Signs of Progress in Childhood Obesity Declines

Site Summary Report
Anchorage, Alaska
2015

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Members of the NCCOR advisory team include: Tina Kauh, RWJF; Carrie Dooyema, CDC Division of Nutrition, Physical Activity and Obesity (DNPAO); Deborah Young-Hyman, NIH Office of Behavioral and Social Sciences Research (OBSSR); Jan Jernigan, CDC DNPAO; Laura Kettel-Khan, CDC DNPAO; Melissa Abelev, USDA Food and Nutrition Services (FNS); Rachel Ballard, NIH National Cancer Institute; Sonia Arteaga, NIH National Heart, Lung, and Blood Institute (NHLBI); Toija Riggins, USDA FNS; Veronica Uzoebo, USDA FNS; and William Dietz, Redstone Global Center, Milken Institute School of Public Health, The George Washington University.

Members of the ICF Macro project team include: Nicola Dawkins-Lyn, Phyllis Ottley, Carole Harris, Joe Fruh, Kate Reddy, Michael Greenberg, Stacey Willocks, and Stephanie Frost.

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We especially want to thank our main points of contact for the study in Anchorage, Karol Fink and Diane Peck. Your graciousness in making the connections to others who could help paint the picture of the work in Anchorage helped to shape this report that we hope can be a resource for others. Most of all, we thank you for your leadership every day in your work to realize a shared vision of health for children.

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BACKGROUND OF CHILDHOOD OBESITY DECLINES PROJECT

The Signs of Progress in Childhood Obesity Declines (Childhood Obesity Declines Project) seeks to document current and past initiatives implemented in a sample of sites reporting childhood obesity declines and to identify the contextual factors that may have facilitated or hindered the initiatives, particularly those that might help understanding of disparities. The work is a collaborative effort guided by members of the National Collaborative on Childhood Obesity Research (NCCOR),[1] funded by the Robert Wood Johnson Foundation (RWJF), and implemented by ICF Macro (an ICF International company). After a careful review of study data and confirmation of the statistical significance of the decline, Anchorage was selected as one of four sites for the case study. ICF Macro team members applied the following methods:

- A review of published studies, grey literature, and site obesity data, using established inclusion and exclusion criteria to select sites for case studies
- A review of documents describing relevant strategies and initiatives implemented in each selected site prior to and during the period of reported declines
- An inventory of strategies, applied as a survey, for knowledgeable respondents within the selected sites to identify which strategies occurred during the period of interest
- A policy and contextual scan to identify relevant policies implemented in each site
- A site visit to each of the selected cities with interviews of respondents across multiple settings to describe the development and implementation of relevant strategies

Taken together, the information from each site (and the synthesis of information across sites) should provide initial insights about strategies that may contribute to declines as well as information about the ways in which those strategies were effectively implemented.

OBESITY DECLINES IDENTIFIED IN ANCHORAGE

A *Morbidity and Mortality Weekly Review* (MMWR) 2013 publication[2] examining measured heights and weights of students in Anchorage School District (grades K, 1, 3, 5, and 7) identified statistically significant declines in obesity among students in grades K, 1, and 3 between the 2003–2004 and 2010–2011 school years. The MMWR noted statistically significant declines while analyzing ***combined*** data from two Anchorage-area school districts—Anchorage School District and Matanuska-Susitna Valley (Mat-Su Valley). When the Anchorage and Mat-Su Valley school districts were analyzed separately, a significant overall decrease was found only for Anchorage Public Schools in grades K, 1, 3, 5 and 7. Obesity declined from 18.0% to 17.6% over this time, representing a 2.2% relative decrease. During this period, the total number of students attending Anchorage School District (ASD) varied from 18,948 in 2003–2004 to 18,720 in 2010–2011. This represented 84–92% of total student enrollment in the represented grades of ASD during the 8-year period.

[1] The four organizations represented in NCCOR are the Robert Wood Johnson Foundation (RWJF); the Centers for Disease Control and Prevention (CDC); the National Institutes of Health (NIH); and the United States Department of Agriculture (USDA).
[2] Centers for Disease Control and Prevention. (2013). Obesity in K-7 students - Anchorage, Alaska, 2003-04 to 2010-11 school years. *Morbidity and Mortality Weekly Report, 62*(21), 426–430.

POLICY LANDSCAPE

The policy review identified nine State policies related to nutrition, physical activity, and the built environment in Alaska between 2001 and 2012. Of the nine policies, one addressed health and personal safety education, five were related to nutrition, two were related to physical activity, and one was related to physical activity and the built environment. Most of these policies affected the early care and education and school settings.

ITEMS ENDORSED IN SITE STRATEGY INVENTORY

Through an inventory, we identified strategies implemented in four settings that addressed physical activity, nutrition, or both: (1) early care and education (ECE), (2) schools, (3) communities, and (4) health care. The strategies in the inventory included a broad range of activities such as programs, policies, initiatives, campaigns, and regulations. A total of 14 individuals completed the Anchorage inventory of strategies (a 78% response rate). Table A presents the overall number of strategies identified per setting.

Table A: Results of Strategy Inventory in Anchorage

Setting	Strategies That Address Physical Activity	Strategies That Address Healthy Eating	Strategies That Address Physical Activity and Healthy Eating
ECE	2	2	22
Schools	16	12	28
Community	12	7	Not included in the inventory
Health care	No respondents completed this section of the survey		

SITE VISIT INTERVIEWS

In addition to the policy review and strategy inventory, more in-depth information was obtained about strategies through site visit interviews. The report presents results from the interviews, including strategies identified for focus and a timeline of strategies (Figure 1) developed by the site visit team. The interviews provided information for deeper descriptions of the strategies identified for focus. They also provided some information describing the site overall, including general uses of data within the site, respondents' reports of champions who helped advance specific or multiple initiatives, respondents' perceptions of factors leading to the declines in rates of childhood obesity in the city, and lessons learned that respondents considered worth sharing with others working to reduce rates of childhood obesity in their own sites.

Strategies Identified for Focus

A subset of the strategies were identified for more focused inquiry. These include initiatives known to have had broad reach into the population where statistically significant declines were documented. These initiatives targeted children at the community- or district-wide levels so that potential exposure to the initiative was far-reaching. Some initiatives also were raised by respondents in the interviews as ones they considered important to understand in relation to the declines. Table B shows the strategies of focus, indicates those that most directly targeted the population that experienced the declines, and provides information about the settings, focus areas, and types of approaches used for each.

Table B: Strategies Identified for Focus in Anchorage

Name of Strategy	Most Directly Targeted Population with Declines	Setting				Focus Area			Type		
		ECE	Schools	Community	Health Care	Nutrition	Physical Activity	Built Environment	Program	Policy	Media Campaign
1. Anchorage Municipal Childcare Licensing Revisions	X	X					X			X	
2. Anchorage School District: Nutrition Changes	X		X			X				X	
3. Anchorage School District: Health, Wellness, and Physical Education	X		X			X	X		X	X	
4. Mayor's Task Force on Obesity and Health				X		X	X	X	X		
5. School Wellness Committee, Policy, and 6-year Plan			X			X	X		X	X	

Additional Strategies Implemented

The strategies above were described in detail because they either directly targeted or had great reach to the population of school children wherein declines were found. In addition to these, however, we learned of several additional initiatives undertaken across settings in Anchorage that were discussed during the site visit interviews. Some of these were programs, local polices, and initiatives. The reach of these strategies ranged from a few schools, to communitywide initiatives, to State and Federal policies implemented locally. We learned of over 30 initiatives, some of which were implemented in multiple settings—more than 18 in the school setting, 9 in the ECE setting, 10 in the community setting, and 3 in the health care setting. A list of all strategies discussed during the site visit, matrixed by setting and type, is in Appendix E.

Strategies Addressing Health Disparities

Data were not available to determine any differences in rates of obesity for children by racial/ethnic subgroups. While the strategies identified for focus did not specifically target populations experiencing health disparities, these children may have been reached through the customary, mandated physical activity and nutrition-based programs and curricula implemented in the majority of Head Start centers in Anchorage during the study period. This programming would have reached children in low-income communities, as this is the predominant demographic group enrolled in Head Start centers. In addition, the Healthy Futures initiative, which focuses on support of extracurricular physical activity among school-aged children, has prioritized schools in low-income neighborhoods as a strategy to reach children at greater risk. However, this more focused effort on Title I schools in Anchorage has only developed in more recent years, close to the end of and following the period of the noted declines.

SITE FINDINGS

Overall Site Use of Data

In April 2003, the Alaska Department of Health and Social Services released their first statewide report, The Burden of Overweight and Obesity in Alaska. The report included data on adults and children, and specific information highlighting body mass index from children in ASD. The 2003 report led to the first statewide conference on obesity prevention, held in Anchorage in 2005. The conference also raised awareness around the gravity of the obesity epidemic, and childhood obesity in particular. After the statewide report was released, the Alaska State Health Department worked with ASD to create a report focused on school children. The cumulative effect of these reports served to raise awareness on the gravity of childhood obesity as a health concern for the children of Anchorage School District. Use of data in Anchorage is heavily focused on surveillance due to limited resources for evaluation.

Site Reports of Champions

Two of the primary forces and high-profile champions in Anchorage during the study time period (2001–2011) were Mayor Mark Begich (2003–2009) and Superintendent Carol Comeau, of the Anchorage School District (2000–2012). They had a close working relationship and prioritized childhood obesity prevention, which led to comprehensive policy changes in the school system with regard to student nutrition, physical education, and health and wellness. Mayor Begich appointed the Mayor's Task Force on Obesity and Health that included leadership from across multiple sectors in Anchorage. Additionally, respondents reported champions at the organizational level in municipal, nonprofit, and health care sectors.

Respondent Perceptions of Factors Leading to Declines

Interviewees discussed a variety of topics as potential factors contributing to the declines in childhood obesity in Anchorage. Respondents repeatedly cited the Mayor's Task Force, which included multi-sector involvement of representatives from the community, government agencies, and businesses, as a catalyst for change that influenced declines. The strong policy improvements in Anchorage School District, focused on student nutrition, physical education, and health and wellness, were also frequently described as important contributors. Infrastructure improvements to the city trail system and community events focused on physical activity for children were also seen as having an important role in attaining the declines. Respondents often mentioned the perfect alignment and timing of multiple factors: a strong working relationship between the mayor and the superintendent; available funding environment; and supportive, well-networked staff members across the school system and community.

Lessons Learned for Other Sites

Respondents also shared various lessons they had learned in the course of their efforts that they thought might be of value to other communities working to address childhood obesity. Bringing a diversity of stakeholders to the table and engaging leadership from the beginning of a committee or task force process were noted as key. Organizers of community efforts engaged both supporters of their efforts, as well as potential detractors or slow adopters. Engaging slow adopters helped them to identify barriers for the work. A few respondents noted the importance of first grounding the group in the evidence, as well as in data on the health and economic impacts of the obesity epidemic, before

proceeding with brainstorming and decision making. When people were briefed on the evidence, they were able to make more informed decisions.

Study Limitations

While the Anchorage site visit illuminated many policies and strategies that likely impacted obesity declines among school-aged children, some factors associated with the data collection and analysis do create limits to consider with respect to the study's findings. First, this study was exploratory in nature and could not explore causal relationships. That is, through interviews, policy scans, and document reviews many items emerged that likely impacted childhood obesity declines in Anchorage, but the study methods do not allow for drawing direct causal conclusions about what led to those declines. Further, snowball sampling and a limited timeframe meant that the study team was limited in how many individuals could be engaged to complete the inventory worksheet and to be interviewed during the study period. Our team was only able to speak to a small subset of the hundreds of individuals in the public, private, and nonprofit sector who likely played a role in advancing changes that brought about obesity declines.

Also, the information gleaned from this study is likely only characteristic of the types of policies, strategies, challenges, and facilitators related to combating obesity declines in Anchorage. Despite the wealth of data acquired before, during, and after the site visit, this information cannot be considered comprehensive. Finally, a great deal of the information collected was retrospective. Interviewees responded to the best of their abilities as to strategies undertaken 4 to 14 years prior, but their memories may not always be complete or precise when it comes to the specifics and timeframe of developing and implementing various strategies. When possible, the study team used documented reports to try to confirm details and timing of policy changes and strategy implementation.

CONCLUSION

Over the course of time reviewed for this study, a broad array of initiatives, policies, and programs were implemented in Anchorage that may have influenced the observed declines in childhood obesity rates. Improvements to the municipal code governing child care licensing and the development of Anchorage School District wellness policies both contributed to improvements in children's environments that are important to preventing obesity and related illnesses. The child care licensing codes focused largely on improved time for physical activity (in both duration and vigor). In addition, the schools improved nutrition programs, limited competitive foods, and increased elementary school physical education time. Health and wellness education were also introduced as a regular component of the elementary school curriculum, and nutritional and physical education changes were integrated throughout the school system. The city of Anchorage and local nonprofits continue to improve the access, safety, and use of public recreational features to improve year-round physical activity. Lessons learned from Anchorage include the need for executive-level champions, cross-sector collaboration, and educating diverse stakeholders on the evidence base before developing strategies.

I. BACKGROUND AND PURPOSE OF CHILDHOOD OBESITY DECLINES PROJECT

PROJECT BACKGROUND

As the search for ways to address childhood obesity continues, organizations and communities across the country are experimenting with various strategies aimed at changing children's environments to prevent obesity. The project, *Signs of Progress in Childhood Obesity Declines* (Childhood Obesity Declines Project [CODP]), was conceived and implemented to identify and describe local-level strategies that have been implemented in municipalities that have experienced declines in rates of childhood obesity. The work is a collaborative effort guided by members of the National Collaborative on Childhood Obesity Research (NCCOR),[1] funded by the Robert Wood Johnson Foundation (RWJF), and implemented by ICF Macro (an ICF International company).

The CODP was conceived to help provide the field with a better understanding of how jurisdictions are operationalizing and implementing obesity prevention and reduction strategies. The project has sought to systematically document current and past initiatives implemented in a small sample of sites reporting childhood obesity declines and to identify the contextual factors that may have facilitated or hindered the initiatives, particularly those that might help understanding of the disparities that continue to persist in most sites. The CODP also collected information on how initiatives have been implemented and who the primary supporters have been. This project was conceived as an initial step in building knowledge about what may be working in sites reporting obesity declines. It will thus serve to supplement other work on this topic that is in progress but for which findings will not be available for some time.

Participating NCCOR members also engaged an expert panel to advise on the study. (See Appendix A for a full list of the expert panelists.) The multidisciplinary expert panel comprises 15 individuals with diverse yet complementary expertise and experiences. The panel has provided guidance and suggestions about the methodology of the project. Panel members represent academics, evaluators, researchers, Federal Government personnel, topic experts (e.g., nutrition, physical activity, and evaluation), practitioners, and program directors (of obesity reduction programs). In addition, expert panel members possessed substantial familiarity with the diverse settings (e.g., schools, communities, early childhood programs, and health care) in which obesity initiatives have been implemented.

PROJECT PURPOSE

As an exploratory endeavor, the CODP will provide the opportunity to examine strategies being implemented in jurisdictions that have had attained declines in rates of childhood obesity. The goal of the CODP is to systematically explore the factors that may be contributing to reported declines in childhood obesity in a small sample of these jurisdictions. Specifically, this project aims to gain a better understanding of the initiatives, strategies, and practices that occurred in municipalities reporting childhood obesity declines, along with the contextual factors that may have influenced these efforts. Another goal is to identify commonalities and differences in approaches and strategies, in populations and disparities, and in implementation of obesity prevention efforts across the selected jurisdictions.

[1] The four organizations represented in NCCOR are the Robert Wood Johnson Foundation (RWJF); the Centers for Disease Control and Prevention (CDC); the National Institutes of Health (NIH); and the United States Department of Agriculture (USDA).

The CODP also will help to increase our knowledge about how obesity prevention efforts operate in conjunction with other health promotion efforts.

The primary questions for the CODP include the following:

1. What current and past initiatives, strategies, practices, and contextual factors are occurring in selected sites with reported childhood obesity declines?
2. What have selected sites reported in terms of reductions among diverse populations (e.g., racial/ethnic groups, low-income populations, underserved communities), and how does this address health disparities?
3. In what ways are obesity reduction initiatives and practices integrated with other health promotion efforts, and how have contextual factors played a role?
4. To what extent have selected sites employed similar or different obesity reduction/prevention strategies? [2]

Through the methods employed, the CODP will provide information about the reported presence or absence of a broad range of strategies in the selected sites during the period of the declines, including strategies recommended by groups like the Institute of Medicine and CDC. Through closer examination, the project also will provide information about characteristics of a subset of these strategies and the process of developing and implementing particular initiatives.

PROJECT COMPONENTS

With initial input from the expert panel, ICF Macro and NCCOR CODP team members determined five primary project components. Through a review of published studies and grey literature, sites reporting declines in rates of childhood obesity were identified. ICF Macro team members then applied the following methods:

- A review of the studies and of site obesity data, using established inclusion and exclusion criteria to confirm the statistical significance of the decline and select sites for case studies
- A review of documents accessible through the academic and grey literature describing relevant strategies and initiatives implemented in each selected site prior to and during the period of reported declines
- An inventory of strategies, applied as a survey, for knowledgeable respondents within the selected sites to identify which occurred during the period of interest
- A policy and contextual scan for each selected site to identify relevant policies implemented prior to and during the period of reported declines
- A site visit to each of the selected sites with interviews of respondents across multiple settings to describe the development and implementation of relevant strategies during the period of interest.

[2] Question #4 will be addressed in a synthesis report of the study that examines similarities and differences across the four sites: ICF Macro (2015). *Signs of progress in childhood obesity declines: Synthesis report*, Unpublished Report.

Taken together, the information from each site (and the synthesis of information across sites) should provide initial insights about strategies that may contribute to declines as well as information about the ways in which those strategies were effectively implemented.

METHODS AND BACKGROUND FINDINGS

The study team conducted data reviews to aid in site selection and document reviews to obtain background information about the site and the various implemented strategies. In Anchorage, statistically significant declines in obesity were noted among students in grades K-7 between the 2003–2004 and 2010–2011[3] school years. The methods outlined in this section detail how the ICF Macro study team focused our investigation on this population and timeframe.

Site Strategy Inventory

In addition to reviewing information in documents about strategies implemented in sites with reported declines, the CODP team members developed an approach for documenting the numerous strategies that occurred in a site during the period through an online site strategy inventory. Team members from CDC's DNPAO identified strategies in the inventory through a review of several publications identifying evidence-based policy recommendations, promising actions, and strategies to address childhood obesity. The publications included reports that recommended policies and actions over the last decade to decrease childhood obesity at the population level, including Institute of Medicine childhood obesity reports, the Guide to Community Preventive Services, and multiple CDC nutrition and physical activity guidance documents. Respondents to the inventory were asked to note, to the best of their knowledge, the presence or absence of each listed strategy in the city during the period of the reported declines. Respondents were identified through a snowball sampling technique, beginning with the authors of studies reporting the declines, then broadened to include those referred to the CODP team members as individuals knowledgeable about strategies implemented in each of the four settings (early care and education [ECE], schools, community, and health care).

Policy and Contextual Data Reviews

To help understand the policy and environmental context in which strategies were implemented, we conducted a scan of the food, physical activity and policy environments over the study time period as well as an assessment of key demographic characteristics at baseline (2004) and follow-up (2011). To assess policy impacting childhood obesity, nutrition, and physical activity, ICF Macro study team members gathered policy information at both Federal and State levels. For Federal policies, we examined policies and programs noted in the 2004–2012 *F as in Fat* reports[4] as well as other reports[5] of Federal obesity prevention policy. To identify State policy over the study time period, we captured policies from existing databases (.e.g., CDC's Chronic Disease State Policy Tracking System[6]) and policy updates from the National Conference of State Legislatures.[7] In addition to these sources, we also documented childhood obesity legislation noted in Bridging the Gap's review of state obesity-

[3] Centers for Disease Control and Prevention. (2013). Obesity in K-7 students—Anchorage, Alaska, 2003–04 to 2010–11 school years. *Morbidity Mortality Weekly Report, 62*(21), 426-430.
[4] Trust for America's Health (2009). *F as in fat. How obesity policies are failing in America*. Washington, DC: Author. Retrieved September 14, 2015, http://healthyamericans.org/reports/obesity2009/
[5] Brill, A. (2013). *The long-term returns on obesity prevention policies.* Retrieved September 14, 2015, from https://depts.washington.edu/waaction/tools/docs/rwjf_returns_report.pdf
[6] Centers for Disease Control and Prevention. (n.d.). *Chronic Disease State Policy Tracking System.* Retrieved September 14, 2015, from http://nccd.cdc.gov/CDPHPPolicySearch/Default.aspx.
[7] National Conference of State Legislatures. (2014). *Childhood obesity legislation policy update.* Retrieved September 14, 2015, from http://www.ncsl.org/research/health/childhood-obesity-legislation-2013.aspx

related policies[8] and the National Resource Center for Health and Safety in Child Care and Early Education's report on child care regulations.[9] It is important to note that we were not able to conduct a full policy search and extraction through Westlaw or similar legal research databases, given the resources that would have been required to conduct, extract, and code policies over the timespan across sites. However, we used multiple sources to arrive at a comprehensive snapshot of the policy context during the study period. Local-level policies (county, municipality, or school district) were captured through the site strategy inventory sent to stakeholders or during site visit interviews.

ICF Macro study team members also collected sociodemographic and food and physical environment data for each site for baseline and follow-up years to better understand contextual factors in the community that may affect the population and any changes in health outcomes. Sociodemographic data were based on the Census American Community Survey,[10] and food and physical activity environment data were taken from the U.S. Census County Business Patterns,[11] for Anchorage's baseline and follow-up years. Sociodemographic, and food and physical activity environment data can be found in Appendix B.

Site Visit and Interviews

The site visit to Anchorage took place May 11–14, 2015. Using semistructured interview guides, the site visit team conducted a total of 19 interviews with 22 people**:** two group interviews, one with two people and another with three people, and 17 individual interviews. (See Appendix C for a list of those interviewed for the study.)

[8] Bridging the Gap. (2014). *State obesity-related policies.* Retrieved September 17, 2015, from http://www.bridgingthegapresearch.org/research/state_obesity-related_policies/.
[9] National Resource Center for Health and Safety in Child Care and Early Education, University of Colorado Denver. (2011). *Achieving a state of healthy weight: A national assessment of obesity prevention terminology in child care regulations 2010.* Aurora, CO: Author. Retrieved September 14, 2015, from http://nrckids.org/default/assets/File/Products/ASHW/regulations_report_2010.pdf

[10] U.S. Census American Community Survey. *American fact finder.* Retrieved September 17, 2015, from http://factfinder.census.gov/faces/nav/jsf/pages/searchresults.xhtml?refresh=t.
[11] U.S. Census. (2015). *County business patterns.* Retrieved September 17, 2015, from http://www.census.gov/econ/cbp/.

II. SITE STRATEGY FINDINGS

The ICF Macro team explored data sources to collect information on strategies implemented in Anchorage during and immediately preceding the period of time when a statistically significant decline in rates of childhood obesity had been reported. For Anchorage, the study period is between the 2003–2004 and 2010–2011 school years.[1] To assess the policies, programs, initiatives and strategies implemented during this period, we reviewed data 2 years prior to the study period (2001) to account for potential lag time between policy enactment and implementation. Because we had an opportunity to learn more onsite during site visits, we also asked respondents to discuss strategies implemented during the pre- and poststudy period. This section presents findings identified through policy reviews, the site strategy inventory, and the site visit interviews.

SITE CONTEXT

Anchorage, Alaska is a diverse city of extremes. Anchorage's most notable extreme is its location. Its far-northern location is a determining factor in everything from food costs to teacher recruitment. This northern location, and the seasonal variation in daylight hours and temperatures, influence residents' ability to remain safely physically active outdoors in the long, dark, and cold winter months. Anchorage is increasingly diverse with immigrant populations from countries in the South Pacific, Asia, and Africa. Immigrant families also tend to be lower-income and unfamiliar with the Alaskan winter environment, which has implications for their physical activity in winter. Minority students represent over 50% of the student population in the Anchorage School District (ASD). ASD encompasses more than 2,000 square miles, educates over 48,500 students, and has more than 130 schools and programs (http://www.asdk12.org/aboutasd/). ASD includes both urban and more isolated rural schools. Though the political climate in Alaska tends to be fiscally conservative and wary of government involvement, the mayor during the study period described in this report, Mayor Mark Begich, created the Mayor's Obesity Task Force to address the growing obesity epidemic in the city. This group included the multi-sector involvement of representatives from the community, government agencies, and businesses The Mayor's Task Force was instrumental in improving the nutritional and physical activity environments in the city during the time when declines in childhood obesity rates were documented.

POLICY LANDSCAPE

Federal policy. Between 2000 and 2012, several notable Federal policies were passed impacting efforts to address childhood obesity at the State and local levels. First, in 2004, Reauthorization of the Child Nutrition and WIC Act included a requirement that all local education agencies participating in the National School Lunch Program would establish a local wellness policy by the start of the 2006–2007 school year. These policies required school districts to address the following: (1) goals for nutrition education, physical activity, and other school-based activities; (2) nutrition guidelines for all foods sold on school campus during the school day to promote health and reduce obesity; (3) a plan to ensure implementation of the policy; (4) involvement of parents, students, and representatives of the school administration and staff as well as the public in a local wellness committee; and (5) guidelines for reimbursable school meals that are not less restrictive than national guidelines. In addition to the local wellness policies, the 2004 reauthorization revised the requirements of the fruit and vegetables program. It emphasized that the majority of schools participating should be low income (at least 50% of students receiving free or reduced-price lunch), and it provided funds for districts and schools related to farm-to-school programs as well as nutrition education (e.g., Team Nutrition grants). In

2007, Federal legislation was passed addressing requirements for the Child and Adult Care Food Program, including standards for the nutritional content of foods served and portion sizes. Funding was also provided to USDA to support centers in increasing physical activity and decreasing sedentary time. Lastly, the Healthy, Hunger-Free Kids Act (HHFKA) was passed in 2010. It reauthorized several child nutrition programs, outlined standards for the nutritional content of foods and beverages sold outside the school meals program, and updated nutrition standards for school meals. The HHFKA also updated requirements for the content and tracking of local wellness policies.

State policy. The policy review identified nine State policies related to nutrition, physical activity, and the built environment in Alaska between 2001 and 2012. Of the nine policies, one addressed health and personal safety education, five were related to nutrition, two were related to physical activity, and one was related to physical activity and the built environment. Most of these policies affected the ECE and school settings. For more information about these policies, see the timeline provided in Figure 1 and a complete list of the policies in Appendix D.

Local-level policy. Due to resource limitations, the ICF Macro team could not conduct a comprehensive scan of local-level policies. However, we used the site strategy inventory and site visit interviews to capture key policies enacted or implemented during the study time period.

ITEMS ENDORSED IN SITE STRATEGY INVENTORY

Through the inventory, we identified strategies that addressed physical activity, healthy eating, or both in the ECE, schools, community, and health care settings. The strategies might include a broad range of activities such as programs, policies, initiatives, campaigns, and regulations. A total of 14 individuals completed the Anchorage strategy inventory (a 78% response rate). Table 1 shows the overall number of strategies identified per setting.

Table 1: Results of Strategy Inventory in Anchorage

Setting	Strategies That Address Physical Activity	Strategies That Address Healthy Eating	Strategies That Address Physical Activity and Healthy Eating
ECE	2	2	22
Schools	16	12	28
Community	12	7	Not included in the inventory
Health care	No respondents completed this section of the survey		

SITE VISIT INTERVIEWS

In addition to the policy review and strategy inventory, more in-depth information was obtained about strategies through site visit interviews. This section presents results from the interviews, including the strategies identified for focus and a timeline of strategies developed by the site visit team. The interviews also provided information for the next section, which presents deeper descriptions of the focal strategies. A later section presents information taken from the site visit interviews to describe the site overall, including general use of data within the site, partnerships, respondents' perceptions of factors leading to the declines in rates of childhood obesity in the city, and lessons that respondents share for other sites that might be working to reduce childhood obesity.

Strategies Identified for Focus

A subset of the strategies were identified for more focused inquiry. These include initiatives known to have had broad reach into the population where statistically significant declines were documented. Some initiatives also were raised by respondents in the interviews as ones they considered important to understand in relation to the declines, similarly for their relevant community- or student-level focus. Table 2 shows the strategies of focus, indicates those that most directly targeted the population that experienced the declines, and provides information about the settings, focus areas, and types of approaches used for each.

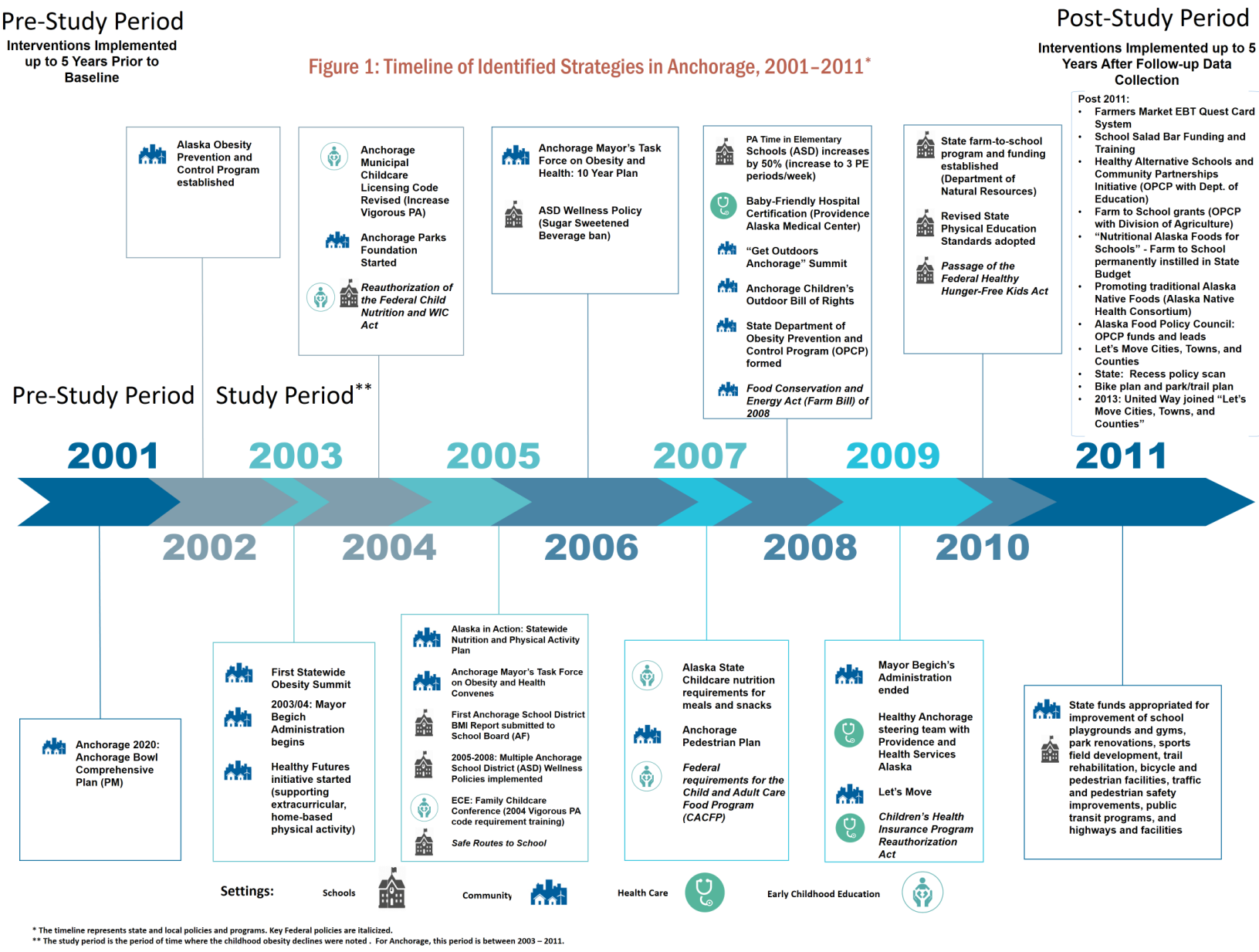
Table 2: Strategies Identified for Focus in Anchorage

Name of Strategy	Most Directly Targeted Population with Declines	Setting				Focus area			Type		
		ECE	Schools	Community	Health Care	Nutrition	Physical Activity	Built Environment	Program	Policy	Media Campaign
1. Anchorage Municipal Childcare Licensing Revisions	X	X					X			X	
2. Anchorage School District: Nutrition Changes	X		X			X				X	
3. Anchorage School District: Health, Wellness, and Physical Education	X		X			X	X		X	X	
4. Mayor's Task Force on Obesity and Health				X		X	X	X	X		
5. School Wellness Committee, Policy, and 6-year Plan			X			X	X		X	X	

Strategy Timeline

A number of relevant initiatives addressing multiple strategies were reported during and prior to the period of documented childhood obesity declines. Site visit team members shared a draft of a timeline with interviewees prior to the interviews and reviewed the document with them during the interview. As additional initiatives were raised by interviewees, site visit team members revised the timeline to include them. The timeline in Figure 1 below presents these identified strategies in the ECE, school, community, and health care settings.

Figure 1: Timeline of Identified Strategies in Anchorage, 2001–2011*



* The timeline represents state and local policies and programs. Key Federal policies are italicized.
** The study period is the period of time where the childhood obesity declines were noted . For Anchorage, this period is between 2003 – 2011.

III. FOCAL STRATEGY DESCRIPTIONS

This section presents a more in-depth description of each strategy of focus, including settings they addressed; their strength, reach, and target audiences; barriers and facilitators encountered in their implementation; and the role of partners in carrying them out. As noted above, these strategies are described in more detail because they directly targeted and had the greatest reach to the population of children wherein declines were found, or they were raised by respondents as important to understand in relation to the declines.

Specifically, when analyzed separately, in Anchorage, statistically significant declines were identified in rates of obesity among students in grades K, 1, 3, 5 and 7. In this section, we begin by describing some of the initiatives occurring during this time period (between the 2003–2004 and 2010–2011 school years) that were more likely to reach this population of children in Anchorage School District public schools. These include: 1) the Anchorage Municipal Childcare Licensing Revisions (which included a minutes-based requirement for vigorous physical activity), 2) nutrition changes in the Anchorage School District, and 3) health, wellness, and physical education initiatives in the Anchorage School District. Following the description of those initiatives, we describe in detail two additional programs that, though not directly involving children, were considered by interviewees as important to understand in relation to the declines: 4) the Mayor's Task Force on Obesity and Health, and 5) a School Wellness Committee, Policy, and 6-year Plan.

Following the detailed descriptions of these initiatives, we note additional strategies that took place across the school, ECE, health care and community settings in Anchorage. We also note ways these strategies may have addressed children from populations experiencing health disparities.

STRATEGY #1: MUNICIPAL CHILDCARE LICENSING CODE REVISION

Strategy Description

In 2004, the Municipality of Anchorage revised its child care licensing code (Anchorage Municipal Code 1655) to increase the rigor of requirements for physical activity. Children in full-day child care center programs were to be provided with opportunities for "a minimum of 20 minutes of vigorous physical activity indoor or outdoor, for every 3 hours the facility is open between the hours of 7:00 a.m. and 7:00 p.m." (AMC 16.55.350 Program in child care facilities). This was new for child care centers, which hold the majority of children in child care in Anchorage. Child care homes, which provide care for a portion of the day in a private family home for compensation, had previously been under State licensing purview in Anchorage, and they already had a similar requirement for vigorous physical activity. In 2004, child care homes in Anchorage also became part of the Municipal licensing purview. The Municipality of Anchorage further specified the new PA requirements by defining "vigorous" physical activity to mean "developmentally appropriate aerobic movements including but not limited to running, jumping, climbing, dancing, or exercising." Anchorage also requires a greater frequency of outdoor play (two times per day) than the State (one time per day).

In addition, in 2007, the State of Alaska required all child care facilities to conform to Child and Adult Care Food Program (CACFP) requirements for all snacks and meals, even if they were not accepting CACFP assistance. The guidance indicates serving sizes and the minimum number of components that must be served for a reimbursable breakfast, lunch, supper, or snack. For children, these requirements include, for example, that milk served must be low-fat (1%) or non-fat (skim), that fruit

or vegetable juice must be full-strength, that breads and grains must be made from whole-grain or enriched meal or flour, and that cereal must be whole-grain or enriched or fortified. Children who were in child care in 2007 and after were subject to the CACFP guidelines and may have entered kindergarten at a healthier weight and maintained a healthier weight trajectory in the years that followed. According to one interviewee, Alaska was one of the earlier States to make such a requirement. The city licensing code revision applied to all child care facilities within the Municipality of Anchorage and thus altered the physical activity environment for many children who would eventually become students within the Anchorage School District. The community of Anchorage was invited to participate in the code revision process through community meetings. Respondents indicated that none of the initiatives, including this childcare licensing code revision, had undergone an evaluation at the municipal level.

Strategy Barriers and Facilitators

Barriers

No reported barriers. Respondents did not report many barriers. They commented that in general child care centers were very receptive to the ideas and support provided by the licensing department for the new vigorous physical activity and outdoor code requirements. They noted that children seemed happier, and had fewer behavioral concerns, when they had more opportunities to be physically active. Further, one respondent explained that the weather often included cold and rain in Alaska, and so people had to get used to it.

Facilitators

Community leaders and seasoned professionals as champions. Much support for the child care code revisions was provided by the mayor of Anchorage (Mark Begich), senior administrative staff from the Anchorage Municipality Department of Health, and internal municipal child care licensing leadership and staff. Interview respondents reported a very positive and energetic approach toward rolling out the vigorous physical activity requirements. One respondent also noted that the change was facilitated by having people involved that had been in their careers for a while and felt comfortable making changes despite potential critique as they believed it was the right thing to do. There also was good communication between the State and municipal child care licensing departments.

Training child care providers on requirements. In 2005, the municipality held a Family Childcare Conference, which included a workshop on vigorous physical activity. The municipality licensing staff provided guidance for child care centers on the nature of "vigorous" physical activity, and they gave suggestions of ways to implement the new requirements. According to respondents, the licensing staff was very positive and enthusiastic about the changes. Anchorage also had funding to support a larger staff of licensing specialists at the time, enabling additional onsite education with child care facilities. The funding and staff size began to decrease again around 2006.

Local initiatives supported by national programs. The code change was supported through national physical activity or nutrition initiatives created for the early care setting, and occasionally for Head Start specifically. As one example, the Nike Go program was described. One respondent was particularly enthusiastic about the quality of training, materials, and curriculum provided by Nike Go, which was piloted in eight cities (80 Head Start locations), including Anchorage, in 2005. The program donated $4,000 worth of large motor equipment (e.g., parachutes, balance beam, easy-to-catch balls, and bean bags) to each pilot site. A majority of the Head Start facilities in Anchorage used this program until 2012, when there was no longer any support available. According to Nike Go, independent

evaluations were offered to each of the pilot sites. However, none of our informants were familiar with or remembered such efforts or data. In another example of supporting national programs, I am Moving, I am Learning and Color Me Healthy were implemented in Head Starts in Anchorage during this time period. Both Nike Go and I am Moving, I am Learning (started in 2008-2009), were created for 3- and 4-year-old children and were mandated curricula for Kids Corp, which represents the majority of Head Start locations in Anchorage. However, these programs were not mandated curricula by the National Head Start Association. One respondent was most enthusiastic about Nike Go, due to its utility and ability to create physical activity opportunities for young children in the Head Start setting.

Multi-sector collaboration and buy-in. Along with the implementation of these supporting national programs, the mayor of Anchorage was simultaneously beginning to convene a task force on obesity and health, which would officially be formed by mid-2005. He and senior health department staff had the clearly expressed expectation that support would be provided for the regulations going forward. Along with this support from the mayor, the director of childcare licensing for the municipality was very supportive. She had been there for several years and was willing to take on this work because she viewed it as the right thing to do. The licensing team was also very strong and had a sense of accountability related to the regulations. All licensing staff at the time had child care experience. One respondent noted that this practical experience was helpful to the licensing staff for conducting enforcement.

Role of Partners

As was the case with many strategies occurring from 2004 to 2008, there was a perfect alignment of partners to make meaningful changes to fight childhood obesity. The foundational, pervasive support of Mayor Begich, his administration, and the building momentum around the Mayor's Taskforce on Obesity and Health was a major catalyst for change in Anchorage. Members of the senior administration at the Municipal Health Department were also supportive of all policy and environmental changes that they hoped would ultimately lead to declines in childhood obesity, including these changes in the child care licensing code to require more and vigorous physical activity opportunities. Several of these individuals had been in their positions for some time, and they had comfort in their role and with their colleagues, within and across organizations. As noted, the head of the municipal child care licensing division was very supportive of this work. She retired a few years after these code changes were put into place. Nike, Inc. was also considered by interviewees to be one of the largest corporate supporters for the National Head Start Association during these years, due to the Nike Go Head Start program.

STRATEGY #2: ANCHORAGE SCHOOL DISTRICT (ASD): NUTRITION CHANGES

Historically, ASD participated in the USDA School Nutrition Program for grades K-8 only. The high schools did not participate with USDA, and instead held contracts with a range of fast food restaurants to cater school lunches. Schools also sold soft drinks in the cafeteria at lunch, and they had vending machines, which were profitable. Not only was the nutritional value of school food in the high schools unregulated, no free or reduced-price lunches were available. Though lunches in K-8 were consistent with USDA guidelines at the time, there were no policies in place to restrict sweets offered at school events, food sold in fundraisers, or food used as a reward in the classroom.

This changed in 2006 when the ASD implemented the school wellness policy districtwide. The policy was informed by their expectation of regulations that would later be part of the Healthy, Hunger-free

Kids Act. This policy included a soda ban, restrictions on foods sold in school fundraisers, and vending machine controls. The policy was thoroughly implemented and introduced through systematic, school district-wide training that included a toolkit, for principals; school nurses; and health, PE, and other teachers. The toolkit included resources on fundraising without food, on conducting healthy celebrations, and on not using food as a reward or physical activity as punishment. One respondent noted that the wellness policy implementation included coordinated and district-wide communication that helped create support for the efforts. The high schools also began participating with the USDA School Nutrition Program at this time, ending their contracts with fast food restaurants. The school district hired its first dietician during this time period, as well. Respondents indicated that these school nutrition changes had not been evaluated for the ASD.

Strategy Barriers and Facilitators

Barriers

Financial losses. The biggest barrier to improving school nutrition was reportedly the financial losses that occurred as a result of ending contracts with competitive food vendors. Ending the contracts was reported as a highly controversial move on the part of ASD, as money from the contracts had helped schools fund programs. With substantial initial financial challenges following the wellness policy implementation, the school district's efforts to balance its nutrition budget was described as ongoing, with varying success. One respondent described this barrier to removing sodas from school vending machines, noting that they had been a main source of funding for supplemental programs. Additionally, adults in the schools complained because the vending machines were removed from administrative buildings.

Facilitators

Superintendent as leader and champion. A major facilitator to implementing the nutrition changes was support of the superintendent, Carol Comeau. Respondents stated how well respected she was and how she was committed to student health. She spearheaded the changes at ASD and had allies on the school board as well.

Making transitions gradually. Because of this momentum and the newly hired dietician, ASD began implementing USDA nutritional guidelines before they were federally mandated. For instance, ASD introduced a blend of brown and white rice to students in advance of the white rice restrictions so that students could adapt to brown rice before white rice was removed, which facilitated adoption of these changes. They used this same method when transitioning from white potato French fries to sweet potato fries, with a transition period of serving "confetti fries," which was a combination of both. When USDA school nutrition regulations went into effect in 2012, ASD had already been in compliance for two years.

Role of Partners

The ASD school nutrition program is reinforced by the health education program. Nutrition changes in the cafeteria are supported in the health curriculum. Students learn about the importance of healthy eating and nutrition in the classroom, and are exposed to appropriate menu items in the cafeterias. As an example, during one interview, respondents reported a current challenge where school lunch participation has declined for seventh grade girls. Respondents discussed adjusting the health curriculum in sixth grade to encourage appropriate nutrition, hoping to address the lack of participation by girls in seventh grade.

STRATEGY #3: ANCHORAGE SCHOOL DISTRICT: HEALTH, WELLNESS, AND PHYSICAL EDUCATION CHANGES

In 2008, ASD introduced health and wellness education in grades K-6, including the addition of 22 dedicated health and wellness teachers. Before this time, teachers were asked to integrate health topics into their curricula for other subjects, but there was no focused health education in the lower grades. In 2008, 22 health and wellness education teachers were hired who were specifically trained in the subject matter and dedicated to implementing the health curriculum. ASD trained health teachers to become the experts in the building on health and wellness topics. One respondent described this change, noting that the health teachers received specific training on the content and became specialists in delivering health messages. As a result, the respondent indicated that there was a stronger connection across platforms, with health teachers also talking about what students eat in the cafeterias.

The new health curriculum taught nutrition and physical education (PE) topics as well as others, and it was integrated with the PE curriculum that taught "lifelong" physical activity skills and values. Health, wellness, and physical education time also was increased from 60 minutes per week of PE only, to 90 minutes of PE, plus 30 minutes of health and wellness instruction per week in elementary schools. Similar to the nutrition changes, respondents indicated that these changes for health, wellness and physical education had not received evaluation for ASD.

Strategy Barriers and Facilitators

Barriers

Lack of teacher training. Before the introduction of dedicated health and wellness teachers, classroom teachers who were not trained on these topics were asked to add them into their existing lesson plans. This may have resulted in a few minutes focused on a health topic per week, as one respondent described. These health topics were also not integrated with the PE curriculum or the nutrition plans in the cafeterias, and they were taught in isolation instead of being reinforced across school programs.

Facilitators

Available funding. In a difficult budget climate, a breakthrough in negotiations with the teachers union facilitated the creation of the health and wellness program, the additional instruction time for PE and health/wellness, and the 22 new health teacher positions. Elementary school teachers had been fighting ASD for parity in planning time allowed middle- and high-school teachers. By creating extended PE time and a new "pull out" class where students left their home rooms to attend health and wellness classes, ASD also created a planning period for elementary school teachers. ASD was able to pay the 22 new health teachers with funds that otherwise would have been used to pay teachers for that class time—a deal developed with the teachers' union.

Role of Partners

The partnerships that supported these changes in the ASD were forged between the curriculum and nutrition departments. Integration between the health and wellness classes, PE classes, and menu items available through the nutrition department was a key strength in this programming strategy. School nurses were additional internal partners at ASD supporting health and wellness. Each school has a staff nurse who, in addition to administering medications, caring for sick and injured students, and assuring emergency preparedness, supports health teachers and students with information about

nutrition and physical activity among other health topics. Nurses also play a role in the implementation and enforcement of wellness policy guidelines, such as assuring no sweets are provided during school events, maintaining the vending machine policy, and collecting height and weight data for student body mass index (BMI) status monitoring. Nurses also work with the nutrition department on nutritional content of foods for students with diabetes.

STRATEGY #4: MAYOR'S TASK FORCE ON OBESITY AND HEALTH

Mayor Begich came into office in July 2003, and Beverly Wooley became director of the Anchorage Department of Health and Human Services at the same time. Nathan Johnson also was appointed director of planning for Anchorage Health and Human Services. He was tasked by the mayor and Director Wooley to begin the process for organizing a Mayor's Task Force on Obesity and Health in late 2004/early 2005. Though not directly targeted to the population of children for whom the declines were noted, respondents considered the program important for the focus on creating healthier community environments. Similarly, though childhood obesity was not a sole motivator for this work, it was integrated into the general health promotion efforts. The Task Force included multi-sector involvement of representatives from the community, government agencies, and businesses. A Resolution by the Anchorage Municipal Assembly, officially recognizing their support of this Mayor's Task Force, was published in June 2005. The Task Force was in place for an estimated 9 to 10 months, and it produced a 10-year plan on obesity and health, which was released in May 2006. The plan was divided into three focus areas: nutrition, physical activity, and the built environment. Goals and tasks within the plan were divided into 1-, 3-, and 10-year increments. See a complete list of Task Force members in Exhibit 1 below.

Exhibit 1: Anchorage Mayor's Task Force on Obesity and Health

Members of the Mayor's Task Force on Obesity and Health

Chris Anderson
Glacier Brew House

Carrie Benton, MS, RD, LD, CDE
University of Alaska Anchorage

Donna Boltz, Col.
United States Army

Robb Boyer, PhD
Nutrition Subcommittee Chair
Anchorage School District

Robert Brewster
Physical Activity Subcommittee Chair
The Alaska Club

Michele Brown
United Way of Anchorage

Stacey Finley, RN
Registered Nurse

Rosey Fletcher
Olympic Athlete

Tammy Green, MPH
State of Alaska Division of Public Health

Caleb Hoch
Chugiak High School Student

Dr. Michelle Laufer
Pediatrician

Jeffrey Lawrence, MD, MSPH, ScD
Providence Alaska Medical Center

Meg Loomis
Rasmuson Foundation

Peter Mjos, MD
Anchorage Neighborhood Health Center

Tom Nelson
Community Environment Subcommittee Chair
Municipality of Anchorage Planning

Timothy Potter
Dowl Engineers
DOWL

Barbara Russell
Premera Blue Cross Blue Shield

Dr. Matt Schnellbaecher
Alaska Native Medical Center

Officer Wendi Shackelford
Anchorage Police Department

Sgt. Cindi Stanton
Anchorage Police Department

Mari Steinbach, CPRP, MPA
Municipality of Anchorage Parks and Recreation

Doug Van Etten
Realtor

Shana Weber, DO, FAAP
Alaska Native Medical Center

Heather Wheeler, MPA, RD
Municipality of Anchorage, Health and Human Services

Bill Wielechowski
Task Force Chair
Anchorage Planning and Zoning Commision

Karl Wing
Mayor's Youth Commission

Candace Winkler, MPA, MSW
Child Care Connection

Janel Wright, JD
Board Member of American Diabetes Association – Former Legal Director Disability Law Center of Alaska

Connie Yoshimura
CY Investments, LLC

Special Thanks

Carol Comeau
Anchorage School District

Joan Diamond
Municipality of Anchorage, Health and Human Services

Jeff Dillon
Municipality of Anchorage, Parks and Recreation

Roger Fiedler
Anchorage School District

Karol Fink, MS, RD
State of Alaska, Division of Public Health

Nathan Johnson
Municipality of Anchorage, Health and Human Services

Steve Johnson
Municipality of Anchorage, Health and Human Services

Erin Peterson, MPH
State of Alaska, Division of Public Health

Richard Mandsager, MD
State of Alaska, Division of Public Health

Hilary Morgan
Homeward Bound

Jennifer Weakland
The Alaska Club

Beverly Wooley
Municipality of Anchorage, Health and Human Services

An ASD Wellness Committee (described in the following section) convened around the same time as the Mayor's Task Force. A few individuals served with both entities, including Ms. Fink (Alaska DHSS), Superintendent Comeau, Ms. Vaissiere (co-lead ASD Wellness Committee and PE/health curriculum director), Dr. Mjos (community physician), and Mr. Johnson (planning director, Anchorage Health Department). Ms. Fink and Ms. Vaissiere worked to align the plans and recommendations coming from the two entities, and most of the recommendations were eventually aligned.

Many of the points of progress from the Mayor's Task Force 10-year plan occurred in the school setting, such as with more PE time and removing soda fountains from high school cafeterias. One respondent noted that the goal of expanding PE to 150 minutes was not met, but they were able to expand to 90 minutes per week, which was more than it had been. Having additional professional development staff and a new health curriculum helped to bolster the PE department initially as well.

Bike racks were installed as changes in the community's built environment. One respondent noted that there has been a great deal of growth in this area, particularly in the downtown region. Some of this development came about as a result of the plan, and there also is a local bicycling organization that has encouraged this work. The city received a designation of Silver City in 2009 from the League of American Bicyclists. The Anchorage Parks Foundation also was described as having been critical in helping to advance many of the goals associated with trails and parks. As noted earlier, respondents indicated that none of the initiatives, including those of the Mayor's Task Force, had undergone an evaluation at the municipal level.

Strategy Barriers and Facilitators

Barriers

Change in support with new leadership. Progress was made on several of the goals outlined in the 10-year plan. However, many of the goals and subtasks did not have a responsible party assigned to them, and thus languished. One respondent summarized that when a new administration came into place, the project and the health department were dismantled. Another respondent indicated that work on several tasks was underway, but ultimately the group could go no further. As mentioned, the action steps were broken into 1-, 3-, and 10-year plans. Most of the 1- and 3-year tasks were accomplished before Mayor Begich left office.

Loss of leader and champion. There is no publically available progress report on the 10-year plan. A few respondents were able to review the plans, and provide a current update on the status of each of the goals and tasks. The concluding point was that the Mayor's Task Force and the staff assigned from the Alaska Department of Health and Social Services did as much as they could within the 3 years remaining in the mayor's term. Mayor Begich became a U.S. Senator for the State of Alaska. However, when the city administration changed with the subsequent mayor, the focus was no longer on obesity and health. Several individuals in leadership positions moved on to different organizations and the Alaska DHSS. The former Mayor's Task Force on Obesity and Health and associated initiatives were no longer a priority.

Lack of control and trust. The majority of respondents thought the Task Force had a positive impact in bringing the community together and building awareness about obesity. However, one respondent noted as a challenge that the group had no control or authority over any of the entities with which it was working. This respondent thought this also created challenges with trust as the members of the Task Force did not know one another well.

Facilitators

Responsible implementation staff. One respondent noted that the mayor had a robust health department at the time, and once the 10-year plan was developed, someone at the health department was assigned to begin to implement it. Respondents described that having a person assigned to work on the plan was integral for seeing the work begin to move forward. Respondents also noted that a lot of earned media was provided, raising general awareness about the Task Force and related initiatives.

Role of Partners

Members of the Task Force represented a broad cross section of organizations. From the public sector, these included the Anchorage School District (along with Superintendent Comeau), the State of Alaska Department of Health and Social Services, and the Municipality of Anchorage's Health and Human Services and Parks and Recreation departments. Private sector groups within the local health care community included Providence Alaska Medical Center, Alaska Native Medical Center, Anchorage Neighborhood Health Center, and individuals involved in health care. There also were local businesses like Child Care Connection; non-profit groups like the United Way and private foundations; and various other cross-sector representatives such as engineers and planners, the police, realty representatives, Olympic athletes, ASD students, and groups implementing youth initiatives. The Task Force prioritized the school wellness policy, and because several individuals involved with the school district were present on the Task Force, there was alignment between the two groups.

STRATEGY #5: SCHOOL WELLNESS COMMITTEE, POLICY, AND 6-YEAR PLAN

In 2006, a School Wellness Committee for ASD was formed. A school wellness committee oversees and coordinates the development and implementation of a local school wellness policy, assesses if it is being followed and how well it is working, and updates the policy as needed. Though these efforts did not solely address obesity or fully target the population of children wherein the declines were noted, many aspects did address school environments. Superintendent Comeau appointed the PE and health curriculum director and the student nutrition director to co-lead the committee. These individuals worked with the Alaska Department of Health and Social Services and sought to align their plan with the recommendations of the Mayor's Task Force. Almost all of the recommendations eventually aligned, except for those on diet soda, which was still allowed in the schools at the time. The director of PE and health curriculum pulled together other members for the wellness committee. One respondent described the PE and health curriculum director's diplomacy, noting that she had a strong background in education and public awareness, and she brought people to the table to put together the wellness policy and the 6-year plan.

Respondents indicated that the wellness committee was ultimately able to achieve success and minimize opposition to the soda and school cafeteria food changes because of the respect that superintendent Comeau and the PE and health curriculum director had in the school and community. Their popularity and support from the public enabled them to make these changes and eliminate sugary beverages.

The compliance with and enforcement of wellness policies varies greatly from school to school, as does the passion and interest of any given wellness representative. However, the general sentiment expressed by respondents was that wellness activities and the policies that were implemented from 2005 to 2008 are still in place within the school district. One respondent noted that compliance felt better than it did five years ago when there were more problems with vending machines and with cafes selling items outside the regulations. As noted, respondents indicated that none of the initiatives, including the school wellness committee, policy or 6-year plan, had undergone formal evaluation. To illustrate the ongoing effort of wellness activity in the school district, one respondent divided up the timeline into three components: 1) prior to the 2006 wellness policy, 2) between the 2006 wellness policy and 2011, and 3) from 2011 to present day, where the newest wellness, health and PE initiatives are underway.

Strategy Barriers and Facilitators

Barriers

Obtaining nutrition policy compliance from new vendors and staff. Although respondents noted that policy and wellness initiatives were being implemented well in schools, they also described ongoing struggles with communication and with having sufficient manpower. For example, someone might find M&M's in the vending machines when they get a new vendor who has not been educated on the school policy, or there may still be confusion around what is allowed in the vending machines. Additional support would be needed to explain the policy to others. Another respondent noted that, though attempts had been made, monitoring had not been sufficient to eliminate all fried foods, as directed in the nutrition cafeteria policy. In some cases, the food arrives pre-fried, and the cafeteria staff then bake it to warm it once it is on site, making it a difficult challenge to overcome.

Facilitators

Ongoing school-level activity despite leadership changes. During the prime period of this era, a flurry of activities was underway. One respondent described the wellness scene in and around the schools during this time, noting that there had been substantial implementation of physical activity and related events, and students were engaged in many of them. After the wellness committee wrapped up, and the PE and health curriculum director (who had been a tremendous champion for the efforts) retired, implementation of the policies began to wane. However, many respondents emphasized that there continues to be a tremendous amount of wellness activity, just taking a different form.

Role of Partners

Wellness representatives in the schools no longer meet in committee form, as they once did. A school wellness representative works to ensure the local school wellness policy is enforced. This can be anyone in the school. Most often it is the health teacher or the school nurse. However, sometimes the school principal fills this role. Respondents discussed how well communication and partnership worked among school staff, ASD administration, and the Board of Education. Everyone had a shared understanding of the goals, and strong professional relationships enabled clear lines of communication from school administration and staff directly to the superintendent.

OTHER STRATEGIES ACROSS SETTINGS

As noted earlier, the focal strategies described above are some of the key strategies implemented in Anchorage during the study period. Across settings, several other strategies were discussed during the site visit interviews. Some of these were programs, local polices, and initiatives. The reach of these strategies ranged from a few schools, to communitywide initiatives, to State and Federal policies implemented locally. Below, we discuss these by setting. Appendix E shows all the strategies reported from the site visit interviews, matrixed by setting and type.

School Setting

In addition to the school-based initiatives described earlier, Healthy Futures was another initiative mentioned frequently by interview respondents. Healthy Futures was started in 2003 by a community parent advocate who was concerned about the obesity epidemic. She worked with ASD to incorporate a physical activity log system for children, as an extracurricular means of supporting and enhancing weekly physical activity.

A couple of school-based strategies that became more prominent in recent years—such as Farm to School, which received State funding in 2010, and Kids in the Kitchen, an extracurricular cooking initiative—were started toward the end or after the study period.

ASD began screening for student weight status (BMI) around 2003-2004, when they published the first Burden of Childhood Obesity report with Alaska DHSS. The annual student weight status reporting (BMI tracking) formed the basis for the *Morbidity and Mortality Weekly Report* publication, which ultimately demonstrated the declines seen among Anchorage students during the study timeline.

Early Care and Education Setting

Primary strategies in the ECE setting were described earlier in the report as strategies of focus. These include the 2004 municipal-level changes in child care licensing. They also include the national, regional, Federal, and privately-funded, Head Start-focused nutrition and physical activity initiatives

implemented during this time period, such as Nike Go, Color Me Healthy, and I am Moving, I am Learning.

In 2007, a few years after the licensing code changes, the Alaska DHSS released a training guide for parents, teachers, and Head Start staff, titled "Physical Activity and Nutrition for Alaska's Head Start Kids." This guidance was not required or mandated, and it was thus was implemented to varying degrees.

Playtime… So Good for Me (Playtime) was launched by the Alaska Department of Health and Social Services in 2005, and focused on children and clients in the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC Program). Playtime was a social marketing initiative focused on physical activity and specifically on promoting unstructured play among 0- to 5-year olds, with a nutrition messaging component incorporated. The Playtime initiative had other counterparts focusing on drinking more water and breastfeeding.

Community Setting

As noted earlier, one of the strategies respondents most discussed was the Mayor's Task Force on Obesity and Health. In addition, many respondents described that a key tipping point for childhood obesity awareness and concern among influential leaders in Anchorage was the release of the State's 2003 report, titled "The Burden of Overweight and Obesity in Alaska." The report's release marked the first time it became clear to Alaska leaders that obesity was not just a problem for the "lower 48" states, but it was also a problem in Alaska. The report rallied leadership into finding ways to address obesity in Alaska. The same year, the Alaska DHSS hosted the first statewide obesity summit. Because the summit was located in Anchorage, several school and municipal public health government leaders and staff were able to attend. The State updated the initial 2003 report in 2009 and 2010.

The Anchorage Parks Foundation was very involved in helping to increase trail connectivity, improving trail lighting for safety, and developing a Trails Comprehensive Plan for the Anchorage Bowl area. In 2008, a summit titled, "Get Outdoors, Anchorage!" was produced, promoting physical activity initiatives outside and reconnecting children with nature. One of the outcomes of the working summit was the "Anchorage Children's Outdoor Bill of Rights."

Although Healthy Futures primarily works within the school setting, the organization also helps to support community youth physical activity events. In 2012, Healthy Futures partnered with the Alaska Department of Health and Social Services in the Play Every Day statewide campaign, which frames physical activity and childhood obesity prevention in a positive light. In addition, the Alaska DHSS and Department of Education and Early Development co-host an annual School Health and Wellness institute, which provides training and guidance for health educators in schools. This institute is held in Anchorage. Attendees usually include health and PE teachers, wellness coordinators, principals, a superintendent or two, counselors, school nurses, and various other school staff. The initial institute, held in 2006, was to provide technical assistance and training around the School Wellness Toolkit developed by the State DHSS that included a model wellness policy. The institute has continued to focus on wellness policy-related PA and nutrition.

Regarding change to the built environment, the Anchorage Assembly adopted a comprehensive Pedestrian Plan in 2007 and a Bicycle Plan in 2010. Anchorage recently received the silver award (after the study follow up period) from the League of American Bicyclists for being a bicycle-friendly and supportive city. The Alaska Department of Health and Social Services has also begun to support

double food stamp efforts at farmers markets. These are primarily focused in Anchorage, although it is a statewide effort. Although they have seen encouraging initial success, this effort was initiated in 2011, toward the end of our study period.

Health Care Setting

In 2008, in the midst of the wave of childhood obesity prevention strategies that took place in Anchorage from 2004–2009, Providence Alaska Medical Center received baby-friendly hospital certification. Hospitals and birthing facilities must adhere to ten steps for successful breastfeeding to receive and retain a Baby-Friendly designation. The ten steps were developed by a team of global experts and consist of evidence-based practices shown to increase breastfeeding initiation and duration. These include practices such as informing all pregnant women about the benefits and management of breastfeeding, helping mothers initiate breastfeeding within one hour of birth, and giving infants no food or drink other than breast milk, unless medically needed. Providence is one of the larger hospital systems in Anchorage. Other respondents noted that it would help to have the health care setting develop stronger relationships with other community groups and to direct further childhood obesity prevention strategies within this setting.

STRATEGIES TARGETING POPULATIONS EXPERIENCING HEALTH DISPARITIES

Data were not available to determine any differences in rates of obesity for children by racial/ethnic subgroups. While the strategies identified for focus did not specifically target populations experiencing health disparities, these children may have been reached through the customary, mandated physical activity and nutrition-based programs and curricula implemented in the majority of Head Start centers in Anchorage during the study period. This programming would have reached children in low-income communities, as this is the predominant demographic group enrolled in Head Start centers. Programmatic interventions, such as Nike Go; Color Me Healthy; and I am Moving, I am Learning, focused on providing curricula, equipment, and ideas for increasing physical activity frequency throughout the day and improving nutrition. The curricula were required at the majority of Head Start Centers in Anchorage. This was particularly true for the Kids Corp Head Start centers. The Alaska Department of Health and Social Services also helped to create a guidance manual, providing suggestions for increased physical activity and improved nutrition for all Head Start centers in the State. The manual, titled "Physical Activity and Nutrition for Alaska's Head Start Kids: A Training Manual for Parents, Teachers, and Food Service Staff," was produced in 2007, in the middle of the study period. The manual takes a fairly comprehensive approach toward improving the food and activity environment for children in Head Start centers. In addition, the Healthy Futures initiative, which focuses on support of extracurricular physical activity among school-aged children, has prioritized schools in low-income neighborhoods as a strategy to reach children at greater risk. However, this more focused effort on Title I schools in Anchorage has only developed in more recent years, close to the end of and following the period of the noted declines.

The Mayor's Task Force on Obesity and Health released a 10-year plan in 2006. The plan included the following goals, which focused upon lower-income populations: (1) explore collaboration between local WIC providers and ASD to promote proper family nutrition and sound early nutrition practices; (2) improve the availability of nutritional choices within the community (increase availability of food assistance programs, including Food Stamps, WIC, Head Start, Senior Meals, Home Delivered Meals, and Alaska Food Banks, especially to low-income families in underserved areas); and (3) increase the percentage of local WIC materials that actively encourage daily physical activity among WIC

participants to 40%. The suggested percentage would gradually reach 100% by the end of the 10-year plan.

IV. DISCUSSION

SCOPE AND SETTINGS OF STRATEGIES

The strategies selected for focus due to their strength and reach were based in the early care and education (ECE) setting (i.e., municipal child care licensing code changes) and in the school setting (i.e., nutrition and physical activity strategies implemented following adoption of the wellness policy). The Municipal Child Care Code for Anchorage made vigorous physical activity opportunities mandatory for all children in child care (centers and homes) throughout Anchorage. The school wellness policy was implemented thoroughly (training was provided for principals through supporting staff) and systematically (in all schools and school entities, such as the board and administration). Supporting strategies, such as physical activity and nutrition in Head Start programs, and the Physical Activity and Nutrition Head Start Training Manual also occurred primarily in the ECE setting. The ASD Wellness Committee was very active in implementing programs and initiatives throughout the study period. Wellness representatives continue to implement and enforce these changes today. We learned of over 30 initiatives in total, some of which were implemented in multiple settings—more than 18 in the school setting, 9 in the ECE setting, 10 in the community setting, and 3 in the health care setting. Many of the supporting strategies had great reach (community or school district-wide changes), if not strength (e.g., not being a mandated policy).

The Mayor's Task Force on Obesity and Health was a community-wide effort with representation from each of the four major settings (schools, ECE, health care, and community). Tasks and goals set forth addressed suggested policies, programs, and initiatives in all of these areas, which were implemented to varying degrees but waned as champions moved on to other priorities or positions.

A groundswell of childhood obesity prevention activities took place in Anchorage and peaked between 2004-2005 and 2008-2009. Many study respondents used the phrase, "the perfect storm" to describe the synchronicity of multiple childhood obesity prevention efforts during this time.

Strategies occurring in the ECE setting during this time period may have had substantial impact on young children and their families. The 2004 Anchorage municipal childcare licensing code change required more frequent and vigorous physical activity for all childcare centers, in addition to child care homes in Anchorage (which were already mandated to do so by the State of Alaska). The physical activity and nutrition programs/curricula implemented in Kids Corp Head Start Centers, such as Nike Go, Color Me Healthy, and I Am Moving, I Am Learning, had strength in that they were required curricula for all Kids Corp Head Start Centers, which represent the majority of Head Start centers in Anchorage. However, reach of these programs was more challenging to determine, as it was not clear from our interviews or research whether these programs were implemented in other, non-Kids Corp, Head Start centers in Anchorage. All of these programs were also primarily focused upon Head Start centers. The Alaska DHSS also published and disseminated the Training Manual for Head Start Parents, Teachers, and Food Service Staff on Physical Activity and Nutrition during this time period. The State DHSS provided training to those entities. However, there was little follow-up evaluation on the impact of these physical activity and nutrition programs or the training manual.

Policy efforts and other changes implemented by the wellness committee in Anchorage School District elementary schools could have had an impact on the third graders, as they had been exposed to the school system for 2–3 years before being measured in third grade. ASD's efforts to hire more PE teachers and increase required PE time for elementary students from 60 to 90 minutes per week also

increased the strength of the initiative as it was a mandated policy implemented across all schools in the district. Further, enforcement of the wellness policy was an important factor in Anchorage. Nurses were in place in the schools and played a key role in the implementation and enforcement of wellness policy guidelines, such as assuring no sweets were provided during school events, maintaining the vending machine policy, and collecting height and weight data for student body mass index (BMI) status monitoring.

Notably, neither the Mayor's Task Force nor the School Wellness Committee and Policy were focused solely on addressing childhood obesity. Instead, these initiatives addressed other the health promotion goals, including obesity prevention for adults, food insecurity, and general health promotion and chronic disease management for students. These initiatives present an example of how Anchorage integrated childhood obesity prevention efforts with other health promoting initiatives.

Three goals of the Mayor's Task Force were to increase WIC (by those eligible to receive it); connect WIC to the public schools; and increase the number of WIC centers, which encourage healthy eating, physical activity, and breastfeeding among their clients. Implementation of the Mayor's Task Force goals was not formally tracked or evaluated. However, these goals could have had an impact on the young families and very young children of Anchorage, potentially leading to healthier kindergarteners and first graders.

NATURE OF DECLINES IDENTIFIED

An MMWR report noted statistically significant declines while analyzing ***combined*** data from two Anchorage-area school districts—Anchorage School District and Matanuska-Susitna Valley (Mat-Su Valley). When the Anchorage and Mat-Su Valley school districts were analyzed separately, a significant overall decrease was found only for Anchorage Public Schools in grades K, 1, 3, 5 and 7. The published MMWR study period was from the 2003-2004 to the 2010-2011 school year. When analyzed separately, Anchorage School District was the only school district showing significant overall declines. Sub-group analyses by grade or race/ethnicity were not performed on the Anchorage-only data set. Though the data were not parsed by these sub-populations at the time of the report, respondents did speculate that the declines were most likely in the more affluent children. Also because there had been a concentrated effort to improve the nutrition and physical activity in ECE and schools, younger children may have first benefited from the ECE improvements and then entered the school system to benefit from the wellness policy improvements made there. Children like these may show the greatest declines. Subsequent studies using this data are needed to gain a more refined understanding of the declines in Anchorage.

EXAMINING HEALTH DISPARITIES

Although many interviewees in Anchorage referenced the ongoing substantial health disparities among the city's many different ethnic and racial groups, few of the focal and supporting strategies made a focused effort to remedy the disparities. The majority of strategies targeting health disparities took place within Head Start programs or were articulated in goals set forth by the Mayor's Task Force. The Task Force goals established to address health disparities (such as those intended to increase participation in WIC and other federal nutrition programs) were not fully met due to the change in mayoral administration, shift in Municipal Health Department focus away from obesity-prevention, and lack of assigned individuals throughout the city to see the Task Force goals through to completion.

Several interviewees mentioned that, following the study period, post 2011, efforts were implemented throughout Anchorage to focus more on health disparities. This is evident in the work being done by Healthy Futures, with a focus on Title I schools.

Diverse, Winter City

Many respondents created a picture of Anchorage being a very diverse, "winter city." Anchorage public high schools are now some of the most diverse in the United States, with multiple languages, races, and ethnic groups represented. Also, for the majority of the year, Anchorage is a "winter city" and a dark city, with less than six hours of sunlight per day in the darkest days of winter.

Respondents spoke of the recent influx of immigrants who were accustomed to warmer climates such those found in as Samoa and in various African nations. Respondents reported that children from immigrant families often stay inside after school and on weekends due to fear of wildlife in the city (such as moose), insufficient cold-weather clothing (e.g., children wearing sandals to Head Start on snowy days), a lack of familiarity with cold-weather sports, and the prohibitive expense of cold-weather sporting gear, such as cross-country skis and snow-shoes. Respondents stated that children from white, higher SES families are more culturally familiar with winter sports and are better able to afford necessary clothing and gear for participation.

Cross-Sector Collaboration

Cross-sector collaboration involves a combined effort across multiple sectors to create significant and sustainable improvements in health. Various types of collaboration are possible in the work for building healthy communities, including among public-sector agencies, non-profit and other community organizations, and private-sector companies. In Anchorage, there was strong cross-sector collaboration particularly through the Mayor's Task Force, which included representation from across these groups. Further, the leaders and staff of the Mayor's Task Force and the school district wellness committees were strong collaborators. The Task Force and Wellness Committee helped ensure that the majority of settings, and individuals of influence within Anchorage, became aware of the pressing need to address the growing childhood obesity problem. Several interviewees noted the overall increased awareness of and support for childhood obesity prevention efforts during this time period.

Study Limitations

While the Anchorage site visit illuminated many policies and strategies that likely impacted obesity declines among school-aged children, some factors associated with the data collection and analysis do create limits to consider with respect to the study's findings. First, this study was exploratory in nature and could not explore causal relationships. That is, through interviews, policy scans, and document reviews many items emerged that likely impacted childhood obesity declines in Anchorage, but the study methods do not allow for drawing direct causal conclusions about what led to those declines. Further, snowball sampling and a limited timeframe meant that the study team was limited in how many individuals could be engaged to complete the inventory worksheet and to be interviewed during the study period. Our team was only able to speak to a small subset of the hundreds of individuals in the public, private, and nonprofit sector who likely played a role in advancing changes that brought about obesity declines.

Also, the information gleaned from this study is likely only characteristic of the types of policies, strategies, challenges, and facilitators related to combating obesity declines in Anchorage. Despite the

wealth of data acquired before, during, and after the site visit, this information cannot be considered comprehensive. Finally, a great deal of the information collected was retrospective. Interviewees responded to the best of their abilities as to strategies undertaken 4 to 14 years prior, but their memories may not always be complete or precise when it comes to the specifics and timeframe of developing and implementing various strategies. When possible, the study team used documented reports to try to confirm details and timing of policy changes and strategy implementation.

V. CONCLUSION

The interviews with individuals in the Anchorage efforts provided rich context surrounding the childhood obesity-prevention strategies implemented from 2001-2011 and the documented declines in the Anchorage School District. Many common themes emerged from these conversations regarding what efforts had been successful and lessons that were learned in the process.

The relationship between the Alaska DHSS Obesity Program and the Anchorage School District was important in providing the student height and weight data and in providing an ability to analyze those data, produce trend information, and publish reports. The first reports published in 2003, showing the levels of childhood obesity among Anchorage children, served as a tipping point and eye opener. One respondent described that it was startling to realize that near or more than one-third of the incoming kindergarteners were obese before walking into the door of the school. The report served to motivate the superintendent in particular.

A few strategies emerged as focal strategies, due to their reach into the population where declines were experienced and the strength or mandatory nature of the effort. The Anchorage Municipal Code, governing child care licensing, was revised to require "a minimum of 20 minutes of vigorous physical activity indoor or outdoor, for every three hours the facility is open between the hours of 7:00 a.m. and 7:00 p.m." Children in full-day centers were also to be provided with the opportunity for supervised activity outside twice daily. At the time, this exceeded the requirements for physical activity opportunities in child care for the State of Alaska, in degree (i.e., specifying that the activity be "vigorous") and in frequency (twice daily). According to respondents, the licensing staff was very positive and enthusiastic about the changes. They also had funding to support a larger staff of licensing specialists at the time.

Other strategies that emerged for focus included the nutrition, wellness/health, and physical education changes that took place after the school wellness policy was implemented, starting in 2006. The wellness policy included a soda ban, restrictions on foods sold in school fundraisers, vending machine controls, and the high schools began their participation with the USDA School Nutrition Program, ending their contracts with fast food restaurants. The school district also hired its first dietician at this time. Physical education time in elementary schools was increased by 30 minutes per week, going from 60 to 90 minutes per week. The school district also hired 22 health and wellness education teachers for the elementary schools (grades K-6). This generated new and more focused attention on health and wellness.

Among the multitude of other strategies implemented during the period examined, the Mayor's Task Force on Obesity and Health, and the Anchorage School District Wellness Committee, Policy, and 6-Year Plan had the greatest reach. Although they did not all directly target the population of school children wherein declines were found, these initiatives seemed to have had a lasting influence on awareness of childhood obesity in Anchorage. Efforts were complementary throughout the community, with cross-representation, and those involved sought to align goals and policies between the Mayor's Task Force and the school wellness policy. However, many respondents in retrospect highlighted the need for more assigned points of responsibility across the community, a plan for follow-up and evaluation of the Task Plan goals, and a transition team to weather the changes in focus across political administrations.

Ultimately, one of the most frequent themes that emerged from our conversations was the importance of champions, at all levels. Many respondents spoke passionately about the influence of two high-level community leaders during this time period, Superintendent Carol Comeau and Mayor Mark Begich. Several other champions were identified at all levels of the Mayor's Task Force and the school wellness committee efforts, but these two individuals were mentioned time and again.

The work in Anchorage presents some examples of how communities can work together to begin to foster a culture of health. The Mayor's Task Force in particular created an opportunity for cross-sector collaboration by public-sector agencies, non-profits and community organization, and private-sector industry. Focus on healthier, equitable communities and on integrating health services and systems were less apparent and noted by some respondents. Efforts such as changes in the childcare licensing code; changes to the school nutrition, health, wellness and physical activity policies; and the school wellness policy reflected a desire to make health for children a shared value.

From the array of data collected through the strategy inventory survey, on-site interviews, and document review, many factors have emerged associated with Anchorage's declines in rates of childhood obesity. The picture created through this assorted data is not complete, but it begins to shed some light on ways Anchorage might have accomplished positive results with respect to the childhood obesity epidemic.

APPENDIX A: CHILDHOOD OBESITY DECLINES PROJECT EXPERT PANEL MEMBERS

Childhood Obesity Declines Expert Panel Members	
Name	**Organization**
1. Rachel Ballard-Barbash	National Cancer Institute, National Institutes of Health
2. Nisha Botchwey	School of City and Regional Planning, Georgia Institute of Technology
3. Bridget Catlin	Population Health Institute, University of Wisconsin
4. Allen Cheadle	Center for Community Health & Evaluation, Group Health Research Institute
5. Jamie Chriqui	Institute for Health Research and Policy, University of Illinois at Chicago
6. Patricia Crawford	School of Public Health, University of California, Berkeley
7. Christina Economos	Friedman School of Nutrition Science and Policy, Tufts University
8. Karen Glanz	Perelman School of Medicine, University of Pennsylvania
9. Shiriki Kumanyika	Perelman School of Medicine, University of Pennsylvania
10. Cathy Nonas	New York City Department of Health and Mental Hygiene
11. Punam Ohri-Vachaspati	Arizona State University
12. Debra Rog	Westat
13. Brian Saelens	Seattle Children's Hospital
14. Jay Variyam	Economic Research Service, U.S. Department of Agriculture
15. Sallie Yoshida	The Sarah Samuels Center for Public Health Research & Evaluation

APPENDIX B. CONTEXTUAL DATA

DEMOGRAPHIC CONTEXT

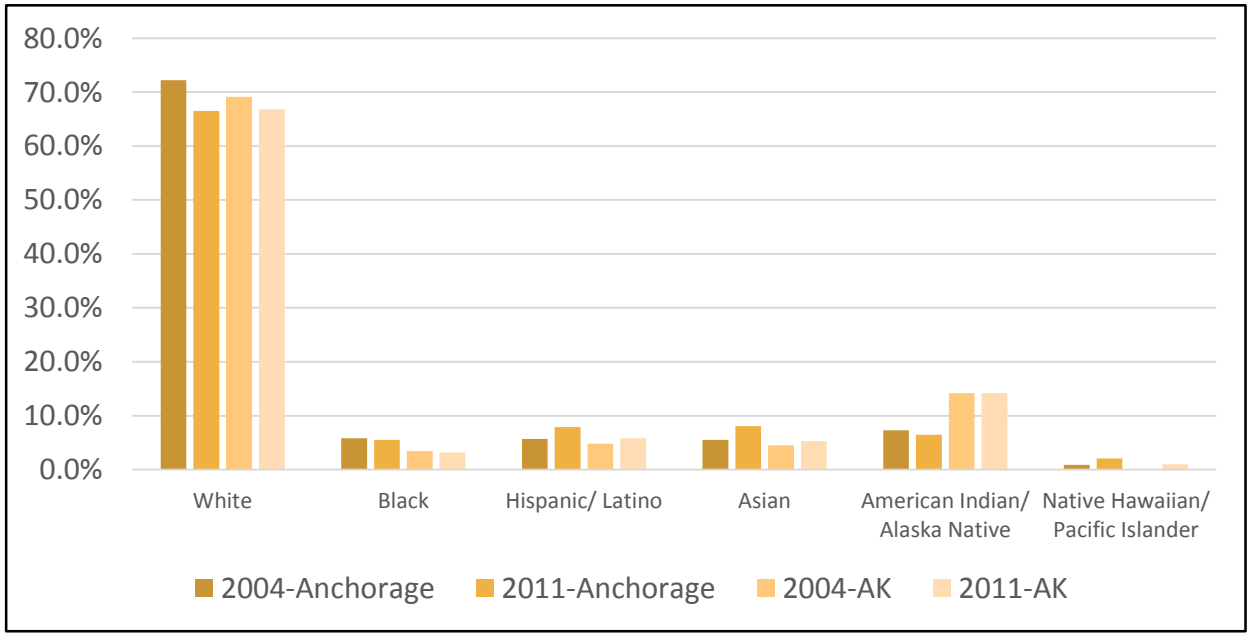
The ICF Macro team collected county-level sociodemographic data for the baseline and follow-up years of Anchorage's timeline, 2003–2004 and 2010–2011, respectively. The data gathered prior to the site visit was helpful to better understand contextual factors in the community that may affect the population and any changes in health outcomes. Variables collected include basic demographics such as total population, race/ethnicity, educational attainment, unemployment rate (adults aged 20–64), percentage living below the Federal poverty level (aged 18–64) and percent of adults without health insurance (aged 18–64). To establish a baseline and follow-up, 2004 and 2011 demographic data were taken at the county level from the U.S. Census American Community Survey.

The data presented below in Table B-1 and Figure B-1 below provide a snapshot of the demographic shifts that took place in Anchorage between 2004 and 2011 as compared with the state of Alaska overall..

Table B-1: Anchorage and Alaska Demographic Data, 2004 and 2011

Demographic Variable	Anchorage		Alaska	
	2004	2011	2004	2011
Population	260,283	295,570	641,724	722,718
Unemployment	4.7%	7.7%	6.0%	8.7%
Living below poverty	5.1%	7.6%	10.1%	9.3%
No health insurance	Not available	20.6%	Not available	25.8%
High school diploma or less	43.0%	40.2%	66.6%	54.4%

Figure B-1: Anchorage and Alaska Population Percentage by Race/Ethnicity, 2004 and 2011



Nutrition and Physical Activity Context

ICF also collected food and physical environment data for 2004 and 2011 to provide a more comprehensive snapshot of Anchorage at the project baseline and follow-up years. Environmental data related to the food environment and physical activity environment were largely compiled from County Business Patterns (CBP),[1] an annual series producing economic data by industry with business categorized according to the North American Industry Classification System. To establish a measure of the food and physical activity environment, we extracted data for the following categories: grocery store,[2] convenience store (including gas stations with convenience stores),[3] fruit and vegetable markets,[4] full service restaurants,[5] limited service restaurants,[6] and fitness/recreation centers.[7] The number of establishments by type was documented for 2004 and 2011 and divided by the total population county to arrive at the number of establishments per 1,000 residents. In addition to data from the Census CBP, we also assessed the number of farmers markets in the area and the payment method accepted using data of the United States Department of Agriculture's Farmers Market Directory.[8] Data were not available retrospectively, so numbers reflect the number of farmers markets in the area as of 2014. Lastly, we used data from the County Health rankings to capture the percentage of county residents with access[9] to recreation opportunities. These data were only available for 2014.

The food environment data suggests an overall increase in the availability of food-related establishments from 2004 to 2011, as indicated in Table B-2 below.

Table B-2: Anchorage Food Environment Data, 2004 and 2011

Store Type	Establishments 2004	Establishments 2011
Grocery store	41 0.16 per 1,000 residents	36 0.12 per 1,000 residents
Convenience stores (with and without gas stations)	65 0.25 per 1,000 residents	57 0.19 per 1,000 residents
Fruit and vegetable markets	2 0.01 per 1,000 residents	1 0.003 per 1,000 residents
Full service restaurants	205 0.79 per 1,000 residents	535 1.81 per 1,000 residents
Limited service restaurants	184 0.71 per 1,000 residents	397 1.34 per 1,000 residents
Farmers Markets		
6 as of 2014	All accepting Supplemental Nutrition Assistance Program (SNAP), five accepting WIC, and three accepting both SNAP and WIC	

[1] U.S. Census Bureau. (n.d.). *County business patterns.* Retrieved September 17, 2015, from http://www.census.gov/econ/cbp/.
[2] Establishments generally known as supermarkets and grocery stores primarily engaged in retailing a general line of food, such as canned and frozen foods; fresh fruits and vegetables; and fresh and prepared meats, fish, and poultry. Included in this industry are delicatessen-type establishments primarily engaged in retailing a general line of food.
[3] Establishments known as convenience stores or food marts primarily engaged in retailing a limited line of goods that generally includes milk, bread, soda, and snacks.
[4] Establishments primarily engaged in retailing fresh fruits and vegetables.
[5] Establishments primarily engaged in providing food services to patrons who order and are served while seated (i.e., waiter/waitress service) and pay after eating.
[6] Establishments primarily engaged in providing food services (except snack and nonalcoholic beverage bars) where patrons generally order or select items and pay before eating. Food and drink may be consumed on premises, taken out, or delivered to customers' location.
[7] Establishments primarily engaged in operating fitness and recreational sports facilities featuring exercise and other active physical fitness conditioning or recreational sports activities, such as swimming, skating, or racquet sports.
[8] U.S. Department of Agriculture, Agriculture Marketing Services. National Farmers Market Directory—2014. Retrieved September 14, 2015, from http://www.ams.usda.gov/local-food-directories/farmersmarkets.
[9] Access is defined as living in a census block that is within 0.5 miles of a park, within 1 mile of a recreation facility in urban areas, or within 3 miles of a recreation facility in rural areas.

The physical activity environment access data, presented in Table B-3 below, suggests an overall increase in the availability of fitness centers from 2004 to 2011, 0.12 per 1,000 residents in 2004 and 0.12 per 1,000 residents in 2011. In 2014, 92% of Anchorage residents had access to at least one recreation opportunity.

Table B-3: Anchorage Physical Activity Environment Access Data, 2004 and 2011

Type of Physical Activity Environment Available	Establishments 2004	Establishments 2011
Availability of fitness centers	*0.12 per 1,000 residents*	*0.12 per 1,000 residents*
Recreational Opportunities		
92% of Anchorage residents lived within 1 mile of at least one recreation opportunity		

APPENDIX C. INTERVIEWEES AND TITLES

Site visitors conducted a total of 19 interviews with 22 people. On average, the interviews lasted approximately one hour. Below is a list of the interviewees for Anchorage and their titles at the time of the interviews.

Name	Title
1. Melanie Sutton	Anchorage School District, Physical Education and Health Curriculum Director
2. Alden Thern	Anchorage School District, Student Nutrition Director
3. Ladonna Dean	Anchorage School District, Student Nutrition Dietitian
4. Dr. Andrea Fenaughty	Alaska Department of Health and Social Services, Obesity Prevention and Control Program, Deputy Section Chief & Epidemiologist
5. Ann-Marie Martin	Alaska Department of Education & Early Development, CACFP Coordinator
6. Beth Nordlund	Anchorage Park Foundation, Executive Director
7. Carol Comeau	Anchorage School District, Retired Superintendent
8. Diane Peck	Alaska DHSS, Obesity Prevention and Control Program, Public Health Nutritionist
9. Dirk Shumaker	Kids' Corp Incorporated (Head Start), Executive Director
10. Dr. Jay Butler	Alaska DHSS, Chief Medical Officer/Director
11. Dr. Mandsager	Chief Executive PAMC, Children's Hospital of Providence
12. Dr. Peter Mjos	Retired Family Medicine physician
13. Harlow Robinson	Healthy Futures, Executive Director
14. Johanna Herron	State of Alaska, Division of Agriculture, Farm to School Program Coordinator
15. Karol Fink	Alaska DHSS, Obesity Prevention and Control Manager
16. Laura Arrington	Anchorage Municipal Department of Health, Childcare Licensing Division, Supervisor
17. Nancy Edtl	Anchorage School District, Health Services, Director
18. Nathan Johnson	Strategic Planning, Business Planner, Providence Hospital (Previous Director of Planning, Anchorage Health and Human Services)
19. Beverly Wooley	Alaska Native Tribal Health Consortium (Previous Director, Anchorage Health and Human Services)
20. Randi Sweet	United Way of Anchorage, Chair
21. Sharon Vaissiere	Anchorage School District, Retired Health & Physical Education Coordinator
22. Stephanie Berglund	Thread, CEO

APPENDIX D: ALASKA CHILDHOOD OBESITY POLICIES, 1999–2013

Year	Policy Name/Number	Description
1999	Health and Safety Education; AS § 14.30.360 Curriculum	Each district in the State public school system shall be encouraged to initiate and conduct a program in health education for kindergarten through grade 12. The State board shall establish guidelines for a health and personal safety education program. Personal safety guidelines shall be developed in consultation with the Council on Domestic Violence and Sexual Assault.
2002	Alaska Admin. Code tit. 4, § 06.075; High school graduation requirements (originally enacted in 1978)	One unit of credit of health/physical education is required.
2007	7 AAC 57—Child Care Facilities Licensing	• 7 AAC 57.520. Program. (a) A child care facility shall provide structure and daily activities designed to promote a child's individual physical, social, intellectual, and emotional development. • 7 AAC 57.535. Behavior Guidance. (a) A child care facility shall help a child to develop age-appropriate patterns of behavior that foster constructive relationships and increasing ability to deal with everyday life. • 7 AAC 57.560. Nutrition. (a) A child care facility shall ensure that snacks and meals meet the child care food program requirements of 7 C.F.R. 226.20.
2010	AS § 14.30.375 School gardens, greenhouses, and farms (repealed on July 1, 2014)	Establishes the farm-to-school program in the Department of Natural Resources, relates to school gardens, greenhouses and farms, and relates to funding.
	AS § 03.20.100. Farm-to-school program established (repealed on July 1, 2014)	The farm-to-school program is established in the department to increase the procurement and use by public schools of food grown in the State.
	4 AAC 04.140. Content standards (Originally enacted in 2000)	Establishes new regulations concerning physical education standards. The content standards for physical education, as set out in the department's publication entitled Alaska Physical Education Standards, as revised as of March 9, 2010, are adopted by reference.
	AK HB 70 (enacted)	Establishes a farm-to-school program in the Department of Natural Resources with provisions related to school gardens, greenhouses, and farms.

Year	Policy Name/Number	Description
2011	Senate Bill 46	Makes and amends appropriations, including capital appropriations and other appropriations. Appropriates funds for improvement of school playgrounds and gyms, park renovations, sports field development, trail rehabilitation, bicycle and pedestrian facilities, traffic and pedestrian safety improvements, public transit programs, and highways and facilities.
2013	AK HCR 1 (resolution adopted)	Establishes a State food resource development working group to work with the Alaska Food Policy Council to identify resources and set policies to build a strong and sustainable healthy food system in the State.

APPENDIX E: ANCHORAGE MATRIX OF STRATEGIES

Name of Strategy	Setting				Focus Area			Type		
	ECE	Schools	Community	Health Care	Nutrition	Physical Activity	Built Environment	Program	Policy	Media Campaign
Anchorage Municipal Childcare Licensing Revisions	X					X			X	
Anchorage School District: Nutrition Changes		X			X				X	
Anchorage School District: Health, Wellness, and Physical Education		X			X	X		X	X	
Mayor's Task Force on Obesity and Health			X		X	X	X	X		
School Wellness Committee, Policy, and 6-year Plan		X			X	X		X	X	
Nike Go (PA program)	X				X	X		X		
Color Me Healthy	X				X	X		X		
I am Moving, I am Learning	X				X	X		X		
Anchorage School District: Health Services/ School Nurses		X			X	X			X	
Alaska School Wellness Toolkit		X			X	X			X	
Student weight status surveillance		X			X	X			X	
Head Start-based interventions	X				X	X		X	X	
Head Start PA and nutrition manual	X				X	X			X	
Healthy Futures		X	X			X		X		
State Health and Wellness Institute		X			X	X		X	X	
Playtime… So Good for Me	X				X	X		X		X
Providence Hospital and Baby Friendly Certification				X	X			X	X	X
Anchorage Pedestrian Plan			X			X	X		X	
Anchorage Bicycle Plan			X			X	X		X	
Get Outdoors, Anchorage! (local coalition of health, education and conservation experts)		X	X			X		X		
Play Every Day (State DHSS public education campaign)		X	X			X		X		
Trail plan/increased trail connectivity/trail lighting			X			X	X	X	X	X
Let's Move!	X	X	X	X	X	X		X	X	X
Farmers markets			X		X			X	X	
Double-up Food Bucks (Quest is Alaska's version of the Electronic Benefit Transfer)			X		X			X	X	X
Farm to School		X			X			X	X	
Kids in the Kitchen		X			X			X		