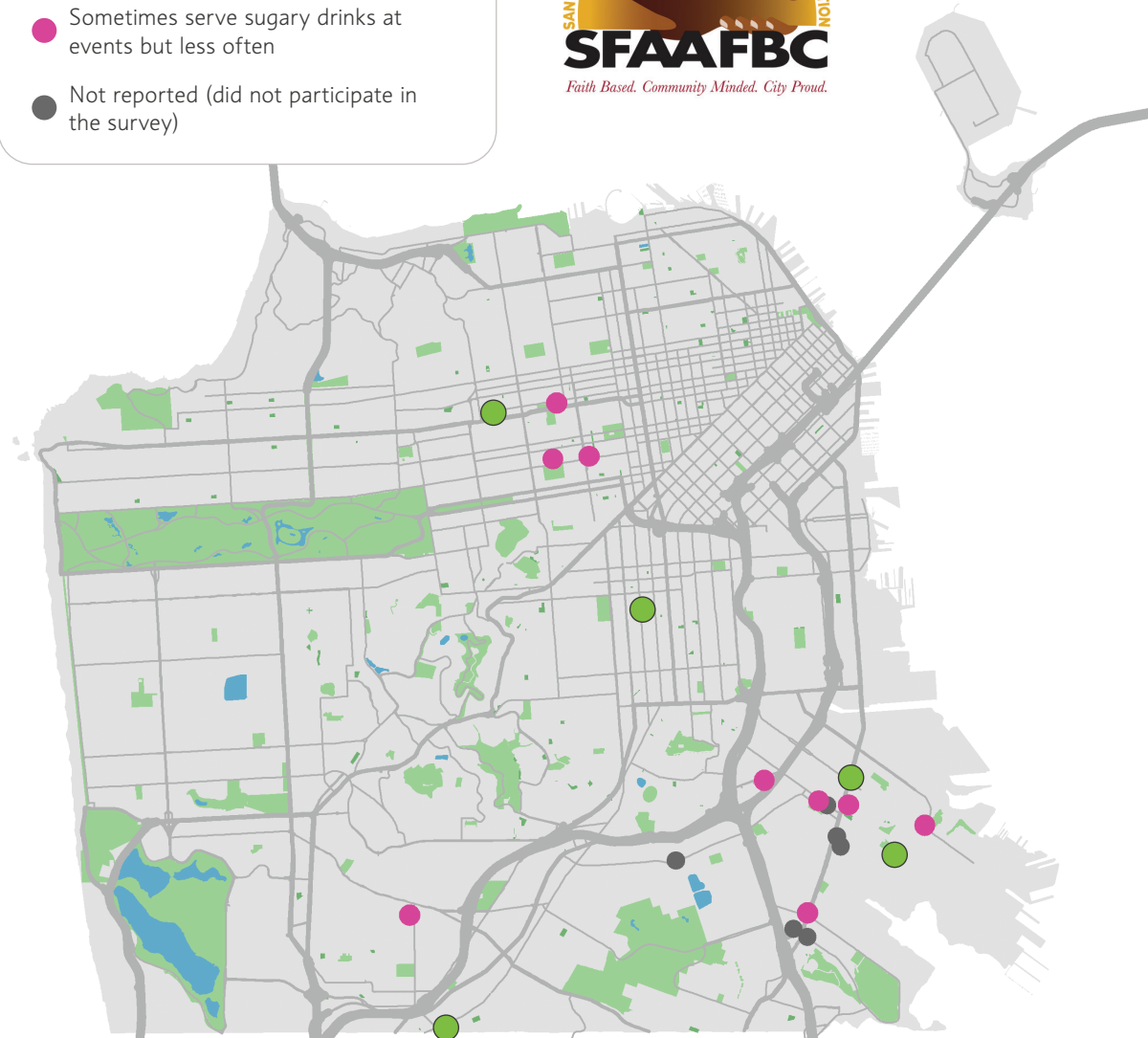
● Not at all/never ● Once a week ● Once every 2 or 3 days ● Once each day ● 2 times/day ● 3-4 times/day ● 5 or more times/day

THE SAN FRANCISCO AFRICAN AMERICAN FAITH-BASED COALITION HAS CHANGED CULTURAL NORMS BY ENCOURAGING PEOPLE TO DRINK WATER INSTEAD OF SUGAR-SWEETENED BEVERAGES

The San Francisco African American Faith-Based Coalition (SFAAFBC) works to eliminate health inequities in communities of color by conducting outreach in San Francisco's Black and African American congregations. Through ongoing SDDT funding from 2019 to 2023, SFAAFBC has been successful in catalyzing a culture shift among congregations' distribution of water and limitations on sugar-sweetened beverages. Of the 21 member congregations, 14 participated in a survey to quantify this cultural shift. Since participating in SDDT, **14 congregations no longer serve sugary drinks or serve them less often than they used to at events that they organize.** This change in sugary drink norms and practices is significant, because these congregations have a large reach throughout the community. Since these congregations are mostly located in the Bayview-Hunters Point and Fillmore District neighborhoods, these changes to church norms around consuming sugary drinks less often is impacting the people most targeted by the sugar-sweetened beverage industry.

SFAAFBC Congregations (n=21)

- No longer serve sugary drinks at events
- Sometimes serve sugary drinks at events but less often
- Not reported (did not participate in the survey)



Every year, the 14 SFAAFBC congregations that now serve sugary drinks less (or not at all) engage:

6,100
registered
members
of those
congregations

+

11,100
other community
members served
through food drives
and other services

9 congregations now serve water at all events

- Grace Tabernacle Community Church
- New Providence Baptist Church
- Providence Baptist Church of San Francisco
- San Francisco Christian Center
- St. Andrew Missionary Baptist Church of San Francisco
- St. John Missionary Baptist Church
- St. Mark Institutional Missionary Baptist Church
- Baptist Church
- St. Paul Tabernacle Baptist Church
- Withoutwalls International Ministries

9 congregations sometimes serve sugary drinks at events but now do so less often

- Calvary Hill Community Church
- Cornerstone Missionary Baptist Church
- Jones Memorial United Methodist Church
- New Providence Baptist Church
- Our Lady of Lourdes and All Hallows Catholic Community
- Providence Baptist Church of San Francisco
- St. Paul Tabernacle Baptist Church
- Third Baptist Church of San Francisco
- Withoutwalls International Ministries

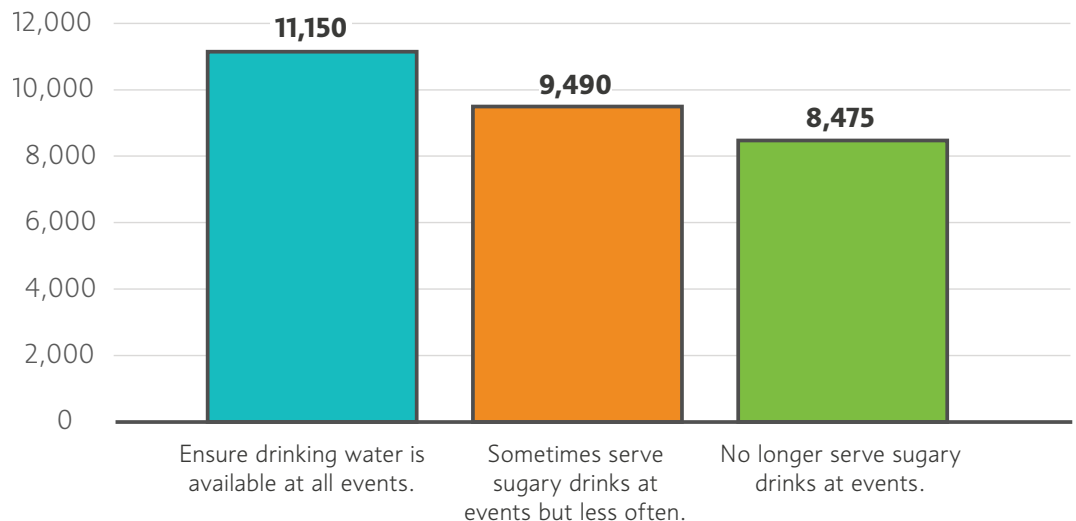
5 congregations no longer serve sugary drinks at events

- Grace Tabernacle Community Church
- San Francisco Christian Center
- St. Andrew Missionary Baptist Church of San Francisco
- St. John Missionary Baptist Church
- St. Mark Institutional Missionary Baptist Church

“The shift has happened. Pastors have been very intentional about wanting water... making sure there’s enough water for church-related events and for community events... It’s been a very clean, distinct, and unquestionable shift that there’s an awareness now [about promoting water consumption].”

-Dr. Joseph Bryant, Jr.

People Impacted Each Year by SFAAFC Congregations' Actions



SDDT-Funded Sugar & Decoloniality Series is Shifting Cultural Awareness of the Sugar Industry's Historical and Ongoing Exploitation of BIPOC Communities

During one full-day workshop and a series of four shorter sessions, participants learned about sugar production, sugar addiction and its colonial roots, and discussed why decolonizing sugar matters and ways to undo the impacts of coloniality on communities experiencing the greatest health disparities (including through policies and systems level strategies and by re-centering those communities). Learn more at shapeupscoalition.org/sugar-decoloniality and shapeupscoalition.org/decoloniality.



SFDPH Sugar Decoloniality series workshop



SFDPH Sugar Decoloniality series workshop

“ [What I liked best about the series was] the speaker’s ability to weave together the history of sugar, colonization, anti-blackness and fatphobia, to show what a central role sugar plays in our lives, and offer approaches to reassess our relationships with sugar.”

“ As a public health nurse working with pregnant people and babies, I will definitely do my best to integrate the new perspectives and ideas I learned today- with the goal to help my moms create healthy mind and body practices and heal generational traumas.”

Children's Oral Health Task Forces are Addressing Oral Health Inequities

The Childrens' Oral Health Task Forces are community health collaboratives that increase access to dental and oral healthcare, provide culturally and linguistically responsive oral health education, and partner with other oral health stakeholders through the CavityFree SF initiative.

During FY 2022-23, SDDT supported task forces in the Chinatown and Mission neighborhoods, which have some of the poorest children's oral health outcomes in San Francisco. As the primary funder of the task forces, SDDT plays a critical role in addressing oral health inequities in the city.



University of the Pacific dental students conduct oral health screenings in partnership with the Mission Children's Oral Health Taskforce

- **Mission Childrens' Oral Health Task Force**

- » CARECEN (lead agency)
- » University of the Pacific
- » Mission Neighborhood Center
- » Mission Neighborhood Health Center
- » SFUSD - Moscone Parent Liaison & School Nurse / Dolores Huerta Parent Liaison
- » Native American Health Center
- » San Francisco Public Library (Mission Branch)
- » Medi-Cal Outreach Team
- » Magic ToothBus

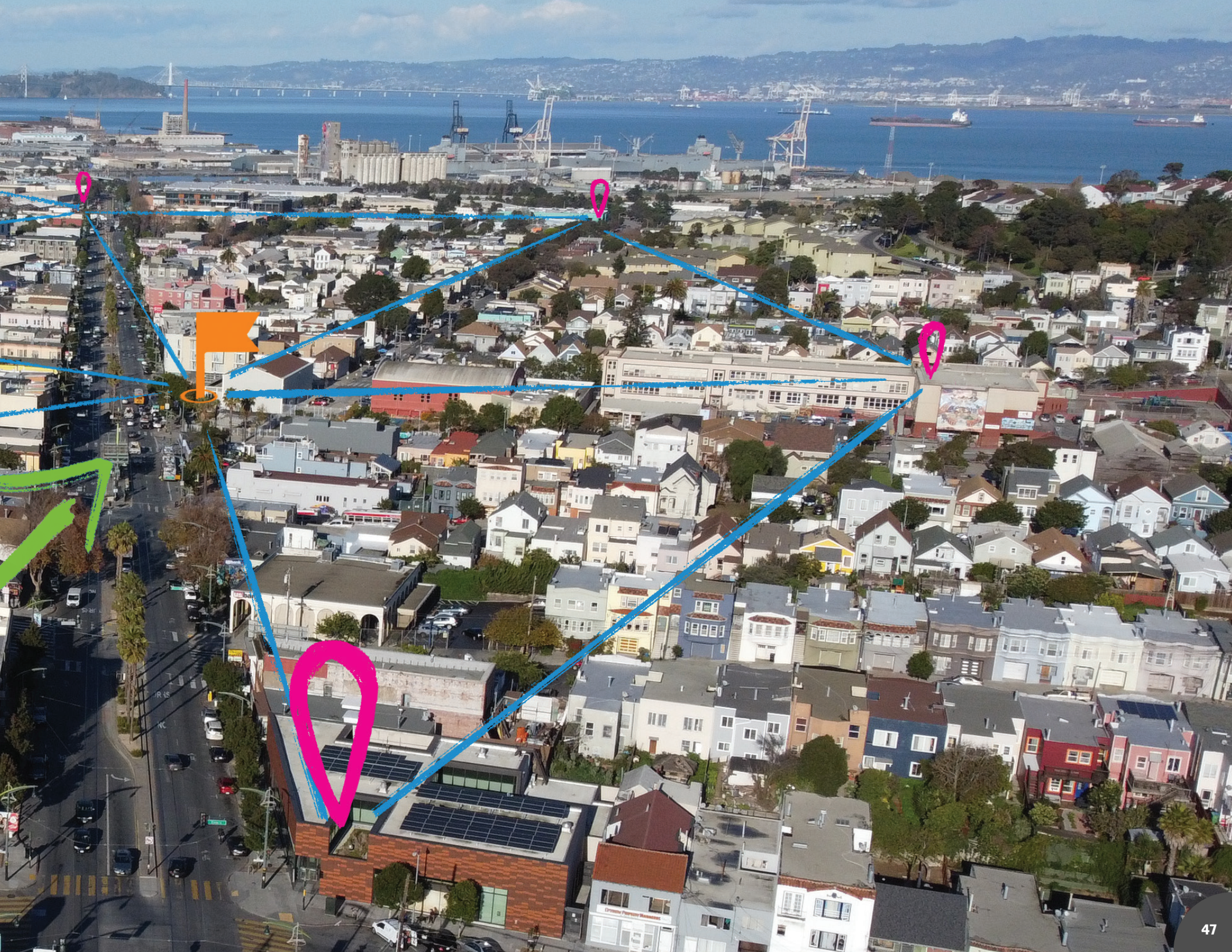
- **Chinatown Task Force on Children's Oral Health**

- » NICOS Chinese Health Coalition (lead agency)
- » APA Family Support Services
- » Asian Health Caucus
- » Asian Women Resource Center
- » Cameron House
- » Chinatown Public Health Center
- » Chinese Student Pharmacist Association
- » Community Youth Center
- » Kai Ming Head Start
- » Kaiser Permanente
- » Magic ToothBus
- » North East Medical Services
- » SFUSD - Gordon J. Lau Elementary School
- » UCSF School of Dentistry
- » University of the Pacific, Arthur A. Dugoni School of Dentistry
- » Wu Yee Children's Services



Finding 4

SDDT investments have increased economic opportunities and strengthened resident leadership within communities most burdened by inequities.



SDDT FUNDS ARE SUPPORTING SMALL BUSINESSES AND LOCAL FARMERS, WHO ARE MOSTLY BIPOC

In addition to helping low-income residents access fresh produce and stretch their household budgets (see page 30), the Healthy Food Purchasing Supplement (HFPS) grantees make a significant contribution to the local economy, especially for small and BIPOC-owned businesses. These grants also have an impressive return on investment: a recent economic analysis found every \$1 dollar invested in Vouchers4Veggies programs leads to an additional \$3 in economic activity to the local economy.²⁴

Although the amount of funding sources other than SDDT (primarily the General Fund) has varied each fiscal year, SDDT has been a consistent source for funding for the HFPS grants (see page 31). Between fiscal years 2019-20 and 2022-23, SDDT has funded 77% of HFPS grants.

Since FY 2019-20, HFPS grants have enabled low-income San Franciscans to purchase \$5.4 million of fresh fruits and vegetables from San Francisco stores and vendors. An impressive 78% has directly supported local small and primarily BIPOC-owned corner stores and BIPOC farmers: \$4,255,593 in 4 years!

78%

of San Francisco's Healthy Food Purchasing Supplements have been used to buy produce from primarily BIPOC-owned corner stores and BIPOC farmers at farmers' markets

24. Thilmany, D., Bauman, A., Love, E., & Jablonski, B. (2021). "The Economic Contributions of Healthy Food Incentives". Retrieved from: https://marketmatch.org/wpcontent/uploads/2021/02/Economic_Contributions_Incentives.pdf.



Healthy cooking demonstration at the SDDT 5-Year Celebration



Vouchers



Market Match



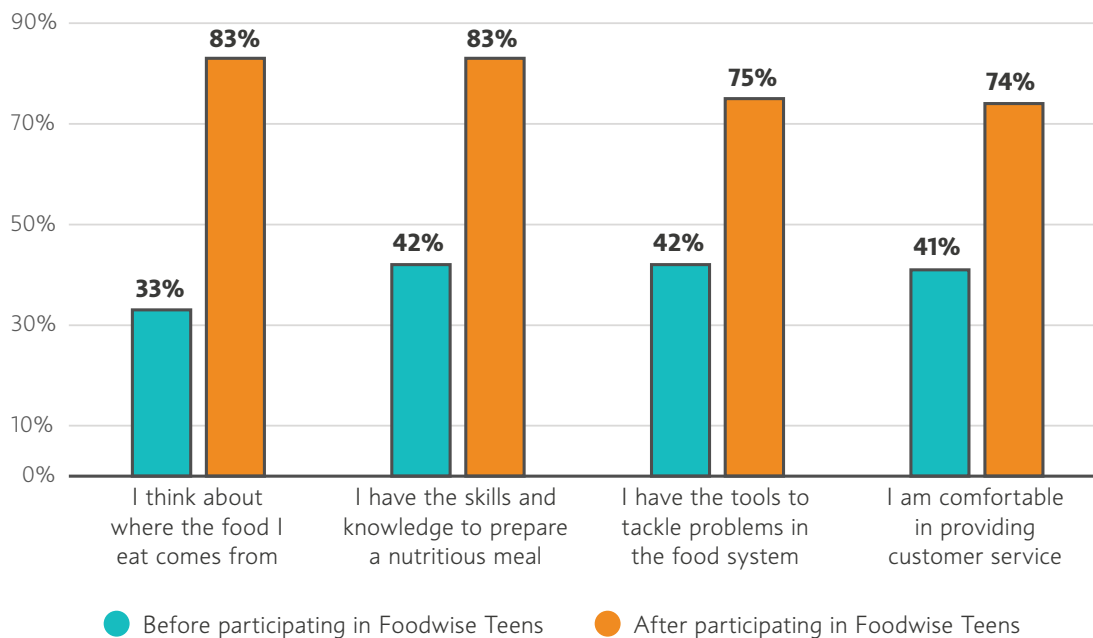
Increased Economic Stability

SDDT INVESTMENTS ARE DEVELOPING YOUTH LEADERS TO POSITIVELY INFLUENCE THE LOCAL FOOD SYSTEMS

Foodwise Teens is a paid youth development program where high school students are trained to be leaders that advocate for a sustainable, equitable, and nourishing food system. For the past few years, SDDT funds to SFUSD have paid for stipends so that students can participate in the Foodwise Teens program.

During FY 2022-23, SDDT funding supported up to 90 high school students from three SFUSD partner schools: John O’Connell High School, Mission High School, and The Academy – San Francisco @ McAteer. Students received a \$550 stipend per semester for completing the program.

The Foodwise Teens program has been highly successful in shifting youth attitudes toward food and food systems. The chart below highlights the results of a survey that was conducted of participants at the beginning and end of the program. These results demonstrate that Foodwise Teens has provided youth, mostly low-income and BIPOC, with the skills and knowledge necessary to understand food systems and advocate for themselves and their communities.



Participants cooking food at a farmers market

82% of participants in the Foodwise Teens program identified as BIPOC in FY 2022-23.

“It was helpful to me to learn about where my food comes from and spread awareness on it...I also learned more about resources to help low income families, like myself, to shop at the ferry plaza farmers market. This not only helps me save money, but to have the access to buy healthy produce and food.”

VideoVoice

VideoVoice is a participatory approach to storytelling that combines words and images. San Francisco Department of Public Health Sugary Drinks Distributor Tax (SF SDDT) Evaluation Team invited four organizations that received an SDDT Healthy Communities grant to participate in the project. This report highlights two of these organizations. VideoVoice explores the effects of programs and services funded by SDDT on participants.

COMMUNITY GROWS, BEETS PROGRAM

The Band of Environmentally Educated and Employable Teens (BEETs) is a paid high school internship for youth of color to gain job skills, learn about environmental justice, and practice land stewardship.

Based at Koshland Community Park and Learning Garden, the program provides highschool students with a variety of educational workshops on topics including herbalism, cooking, and land stewardship as well as leadership topics including community organizing and power mapping.



Sincere Jones, Community Grows BEETS program participant

“BEETS has affected me in such a drastic way to the point that I thought that I would never see myself in the position that I am in right now.”

“I love it here! The community here makes my heart warm so so much. I have never been happier. If schools sucks for the day, I come to the garden and I feel better. If home sucks for the day, I come to the garden and I feel better.”

“I’ve learned a lot of plant names...I didn’t know how to cook. As a low-income African American male, I don’t cook at home; barely at all. Everything is store bought, frozen, or take out. But when I came to BEETS for the first time to cook, it was magical for me. Woah, I just made something and it tastes so good.”

FARMING HOPE

Farming Hope manages a paid culinary job training/apprenticeship program for community members who are overcoming obstacles such as former incarceration or homelessness. They also provide and connect apprentices with an ecosystem of support services and partners. The Farming Hope kitchen (Refettorio) produces thousands of meals every year for food insecure neighbors and also hosts inclusive community events as well as professional and life skills courses.

Devon Jordan-McFeely, Refettorio Cook and Trainer



“ I was fresh out of prison. I really didn't have any opportunities available to me, so I reached out to Farming Hope and they gave me a shot, which actually changed my life.”

“ The most important part of the work that we do is giving a second chance to formerly incarcerated individuals. Getting out, starting over, looking for work, looking for opportunities is hard. For Farming Hope to give us opportunities, it's big and life-changing.”

“ Getting out myself. It's hard not to be hard on yourself and think that your past is always going to follow you and define the person you are. Getting out and getting this second chance; your past doesn't have to define you.”

Watch the full videos at www.sodatax-sf.org/data-overview/#videovoice or scan the code below.



Recommendations



Community member using EatSF Vouchers4Veggies to buy produce at a farmers market

“ Keeping toxic drinks cheap isn’t doing poor people any favors.”

-Roberto Ariel Vargas, MPH
Associate Director, Center for Community
Engagement, UCSF

- 1. Continue to encourage San Franciscans to drink tap water (especially among populations that are reticent about the safety of tap water).** As evidenced by the SDDT participant survey and the congregation survey of the San Francisco African American Faith-Based Coalition, SDDT-funded entities have made progress in encouraging community members to increase their consumption of water though there are still reported concerns with the safety of drinking tap water. To ensure that all San Franciscans feel safe making the healthy choice, environmental and systems changes (e.g., hydration stations, and institutional policies and practices around serving drinking water) should be supported with culturally responsive health promotion about water and SSB consumption.
- 2. Continue to increase awareness about the negative impacts of sugary drinks and to reduce SSB consumption, especially among priority populations.** Based on the results of the SDDT participant survey, regular soda and sweetened coffee/tea have the highest levels of daily consumption among SSB types and, therefore, SDDT should invest in greater levels of education on the health harms of excessive consumption of these types of SSBs and the beverage industry’s continued financial exploitation of BIPOC communities. All SDDT-funded programs and interventions should include information about the health harms of SSBs in interactions with community members.
- 3. Ensure SDDT funding promotes policies and structural changes that encourage active lifestyles and physical activity.** Since physical activity is a protective factor against diet-sensitive chronic disease and is one of the SDDTAC’s outcomes, investment in physical activity and active lifestyles should continue to be promoted in SDDT-funded programs and services.
- 4. Continue to support efforts to reduce health inequities in oral health outcomes.** Neighborhoods targeted by the beverage industry are also the neighborhoods with the highest rates of cavities in the city. Expanding programs that provide culturally and linguistically responsive oral health education and expand access to oral healthcare will help to reduce those inequities.

5. **Support residents from priority populations with economic and leadership opportunities.** Increasing job training and economic opportunities is critical to developing resident leaders and strengthening overall community capacity given the many structural inequities they experience in securing jobs and accessing decision-makers and government systems.
6. **Support SDDT-funded entities to increase their capacity to collect demographic participant data.** While SDDT-funded entities have improved their ability to collect demographic data of program participants, there is still room for continued improvement. Demographic data is critical to understand who is participating in SDDT-funded programming and services, which allows the evaluation to assess SDDT's reach in advancing health equity.
7. **Continue to support SDDT evaluation efforts.** The multi-year investment in evaluation has helped the SDDTAC demonstrate SDDT's impact in addressing health inequities and make data-driven recommendations. To ensure SDDT funding is informed by data and evidence, it is important to continue evaluating SDDT-funded programs and structural interventions
8. **Encourage the use of braided funding to leverage SDDT funds for greater impact.** There is a need to proactively seek and strengthen partnerships with other federal, state, and philanthropic organizations to support evidence-based interventions, structural and systems changes, and innovative programs aligned with the outcomes of SDDT funding. These funding partnerships will help to ensure fiscal sustainability of SDDT-funded programs (e.g., Healthy Retail, RPD, COHTF) and to ensure the consistent implementation of health and wellness efforts across and within SFUSD.
9. **Ensure the SDDT Advisory Committee (SDDTAC) exists beyond the current 2028 end-date.** The SDDTAC is made up of key leaders and community members that represent priority populations and who ensure that SDDT funding is equity-focused and responsive to emerging community needs.
10. **Share best practices, lessons learned, and evaluation findings from the San Francisco SDDT with other cities to highlight how local sugary drinks taxes can support health equity.** To support health equity and counter the negative health impacts of consuming sugary beverages, SFDPH and SDDTAC partners should share best practices, lessons learned, and evaluation findings related to the San Francisco SDDT (for example, by participating in regional and statewide coalitions, by presenting at public health conferences).

Danza Azteca Xitlalli de San Francisco at SDDT 5-Year Celebration



San Francisco Sugary Drinks Distributor Tax (SDDT)

EVALUATION REPORT 2022-2023



PREPARED BY:
 raimi+ associates

SodaTax-SF.org | sf.gov/sddtac

Appendix D

ARTICLE 8: Sugary Drinks Distributor Tax Ordinance (San Francisco Business and Tax Regulations Code)



[Print](#)

San Francisco Business and Tax Regulations Code

ARTICLE 8:

SUGARY DRINKS DISTRIBUTOR TAX ORDINANCE

Sec. 550.	Short Title.
Sec. 551.	Findings and Purpose.
Sec. 552.	Definitions.
Sec. 553.	Imposition of Tax; Deposit of Proceeds.
Sec. 554.	Registration of Distributors; Documentation; Administration.
Sec. 555.	Credits and Refunds.
Sec. 556.	Technical Assistance to the Tax Collector.
Sec. 557.	Municipal Affair.
Sec. 558.	Not a Sales and Use Tax.
Sec. 559.	Severability.
Sec. 560.	Amendment.

SEC. 550. SHORT TITLE.

This Article shall be known as the “Sugary Drinks Distributor Tax Ordinance.”

(Added by Proposition V, 11/8/2016)

SEC. 551. FINDINGS AND PURPOSE.

The U.S. Department of Health and Human Services, the U.S. Department of Agriculture, and the World Health Organization, based on a summary of the available evidence linking intake of added sugar and sugar-sweetened beverages (SSBs) to adverse health outcomes including obesity and diabetes, have recommended that Americans consume no more than 10% of their daily calories in the form of added sugar. Yet, standard single serving sizes of SSBs provide all (in a 20-ounce serving of many SSBs) or nearly all (in a 12-ounce serving) of the recommended maximum daily added sugar amount for most adults, and generally exceed the recommended maximum daily added sugar amount for children.

Numerous organizations and agencies, including the American Heart Association, American Diabetes Association, American Academy of Pediatrics, Institute of Medicine of the National Academies, American Medical Association, and the Centers for Disease Control, recommend limiting intake of added sugar and SSBs to improve health. Sugary beverages, though they can contain hundreds of calories in a serving, do not signal “fullness” to the brain and thus facilitate over-consumption.

Studies show that sugary beverages flood the liver with high amounts of sugar in a short amount of time, and that this “sugar rush” over time leads to fat deposits and metabolic disturbances that cause diabetes, cardiovascular disease, and other serious health problems. Diseases connected to sugary beverages disproportionately impact minorities and low-income communities. For example, diabetes hospitalizations are more than triple in low-income communities as compared with higher income areas. African American death rates from DM2 are five times higher than San Francisco’s overall rate. DM2 is the fifth leading

cause of death in SF (which is an underestimate, since heart disease, the leading killer, is often a result of DM2); DM2 reduces the lifespan of San Franciscans by eight to ten years.

As recently as 2010, nearly a third of children and adolescents in San Francisco were obese or overweight; and in San Francisco, 46.4% of adults are obese or overweight, including 61.7% of Hispanics and 51.3% of African Americans. Nationally, childhood obesity has more than doubled in children and tripled in adolescents in the past 30 years; in 2010, more than one-third of children and adolescents were overweight or obese. Every additional sugary beverage consumed daily can increase a child's risk for obesity by 60%; and one or two sugary beverages per day increases the risk of Type II diabetes by 26%.

Sugary beverages, including sweetened alcoholic drinks, represent nearly 50% of added sugar in the American diet, and, on average, 11% of daily calories consumed by children in the U.S.

Seven percent of San Franciscans are diagnosed with diabetes, and it is estimated that the City and County of San Francisco pays over \$87 million for direct and indirect diabetes care costs.

This Article 8 is intended to discourage the distribution and consumption of sugar-sweetened beverages in San Francisco by taxing their distribution. Mexico, where an average of 163 liters of sugar-sweetened beverages are consumed per person each year, enacted an excise tax on sugary drinks, with the result that the purchase of taxed sugar sweetened beverages declined by 12% generally and by 17% among low-income Mexicans. The Mexico data indicate that, when people cut back on SSBs, to a significant extent they choose lower-caloric or non-caloric alternatives. This body of research demonstrates that taxation can provide a powerful incentive for individuals to reduce their consumption of SSBs, which in turn will reduce obesity and DM2.

The City of Berkeley became the first city in the United States to follow in Mexico's footsteps, by passing a one-cent-per-ounce general tax on distributors of SSBs within the city limits. It is estimated that the City of Berkeley, which began implementing the tax in March 2015, will collect at least \$1.2 million from the tax annually.

(Added by Proposition V, 11/8/2016)

SEC. 552. DEFINITIONS.

Unless otherwise defined in this Article 8, terms that are defined in Article 6 of the Business and Tax Regulations Code shall have the meanings provided therein. For purposes of this Article, the following definitions shall apply.

“Beverage for Medical Use” means a beverage suitable for human consumption and manufactured for use as an oral nutritional therapy for persons who cannot absorb or metabolize dietary nutrients from food or beverages, or for use as an oral rehydration electrolyte solution formulated to prevent or treat dehydration due to illness. “Beverage for Medical Use” also means a “medical food” as defined in Section 109971 of the California Health and Safety Code. “Beverage for Medical Use” shall not include beverages commonly referred to as “sports drinks,” or any other similar names.

“Bottle” means any closed or sealed container regardless of size or shape, including, without limitation, those made of glass, metal, paper, plastic, or any other material or combination of materials.

“Bottled Sugar-Sweetened Beverage” means any Sugar-Sweetened Beverage contained in a Bottle that is ready for consumption without further processing, such as, and without limitation, dilution or carbonation.

“Caloric Sweetener” means any substance or combination of substances that is suitable for human consumption, that humans perceive as sweet, and that adds calories to the diet of any human who consumes it. “Caloric Sweetener” includes, but is not limited to, sucrose, fructose, glucose, other sugars, and high fructose corn syrup.

“City” means the City and County of San Francisco.

“Distribution” includes:

(a) The transfer in the City, for consideration, of physical possession of Sugar- Sweetened Beverages, Syrup, or Powder by any person other than a common carrier. “Distribution” also includes the transfer of physical possession in the City by any person other than a common carrier, without consideration, for promotional or any other commercial purpose.

(b) The possession, storage, ownership, or control in the City, by any person other than a common carrier, of Sugar-Sweetened Beverages, Syrup, or Powder for resale in the ordinary course of business, obtained by means of a transfer of physical possession outside the City or from a common carrier in the City.

“Distribution” does not include:

(a) The return of any Sugar-Sweetened Beverages, Syrup, or Powder to a person, if that person refunds the entire amount paid in cash or credit.

(b) A retail sale or use.

“Distributor” means any person engaged in the business of Distribution of Bottled Sugar- Sweetened Beverages, Syrup, or Powder. A Distributor does not include a common carrier. Where a common carrier obtains physical possession of Sugar-Sweetened Beverages, Syrup, or Powder outside the City and transfers physical possession of the Sugar-Sweetened Beverages, Syrup, or Powder in the City, the transferee of the Sugar-Sweetened Beverages, Syrup, or Powder is a Distributor.

“Milk Product” means: (a) any beverage whose principal ingredient by weight is natural liquid milk secreted by an animal. “Milk” includes natural milk concentrate and dehydrated natural milk, whether or not reconstituted; and (b) any plant-based substance or combination of substances in which (1) water and (2) grains, nuts, legumes, or seeds constitute the two greatest ingredients by volume. For purposes of this definition, “Milk Product” includes, but is not limited to, soy milk, almond milk, rice milk, coconut milk, hemp milk, oat milk, hazelnut milk, or flax milk;

“Natural Fruit Juice” means the original liquid resulting from the pressing of fruit, the liquid resulting from the complete reconstitution of natural fruit juice concentrate, or the liquid resulting from the complete restoration of water to dehydrated natural fruit juice.

“Natural Vegetable Juice” means the original liquid resulting from the pressing of vegetables, the liquid resulting from the complete reconstitution of natural vegetable juice concentrate, or the liquid resulting from the complete restoration of water to dehydrated natural vegetable juice.

“Nonalcoholic Beverage” means any beverage that is not subject to tax under California Revenue and Taxation Code sections 32001 *et seq.* as “beer, wine or distilled spirits.”

“Powder” means any solid mixture, containing one or more Caloric Sweeteners as an ingredient, intended to be used in making, mixing, or compounding a Sugar-Sweetened Beverage by combining the Powder with one or more other ingredients.

“Sugar-Sweetened Beverage” means any Nonalcoholic Beverage intended for human consumption that contains added Caloric Sweetener and contains more than 25 calories per 12 fluid ounces of beverage, including but not limited to all drinks and beverages commonly referred to as “soda,” “pop,” “cola,” “soft drinks,” “sports drinks,” “energy drinks,” “sweetened ice teas,” or any other similar names. “Sugar-Sweetened Beverage” does not include:

(a) Any beverage sold for consumption by infants, which is commonly referred to as “infant formula” or “baby formula,” or any product whose purpose is infant rehydration.

(b) Any Beverage for Medical Use.

(c) Any beverage designed as supplemental, meal replacement, or sole-source nutrition that includes proteins, carbohydrates, and multiple vitamins and minerals (this exclusion does not include beverages commonly referred to as “sports drinks,” or any other similar names, which are defined as Sugar-Sweetened Beverages).

(d) Any Milk Product.

(e) Any beverage that contains solely 100% Natural Fruit Juice, Natural Vegetable Juice, or combined Natural Fruit Juice and Natural Vegetable Juice.

“Sugary Drinks Distributor Tax” or “Tax” means the general excise tax imposed under Section 553.

“Syrup” means any liquid mixture, containing one or more Caloric Sweeteners as an ingredient, intended to be used, or actually used, in making, mixing, or compounding a Sugar-Sweetened Beverage by combining the Syrup with one or more other ingredients.

(Added by Proposition V, 11/8/2016)

SEC. 553. IMPOSITION OF TAX; DEPOSIT OF PROCEEDS.

(a) Effective January 1, 2018, for the privilege of engaging in the business of making an initial Distribution within the City of a Bottled Sugar-Sweetened Beverage, Syrup, or Powder, the City imposes a Sugary Drinks Distributor Tax, which shall be a general excise tax, on the Distributor making the initial Distribution of a Bottled Sugar-Sweetened Beverage, Syrup, or Powder in the City.

(b) The Tax shall be calculated as follows:

(1) One cent (\$0.01) per fluid ounce of a Bottled Sugar-Sweetened Beverage upon the initial Distribution within the City of the Bottled Sugar-Sweetened Beverage; and

(2) One cent (\$0.01) per fluid ounce of a Sugar-Sweetened Beverage that could be produced from Syrup or Powder upon the initial Distribution of Syrup or Powder. The Tax for Syrups and Powders shall be calculated using the largest volume of Sugar-Sweetened Beverage that would typically be produced by the amount of Syrup or Powder based on the manufacturer’s instructions or, if the Distributor uses the Syrup or Powder to produce a Sugar-Sweetened Beverage, the regular practice of the Distributor.

(c) The Tax is a general tax. Proceeds of the Tax are to be deposited in the General Fund.

(Added by Proposition V, 11/8/2016)

SEC. 554. REGISTRATION OF DISTRIBUTORS; DOCUMENTATION; ADMINISTRATION.

(a) Each Distributor shall register with the Tax Collector according to rules and regulations of the Tax Collector, but no earlier than 30 days after the effective date of Article 8.

(b) Each Distributor shall keep and preserve all such records as the Tax Collector may require for the purpose of ascertaining compliance with Article 8.

(c) Except as otherwise provided under Article 8, the Tax shall be administered pursuant to Article 6 of the Business and Tax Regulations Code.

(Added by Proposition V, 11/8/2016)

SEC. 555. CREDITS AND REFUNDS.

The Tax Collector shall refund or credit to a Distributor the Tax that is paid with respect to the initial Distribution of a Bottled Sugar- Sweetened Beverage, Syrup, or Powder: (a) that is shipped to a point outside the City for Distribution outside the City; or (b) on which the Tax has already been paid by another Person; or (c) that has been returned to the Person who Distributed it and for which the entire purchase price has been refunded in cash or credit.

(Added by Proposition V, 11/8/2016)

SEC. 556. TECHNICAL ASSISTANCE TO THE TAX COLLECTOR.

(a) The Department of Public Health shall provide to the Tax Collector technical assistance to identify Bottled Sugar-Sweetened Beverages, Syrups, and Powders subject to the Tax.

(b) All City Departments shall provide technical assistance to the Tax Collector to identify Distributors of Bottled Sugar-Sweetened Beverages, Syrups, and Powders.

(Added by Proposition V, 11/8/2016)

SEC. 557. MUNICIPAL AFFAIR.

The People of the City and County of San Francisco hereby declare that the taxation of the distribution of Sugar-Sweetened Beverages, Syrups and Powders, and that the public health impact of Sugar-Sweetened Beverages, separately and together constitute municipal affairs. The People of the City and County of San Francisco hereby further declare their desire for this measure to coexist with any similar tax adopted at the local or state levels.

(Added by Proposition V, 11/8/2016)

SEC. 558. NOT A SALES AND USE TAX.

The tax imposed by this measure is a general excise tax on the privilege of conducting business within the City and County of San Francisco. It is not a sales tax or use tax or other excise tax on the sale, consumption, or use of sugar-sweetened beverages.

(Added by Proposition V, 11/8/2016)

SEC. 559. SEVERABILITY.

If any provision of this measure, or part thereof, or the applicability of any provision or part to any person or circumstances, is for any reason held to be invalid or unconstitutional, the remaining provisions and parts shall not be affected, but shall remain in full force and effect, and to this end the provisions and parts of this measure are severable. The voters hereby declare that this measure, and each portion and part, would have been adopted irrespective of whether any one or more provisions or parts are found to be invalid or unconstitutional.

(Added by Proposition V, 11/8/2016)

SEC. 560. AMENDMENT.

The Board of Supervisors may by ordinance amend or repeal Article 8 of the Business and Tax Regulations Code without a vote of the people except as limited by Article XIIC of the California Constitution.

(Added by Proposition V, 11/8/2016)

Appendix E

ARTICLE XXXIII: Sugary Drinks Distributor Tax Advisory Committee (San Francisco Administrative Code)



[Print](#)

San Francisco Administrative Code

ARTICLE XXXIII: SUGARY DRINKS DISTRIBUTOR TAX ADVISORY COMMITTEE

- Sec. 5.33-1. Creation of Advisory Committee.
- Sec. 5.33-2. Membership.
- Sec. 5.33-3. Organization and Terms of Office.
- Sec. 5.33-4. Powers and Duties.
- Sec. 5.33-5. Meetings and Procedures.
- Sec. 5.33-6. Sunset.

SEC. 5.33-1. CREATION OF ADVISORY COMMITTEE.

There is hereby established the Sugary Drinks Distributor Tax Advisory Committee (the “Advisory Committee”) of the City and County of San Francisco.

(Added by Proposition V, 11/8/2016)

SEC. 5.33-2. MEMBERSHIP.

The Advisory Committee shall consist of the following 16 voting members.

- (a) Seats 1, 2, and 3 shall be held by representatives of nonprofit organizations that advocate for health equity in communities that are disproportionately impacted by diseases related to the consumption of Sugar-Sweetened Beverages, as defined in Business and Tax Regulations Code Section 552, appointed by the Board of Supervisors.
- (b) Seats 4 and 5 shall be held by individuals who are employed at medical institutions in San Francisco and who have experience in the diagnosis or treatment of, or in research or education about, chronic and other diseases linked to the consumption of Sugar-Sweetened Beverages, appointed by the Board of Supervisors.
- (c) Seat 6 shall be held by a person who is under 19 years old at the time of appointment and who may be a member of the Youth Commission, nominated by the Youth Commission and appointed by the Board of Supervisors. If the person is under legal voting age and unable to be an elector for that reason, the person may hold this seat, but upon reaching legal voting age, the person shall relinquish the seat unless he or she becomes an elector, in which case the person shall retain the seat.
- (d) Seat 7 shall be held by a person appointed by the Director of the Office of Economic and Workforce Development or any successor office.
- (e) Seats 8 and 9 shall be held by persons appointed by the Board of Education of the San Francisco Unified School District. If at any time the Board of Education declines to appoint a member to Seat 8 or 9 and leaves the seat vacant for 60 days or longer, the Board of Supervisors may appoint a member of the public to fill the seat until such time as the Board of Education appoints a member.

- (f) Seat 10 shall be held by an employee of the Department of Public Health who has experience or expertise in the field of chronic disease prevention or treatment, appointed by the Director of Health.
- (g) Seat 11 shall be held by a person with experience or expertise in the field of oral health, appointed by the Director of Health.
- (h) Seat 12 shall be held by a person with experience or expertise in the field of food security or access, appointed by the Director of Health.
- (i) Seat 13 shall be held by an employee of the Department of Children, Youth & Their Families, appointed by the Director of that Department.
- (j) Seat 14 shall be held by an employee of the Recreation and Park Department, appointed by the General Manager of that Department.
- (k) Seat 15 shall be held by a parent or guardian of a student enrolled in the San Francisco Unified School District at the time of appointment, nominated by the San Francisco Unified School District's Parent Advisory Council, and appointed by the Board of Supervisors. If at any time the Parent Advisory Council declines to nominate a member to a vacant seat for 60 days or longer, the Board of Supervisors may appoint a member of the public to fill the seat until the seat becomes vacant again.
- (l) Seat 16 shall be held by a person with experience or expertise in services and programs for children five and under, appointed by the Board of Supervisors.

(Added by Proposition V, 11/8/2016)

SEC. 5.33-3. ORGANIZATION AND TERMS OF OFFICE.

- (a) Members of the Advisory Committee shall serve at the pleasure of their respective appointing authorities, and may be removed by the appointing authority at any time.
- (b) Appointing authorities shall make initial appointments to the Advisory Committee by no later than September 1, 2017. The initial term for each seat on the Advisory Committee shall begin September 1, 2017 and end December 31, 2018. Thereafter, the term for each seat shall be two years. There shall be no limit on the number of terms a member may serve. A seat that is vacant on the Advisory Committee shall be filled by the appointing authority for that seat.
- (c) Members of the Advisory Committee shall receive no compensation from the City, except that the members in Seats 4, 5, 7, 10, 11, 12, 13, and 14 who are City employees may receive their respective City salaries for time spent working on the Advisory Committee.
- (d) Any member who misses three regular meetings of the Advisory Committee within any 12-month period without the express approval of the Advisory Committee at or before each missed meeting shall be deemed to have resigned from the Advisory Committee 10 days after the third unapproved absence. The Advisory Committee shall inform the appointing authority of any such resignation.
- (e) The City Administrator shall provide administrative and clerical support for the Advisory Committee, and the Controller's Office shall provide technical support and policy analysis for the Advisory Committee upon request. All City officials and agencies shall cooperate with the Advisory Committee in the performance of its functions.

(Added by Proposition V, 11/8/2016)

SEC. 5.33-4. POWERS AND DUTIES.

The general purpose of the Advisory Committee is to make recommendations to the Mayor and the Board of Supervisors on the effectiveness of the Sugary Drinks Distributor Tax in Business Tax and Regulations Code Article 8. Starting in 2018, by March 1 of each year, the Advisory Committee shall submit to the

Board of Supervisors and the Mayor a report that (a) evaluates the impact of the Sugary Drinks Distributor Tax on beverage prices, consumer purchasing behavior, and public health, and (b) makes recommendations regarding the potential establishment and/or funding of programs to reduce the consumption of Sugar-Sweetened Beverages in San Francisco. Within 10 days after the submission of the report, the City Administrator shall submit to the Board of Supervisors a proposed resolution for the Board to receive the report.

(Added by Proposition V, 11/8/2016)

SEC. 5.33-5. MEETINGS AND PROCEDURES.

(a) There shall be at least 10 days' notice of the Advisory Committee's inaugural meeting. Following the inaugural meeting, the Advisory Committee shall hold a regular meeting not less than four times each year.

(b) The Advisory Committee shall elect officers and may establish bylaws and rules for its organization and procedures.

(Added by Proposition V, 11/8/2016)

SEC. 5.33-6. SUNSET.

Unless the Board of Supervisors by ordinance extends the term of the Advisory Committee, this Article XXXIII shall expire by operation of law, and the Advisory Committee shall terminate, on December 31, 2028. In that event, after that date, the City Attorney shall cause this Article XXXIII to be removed from the Administrative Code.

(Added by Proposition V, 11/8/2016)

APPENDIX F

Sugary Drinks Distributor Tax Advisory Committee Bylaws



City and County of San Francisco



Sugary Drinks Distributor Tax Advisory

Committee Bylaws

I. Name and Membership:

In accordance with the provisions of Article XXXII of the San Francisco Administrative Code, there shall be a Sugary Drinks Distributor Tax Advisory Committee (“Committee”) composed of 16 voting members, appointed as follows:

Seats 1, 2, and 3 shall be held by representatives of nonprofit organizations that advocate for health equity in communities that are disproportionately impacted by diseases related to the consumption of Sugar-Sweetened Beverages, as defined in Business and Tax Regulations Code Section 552, appointed by the Board of Supervisors. (3 Members)

Seats 4 and 5 shall be held by individuals who are employed at medical institutions in San Francisco and who have experience in the diagnosis or treatment of, or in research or education about, chronic and other diseases linked to the consumption of Sugar- Sweetened Beverages, appointed by the Board of Supervisors. (2 Members)

Seat 6 shall be held by a person who is under 19 years old at the time of appointment and who may be a member of the Youth Commission, nominated by the Youth Commission and appointed by the Board of Supervisors. If the person is under legal voting age and unable to be an elector for that reason, the person may hold this seat, but upon reaching legal voting age, the person shall relinquish the seat unless he or she becomes an elector, in which case the person shall retain the seat. (1 Member)

Seat 7 shall be held by a person appointed by the Director of the Office of Economic and Workforce Development or any successor office. (1 Member)

Seats 8 and 9 shall be held by persons appointed by the Board of Education of the San Francisco Unified School District. If at any time the Board of Education declines to appoint a member to Seat 8 or 9 and leaves the seat vacant for 60 days or longer, the Board of Supervisors may appoint a member of the public to fill the seat until such time as the Board of Education appoints a member. (2 Members)

Seat 10 shall be held by an employee of the Department of Public Health who has experience or expertise in the field of chronic disease prevention or treatment, appointed by the Director of Health. (1 Member)

Seat 11 shall be held by a person with experience or expertise in the field of oral health, appointed by the Director of Health. (1 Member)

Seat 12 shall be held by a person with experience or expertise in the field of food security or access, appointed by the Director of Health. (1 Member)

Seat 13 shall be held by an employee of the Department of Children, Youth & Their Families, appointed by the Director of that Department. (1 Member)

Seat 14 shall be held by an employee of the Recreation and Park Department, appointed by the General Manager of that Department. (1 Member)

Seat 15 shall be held by a parent or guardian of a student enrolled in the San Francisco Unified School District at the time of appointment, nominated by the San Francisco Unified School District's Parent Advisory Council, and appointed by the Board of Supervisors. If at any time the Parent Advisory Council declines to nominate a member to a vacant seat for 60 days or longer, the Board of Supervisors may appoint a member of the public to fill the seat until the seat becomes vacant again. (1 Member)

Seat 16 shall be held by a person with experience or expertise in services and programs for children five years old and under, appointed by the Board of Supervisors. (1 Member)

II. Purpose

The purpose of the Committee is to make recommendations to the Mayor and the Board of Supervisors on the effectiveness of the Sugary Drinks Distributor Tax, as established by Article 8 of the San Francisco Business Tax and Regulations Code. Starting in 2018, by March 1 of each year, the Advisory Committee shall submit to the Board of Supervisors and the Mayor a report that (a) evaluates the impact of the Sugary Drinks Distributor Tax on beverage prices, consumer purchasing behavior, and public health, and (b) makes recommendations regarding the potential establishment and/or funding of programs to reduce the consumption of Sugar-Sweetened Beverages in San Francisco.

III. Attendance

Committee members are expected to attend each regular or special meeting of the Committee. Committee staff shall maintain a record of members' attendance.

Any member who misses three regular Committee meetings within any 12-month period without the express approval of the Advisory Committee at or before each missed meeting shall be deemed to have resigned from the Advisory Committee.

If any member cannot attend a meeting of the Committee, the member shall notify the Committee Staff in writing of the member's intent to be absent and the reason for the absence, and shall indicate whether the member seeks approval of the absence from the Advisory Committee. Such notice shall be given not less than 72-hours in advance of the meeting. Any request for approval of the absence shall be placed before the Committee at its next meeting for review and possible action.

A Committee member's absence shall be approved if the member has shown good cause for the absence. For purposes of attendance, good cause exists where the absence is due to

unforeseen circumstances, such as illness or emergency. Good cause shall not extend to planned vacations or professional or personal scheduling conflicts.

IV. Election of Officers and Terms of Offices

The Committee shall elect Co-Chairs annually in March or after adopting the annual report, whichever is later.

The election of Co-Chairs may be held at a regular or special meeting of the Committee. The Co-Chairs or any two members may call a special meeting for the election of officers, if needed, or call for such an election at a regular Committee meeting.

V. Duties of the Co-Chairs

The duties of the Co-Chairs are to:

Preside at all meetings of the Committee, and perform all other duties necessary to ensure a productive body that is engaged in all facets of the Committee's work;

Set the agenda for Committee meetings in consultation with other members and with Committee staff; and

Prior to each meeting, decide who will facilitate and lead the meeting.

VI. Committee Meetings

a. Regular Meetings

Regular Meetings of the Committee shall be open and public. The Committee shall hold its regular meetings on the third Wednesday of every month at 5 PM. Please check the meeting notice for location at www.sfdph.org/sddtac. If a recommendation is made by DPH that a Regular Meeting be canceled or changed, the Committee or the Co-Chairs may cancel the Regular Meeting or fix another time therefor. Written notice of cancellation or of a change in a Regular Meeting time must be given at least seventy-two (72) hours before the scheduled time of such Regular Meeting. The Committee must hold a minimum of 4 meetings per year.

b. Special Meetings

Special Meetings of the Committee shall be open and public. Special Meetings shall be held at such times as the Committee may determine, or may be called by the Co-Chairs at any time. Written notice of a Special Meeting must be given at least seventy-two (72) hours before the scheduled time of such Meeting. Special Meetings shall be held at the regular meeting place except that the Committee may designate an alternate meeting place provided that the notice designating the alternate meeting place is issued 15 days prior to the date of the Special Meeting.

c. Public Comment

Members of the public are entitled to comment on any matter on the calendar prior to action being taken by the Committee on that item or prior to calling the next item on the agenda. In addition, the agenda shall provide an opportunity for members of the public to address the Committee on items within the subject matter jurisdiction of the Committee and have not been the subject of public comment on other items on the agenda. Upon the

specific findings of the Committee and support thereof, the presiding Co-Chair may set a reasonable time limit for each speaker, based on such factors as the complexity and nature of the agenda item, the number of anticipated speakers for that item, and the number and anticipated duration of other agenda items. Individual Committee members and Committee staff should refrain from entering into any debates or discussion with speakers during public comment.

d. Minutes of Meetings

DPH shall maintain written minutes of Committee meetings. A draft copy of the minutes of each meeting shall be provided to each member before the next regular meeting of the Committee. Approved Committee minutes shall be made available at the San Francisco Main Library, posted on the DPH website and by email ten (10) days after the meeting approving the minutes.

VII. Subcommittees

a. Standing Subcommittees

Upon approval by a majority of the members of the Committee, standing subcommittees may be formed to advise the Committee. The Chair of the Committee shall name the Chair and members of each subcommittee.

b. Special Subcommittees

Upon approval by a majority of the members of the Committee, special or ad-hoc subcommittees may be formed. Special subcommittees shall be formed for a specific purpose and cease to exist after completion of that purpose.

VIII. Quorum

The presence of a majority of members is required to conduct a meeting and shall constitute a quorum for all purposes. The only official business that can be transacted in the absence of a quorum is: (1) to take measures to obtain a quorum; (2) to fix the time to which to adjourn; (3) to take a recess; or (4) to adjourn.

IX. Rules of Order and Compliance with Open Meeting Requirements

a. All meetings shall be conducted in accordance with Robert's Rules of Order.

b. The Committee and its subcommittees shall perform its duties in compliance with all applicable provisions of the San Francisco Charter, California's Ralph M. Brown Act (California Government Code §§54950 et seq.), and the San Francisco Sunshine Ordinance (San Francisco Administrative Code Chapter 67).

X. Voting

Each member present at Advisory Committee meetings must vote on all motions and questions put before the Committee by voting "for" or "against," unless abstaining from the vote.

XI. Technical Assistance

Under Chapter 5 of the Administrative Code, the City Administrator is charged with providing administrative and clerical support to the Committee. The City Administrator has

delegated this function to the Department of Public Health (DPH). In addition, the Controller's Office shall provide technical support and policy analysis for the Advisory Committee upon request. All City officials and agencies shall cooperate with the Advisory Committee in the performance of its functions.

XII. Order of Business

The order of business at any Regular Meeting shall be as follows:

- a. Call to Order/Roll Call
 - Approval of Absences
- b. Approval of Minutes
- c. Review and Consideration of Regular Agenda
- d. General Public Comment
- e. DPH Staff Report
- f. Funding Update
- g. New Business
- h. Subcommittee Update
- i. Committee Members' Proposed Future Agenda Items
- j. Announcements
- k. Adjournment

These Bylaws were adopted by the Sugary Drinks Distributor Tax Advisory Committee on February 6, 2019.