

Fort Worth, Texas

- ↑ **31% decrease in smoking**, reducing smoking rate to 13.5%
- ↓ **Nine-point increase** in residents who exercise at least 30 minutes three or more days of the week, now at 62%
- ↑ Overall 2018 Well-Being Index score rose to 62.5, **a gain of 3.7 points or 6%** since 2014
- ↓ **\$20B Lifetime Reduced Smoking Value**

Since the launch of Blue Zones Project in Fort Worth, the health and well-being of residents has surged while the U.S. overall health score has dropped. According to the annual Gallup-Sharecare Well-Being Index®, Fort Worth's overall 2018 Well-Being Index score rose to 62.5, a gain of nearly four points since 2014, when the city began working with Blue Zones Project®.

Each point increase in well-being for a population leads to approximately a two percent reduction in ER visits and hospital utilization, and to approximately a one percent reduction in total health care costs. This equals tens of millions of dollars of healthcare savings per year.

Meanwhile the U.S. Well-Being Index score—which outpaced the Fort Worth score by 3 points in 2014—is 61.3, a decline of 0.5 over the same period. Compared annually to close to 190 metro areas reported nationally, Fort Worth's equivalent rank for well-being rose from 185th in 2014 to 58th in 2017.

According to the Gallup-Sharecare Well-Being Index (WBI):

- Adult residents of the Fort Worth have reported substantially elevated levels of overall well-being in the four years since measurement began in 2014.
- Fort Worth's Well-Being Index score 2018 = 62.5
- Fort Worth's Well-Being Index score 2014 = 58.8

The section of the city with the lowest well-being, East Southeast, saw the greatest improvement. With a 10.9% well-being improvement over five years, which is a 6.1-point increase moving from 55.9 in 2014 to 62.0 in 2018.

What happens when you increase well-being by 1-point?

- ↓ **2.2% less** likelihood of hospital admission
- ↓ **1.7% less** likelihood of ER visit
- ↓ **1.0% less** likelihood of incurring healthcare costs

What happens when you increase well-being by 10%?

- ↓ **5.0% fewer** unscheduled absences
- ↑ **5.0% higher** reported job performance
- ↑ **6.0% more** days of 'best work' in 28-day period

*This occurred during a period of decline in well-being nationally, with the U.S. Well-Being Index score dropping from 61.8 in Q2-2014 to 61.3 in Q2-2018.

Fort Worth moved from 185th to 58th in the Gallup-Sharecare annual database of around 190 U.S. communities. Fort Worth has also had statistically significant improvement in all five elements of well-being since baseline year.

Reduced Smoking Rates in Fort Worth, TX:

- Adult Smoking Rate in 2018 = 13.5%
- Adult Smoking Rate in 2014 = 19.6%

Fort Worth has saved an estimated \$268 million in 2018 compared to 2014 based due to the reduced smoking rate among its adult residents.

Gallup estimates Fort Worth's lost productivity due to smoking (at a rate if 19.6%) was about \$602 million per year across all of its employers in 2014. In 2018 Gallup estimates that these lost productivity costs were reduced by about \$187 million per year as a function of the lower smoking rate, likely representing a substantial boost to the economy.

In Fort Worth, the 6.1 percentage point estimated reduction in adult smoking translates to 38,074 fewer smokers than in 2014, yielding a savings in health care utilization of about \$81 million per year compared to that year.

Other well-being improvements:

- Exercise 30 plus minutes, 3x days, week: Improved 9 points from 53% in 2014 to 62% in 2018
- Agree city/area is perfect place for you: Improved from 61.9% in 2014 to 65.6% in 2018
- Agree proud of community: Improved 5.6 points from 63.8% in 2014 to 69.4% in 2018
- Schools & Youth Impact
- Won \$3.2 Million in Safe Routes to School funding for seven FWISD schools
- Youth smoking decrease: Percentage of youth who report currently smoking cigarettes at least once in the last 30 days has declined from 9% in 2015 to 5.5% in 2017, according to the Youth Risk Behavior Surveillance Survey (YRBS)
- Youth e-cigarette decrease: Percentage of youth who report currently using electronic vaping products at least once in the last 30 days has declined from 19.9% in 2015 to 7.4% in 2017, according to the YRBS Policy Impact & Funding

- Partnered with City and community partners to secure over \$9.9 Million in funding for built environment policies and infrastructure projects and \$656 Thousand in funding for community and school gardens, increasing fresh fruits and vegetables in schools, and a corner store transformation
- \$15 Million allocated for sidewalks and bicycle infrastructure and \$5 Million allocated for Safe Routes to School improvements out of 2018 bond, ten-fold increase in SRTS funding from previous bond
- Significant increase in the number of miles of bicycle infrastructure: Miles of bike lanes have increased from 9.6 miles in 2010 to 86.8 miles in 2018, and miles of bike routes (sharrows or bike route signage) have increased from 68 miles in 2010 to 87.2 miles in 2018.

Food Systems Case Study:

- City Healthy Food Financing Initiative – with low to no interest loans, retailers can open, renovate or expand retail outlets that provide fresh produce.
- Urban Agricultural Ordinance – allows vacant lots within the city to be used for the development of urban farms with rezoning. Community and backyard gardens allowed to have small temporary sales on-site.

Media Valuation:

- Media mentions at \$4,424,635 advertising equivalency
- 2.3B total reach
- 100% positive or neutral coverage
- 2,195 total news stories

“Fort Worth showed early promise in its efforts to improve the well-being of its residents with impressive gains in 2015 and 2016 compared to its baseline year of 2014. After mirroring national trends and taking a step back last year, Fort Worth’s latest jump in well-being in 2018, as the U.S. continues to decline, securely establishes it as a best practice example of what a community can accomplish when it sustains a focused commitment to well-being. The work of the Blue Zones Project in Fort Worth is playing an important role in the improving well-being culture and associated outcomes of the community.” – Dan Witters, Principal at Gallup

Hawaii

While national well-being has been declining since 2016, the well-being of Blue Zones Project Hawaii communities has remained steady since their baseline year of 2015 or 2017. Blue Zones Project Hawaii communities appear to be rebounding from 2019 to 2020 despite the survey window coinciding with the COVID-19 pandemic.

IN 4M & WAHIAWA

4M Communities 2017-2019 Value Accrued:

7.2% decrease in risk = \$4M in generated value

10-year value projection from 2019:

27.7% decrease in risk = \$124M in generated value

Wahiawa 2017-2020 Value Accrued:

10.1% increase in risk = \$3.9M in generated value

Wahiawa 10 year value projection from 2019:

30.8% decrease in risk = \$78M in generated value

- The Blue Zones Project Wahiawa team partnered with other organizations and the County to help leverage \$223 thousand in grant funding for policies, programs in Wahiawa. \$13.5 million has been allocated toward bicycle and pedestrian projects in the form of the Wahiawa Bridge Project for shared use paths.
- The percentage of adults utilizing public transportation or bicycles to actively commute to work increased from 10.2% in 2017 to 12.5% in 2019 (Census).
- Twenty percent of Wahiawa residents report that it is easier to walk or bike in their community today compared to five years ago (WBI).
- Added 21.6 miles of new bike lanes County-wide
- 21 businesses donated 3,272 pounds of healthy food during a Give Healthy Food Drive in 2019 which will be an annual event
- According to FeedingAmerica.org, the percent of Honolulu

County residents who are food insecure declined from 11.8% in 2016 to 10.4% in 2018.

IN WEST HAWAII

The Healthways Simulation Model, developed in collaboration with the World Economic Forum, Harvard, Johns Hopkins School of Public Health, and Boston Consulting Group, is a predictive population health simulation model that can calculate health care-related costs associated with conditions and behaviors, forecast the incidence and progression of these diseases over time, and determine the medical and productivity value of changes in health conditions over time. The accuracy of this model was scientifically and independently tested using data available from the Framingham Heart Study, the longest-running longitudinal epidemiologic public health study of its kind, to ensure validity of the model using real data points. According to this simulation model, West Hawaii has outperformed state of Hawaii well-being trends since its baseline year of 2017, seeing 10.5 percent fewer health risks than expected if the community had followed state trends. This risk avoidance equates to \$2.96 million in avoided medical and productivity costs to the community from 2017 to 2019.

- **Adult smoking:** According to the Behavioral Risk Factor Surveillance Survey (BRFSS), the adult smoking rate on Hawaii Island has declined from 16.2 percent in 2015 to 14.9 percent in 2017. The percentage of adults using e-cigarettes has declined from 6.1 percent in 2015 to 5.1 percent in 2017.
- **Adult obesity:** Decreased island-wide from 25 percent in 2015 to

23.3 percent in 2017, according to BRFSS. In Kona, adult obesity has declined from 57 percent in 2015 to 52 percent in 2017.

- **Adult depression:** Island-wide, the percentage of adults with depression has declined from 15.1 percent in 2015 to 13.4 percent in 2017, according to BRFSS. Adult depression in Kona has also declined, from 13.3 percent in 2015 to 9.5 percent in 2017.
- **Youth smoking:** Island-wide, cigarette use by high school youth has decreased from 11.4 percent in 2015 to 10.1 percent in 2017, according to the Youth Behavioral Risk Survey.
- **Youth physical activity:** The percentage of Hawaii Island middle school youth meeting recommended physical activity guidelines increased from 16.3 percent in 2015 to 17.8 percent in 2017.
- **Produce consumption:** Fruit consumption has increased island-wide and for Kona. Across Hawaii Island, the percentage of adults reporting that they consume more than three servings of fruit daily has increased from 16.2 percent in 2015 to 18.9 percent in 2017. For Kona, the percentage of residents reporting this has increased from 17.7 percent to 20.9 percent from 2015 to 2017.
- BZP has partnered with organizations and the County to help bring \$1.39 million in grants to Hawai'i Island since the Project's start in 2015:
- Over 14 miles of new bicycle lanes have been added in the County from 2015-2019
- 50% increase in the number of farmer's markets accepting SNAP/EBT across the County, from 10 farmers markets in 2015 to 15 in 2019
- Successfully advocated for the state's passage of House Bill 1895 which requires retailers of electronic smoking devices to register with the Attorney General's office in order to sell and creates a civil offense if the retailer is selling unregistered

IN CENTRAL HAWAII

The Healthways Simulation Model, developed in collaboration with the World Economic Forum, Harvard, Johns Hopkins School of Public Health, and Boston Consulting Group, is a predictive population health simulation model that can calculate health care-related costs

associated with conditions and behaviors, forecast the incidence and progression of these diseases over time, and determine the medical and productivity value of changes in health conditions over time. The accuracy of this model was scientifically and independently tested using data available from the Framingham Heart Study, the longest-running longitudinal epidemiologic public health study of its kind, to ensure validity of the model using real data points. According to this simulation model, Central Maui has outperformed state of Hawaii well-being trends since its baseline year of 2017, seeing 4.4 percent fewer health risks than expected if the community had followed state trends. This risk avoidance equates to \$1.24 million in avoided medical and productivity costs to the community from 2017 to 2019.

- Forty percent of Central Maui residents are aware of Blue Zones Project and 18 percent are engaged with the Project
- Central Maui residents who are engaged with the Project are more likely to be thriving in their life evaluation; 80 percent of those engaged are thriving in life evaluation compared to 50 percent of those who are aware but not engaged
- Engaged residents have higher purpose well-being with 56 percent thriving in purpose, compared to only 24 percent of non-engaged residents.
- Adult smoking rate in Kahului has declined from 14 percent in 2016 to 10 percent in 2017
- Adult obesity: BRFSS data shows that the adult obesity rate in Kahului has declined from 60 percent in 2016 to 55 percent in 2017
- Over 21 miles of new bicycle lanes have been added in the County from 2015-2019

Media Valuation:

- Media mentions at \$6,694,742 advertising equivalency
- 5.1B total reach
- 100% positive or neutral coverage
- 3,130 mentions

*Selected communities stated.

Klamath Falls, Oregon

In 2015, Klamath Falls was selected to be the first Blue Zones Project demonstration site in the Pacific Northwest. Since then, local leaders, volunteers, and organizations throughout the community have worked to achieve certification status.

As a result of its efforts, Klamath Falls can celebrate:

- More than \$1.3 million in grant funding to support community well-being projects including Safe Routes to Parks, Safe Routes to Schools, a Cigarette Litter Prevention Program (resulting in a nearly 80 percent reduction in tobacco litter downtown), supporting a preventative food pantry, increasing wayfinding signage, and increasing park access.
- New ordinances that are paving the way for smoking cessation and tobacco prevention through smoke-free city parks, smoke-free events, and increased education around smoking cessation, leading to a 24 percent decrease in smoking rates since 2015.
- New city policies that support healthy eating through the creation of the county food policy council, the county nutrition options resolution, and the adoption of many healthy meeting protocols in workplaces across the community.
- Increased physical activity among approximately 4,400 students

- in the local schools by participating in Walking School Bus Days.
- Twelve approved restaurants that offer a combined 37 new healthier menu items for adults and children. Klamath Falls has also become home to a vegan eatery and juicing company, offering even more options to the community's residents.
- Increased demand for produce, which prompted a regionally owned grocery store to increase its produce section resulting in a 12% increase in produce sales.
- More than 1,113 individuals joined a Moai® walking group that promotes building friendships and moving naturally.
- More than 715 individuals have volunteered to support the Blue Zones Project in Klamath Falls.

Since 2015, Klamath Falls has seen a 24 percent decrease in smoking following Blue Zones Project implementation, advocacy, and policy work. Klamath Falls' adult smoking rate now stands at 13.1 percent,



down from 17.3 percent in 2015 according to the Gallup-Sharecare Well-Being Index. Youth smoking has also decreased, with the percentage of youth who report having smoked cigarettes in the past 30 days declining among 8th and 11th graders between 2015 and 2017. According to the Youth Behavioral Risk Survey (YBRS), for 8th graders, the percentage dropped from 6.7 percent in 2015 to 4.7 percent in 2017, and for 11th graders the percentage dropped from 11.2 percent in 2015 to 8 percent in 2017. Frequent e-cigarette use among 11th graders has also declined in Klamath Falls while it has risen nation-wide. According to the YBRS, the percentage of 11th graders who smoked e-cigarettes 3-5 days within the last 30 days declined from 4.2 percent in 2015 to 1.3 percent in 2017.

According to the Gallup-Sharecare Well-Being Index, the percentage of Klamath Falls adults who smoke has declined from 17.3 percent in 2015 to 13.1 percent in 2018.

Blue Zones Project Klamath Falls results include:

- 20 Blue Zones Project Approved worksites
- 8 Blue Zones Project Approved schools
- 10 Blue Zones Project Approved restaurants
- 2 Blue Zones Project Approved grocery stores
- 27 participating faith-based, neighborhood and community organizations

organizations

- More than 6,000 residents have taken the Personal Pledge or participated in a
- Blue Zones Project activity, like volunteering; attending a Purpose Workshop, cooking demonstration, or Blue Zones Project Story; or joining a Moai®
- The city of Klamath Falls and Klamath County have implemented key food, built environment, and tobacco policies and projects

Food Systems Case Study:

- Established on-line Farmers Marketplace: online food hub connecting local producers with consumers. Provides the only year-round location where SNAP recipients can purchase fresh produce year-round.
- Produce Connection: a network of eight drop sites where free produce is provided. Over 790,000 lbs. of produce distributed in 2018.

Media Valuation:

- Media mentions at \$2,754,967 advertising equivalency
- 1.5B total reach
- 99% positive or neutral coverage
- 2,428 total news stories

Southwest Florida

5 health risks statistically lower in Southwest Florida versus the state of Florida:

- ↓ **36% lower** in tobacco use
- ↓ **28% lower** in poor nutrition
- ↓ **17% lower** in stress
- ↓ **23% lower** in obesity
- ↓ **9% lower** in lack of exercise



SWFL Medical and Productivity Value of \$40,313,800 (accrued in 4 years 2015-2019):

- 7.2% decrease in risk
- \$27.80 avg. savings PMPY
- \$635.9M projected savings in 10 years

Value in Ad Equivalency of \$10,150,195 (2015-2020)

- 5.3B total reach
- 100% positive or neutral coverage
- 6,824 mentions
- 4 million total social media impressions

Grant Value of \$14,590,385 over 4.5 years:

- \$13,132,691 TIGER Grant Collier County
- \$907,694 Safe Routes to School
- \$200,000 MPO Grant Bonita Springs
- \$250,000 Terry Street Project Bonita Springs
- In addition, helped support purchase of Edison Farms, a 4,000 acre preserve in Estero and the Gore property in Golden Estates which put 180 in preservation for trails and passive recreation (Letter of Support, Proof of Community Collaboration). \$100,000 to establish and sustain the first SWFL Food Policy Council.

Total SWFL Value 2015-2019:

- \$40.3M Community Well-Being Value
- \$10.1M Media Value/Ad Equivalency
- \$14.5M Grant Value
- \$64.9M Total Value
- 5.0 ROI

NCH Healthcare System (3 years)

- A 4.9 point jump in overall well-being among employees
- 54% decrease in healthcare expenditures over six years
- \$27 million reduction in self-insured medical claims
- Nearly 60% of all employees pledged participation
- 40% decline in lost work days due to injury

Spencer, Iowa



After launching Blue Zones Project, Spencer, Iowa saw:

- ↓ **11% improvement** in fruit and vegetable consumption
- ↑ Workers' healthcare claims **reduced by 20%**
- ↓ Metabolic syndrome risk factors **fell from 43% to 13%** at the Spencer Hospital
- ↑ From 2010-2015, according to the Gallup-Healthways Well-Being Index, Iowa outpaced the nation in overall well-being, **improving twice the rate** of the national average

- More than 50% of community believes Blue Zones Project helped create a positive impact.
- 84 Iowa communities submitted interest, an elite 15 were chosen.
- 520,000 lives impacted by environmental changes designed to help people move naturally, eat wisely, develop the right outlook, and connect with others.
- 430,000+ actions taken by individuals to improve well-being for themselves, their families, and friends.
- 610 worksites, schools, grocery stores, and restaurants achieved Blue Zones Project designation.
- 180,245 total feet of bike lanes, trails, and sidewalks built to encourage people to move naturally.
- 142 Walking School Bus routes created to encourage students to move naturally.
- All 15 communities passed new Complete Streets policies to enable safe access for all users.
- In 2014, more than 25% of elementary students in Spencer, Iowa moved naturally to and from school.
- 60% of Spencer, Iowa's public schools are Blue Zone Schools and 67% of its grocery stores are Blue Zones Grocery Stores.

Media Valuation:

- Media mentions at \$6,970,397 advertising equivalency
- 3.6B total reach
- 99% positive or neutral coverage
- 4,222 mentions

Beach Cities, California



- ↓ **68% drop** in childhood obesity rates at Redondo Beach K-5 schools
- ↑ **15% drop** in adult obesity and overweight rates
- ↓ **36% drop** in smoking
- ↑ **10% drop** in significant daily stress since 2010

Local officials engaged Blue Zones Project because their childhood obesity levels were higher than the national average (pre-2010). Stress levels were high, particularly in affluent Manhattan Beach, measuring the same as New Orleans post-Katrina, or in Detroit. At higher than the national average, significant daily stress was an important unhealthy indicator in the Beach Cities. These three beach cities in Southern California continue to show dramatic improvements since launching with Blue Zones Project in 2010.

Obesity and Overweight Rates:

15% drop in obese and overweight adults (between 2010-2017). At 12.1 percent, the rate of obesity in the Beach Cities is less than half of the U.S. rate of 28.1 percent - meaning just one in eight Beach Cities residents are obese compared to one in four Americans nationally.

68% reduction in childhood obesity from 2007 to 2019 at Redondo Beach K-5 schools. The number of Beach Cities residents who are above normal weight (obese or overweight) fell from 60 to 50.8 percent. In contrast, 63.7 percent of U.S. adults and 58.7 percent of Californians are above normal weight.

Smoking Rates:

36% drop in smoking (between 2010-2017). The smoking rate in the Beach Cities fell to just 8.9 percent of residents - a rate significantly lower than the U.S. (18.8 percent) and California (13.7 percent).

Exercise:

Now, 65.8 percent of Beach Cities residents report exercising at least 30 minutes a day, three days a week—a 9 percent increase since 2010—compared to just 53.2 percent of adults nationally and 57.7 percent statewide.

Overall Well-Being Score:

The Beach Cities collectively earned the highest 2015 Well-Being Index score (65.9) in the U.S., outpacing all 190 metropolitan areas measured.

Individually, Manhattan Beach (68), Hermosa Beach (67) and Redondo Beach (64.8) placed first, second and fifth in the U.S. respectively.

Creating Value for Beach Cities:

Since the inception of Blue Zones Project in 2010, improvements in community well-being are valued at:

- Savings of \$21M in direct medical expenses
- Reductions in projected lost productivity of \$21M
- A cumulative total of \$42M in value
- \$341 average annual per capita value

Based on trends over the past 5 years, we project the total value of well-being improvement by 2020 to be:

- Savings of \$74M in direct medical expenses
- Reductions in projected lost productivity of \$51M
- A cumulative total of \$125M in value
- \$1,011 average annual per capita value

Albert Lea, Minnesota

↓ **\$7.5M in savings** in annual healthcare costs for employers

↑ **2.9 years added** to lifespans within one year of participating in the Blue Zones Project

↓ The Downtown Streetscape revitalization has **increased** private investment, tourism, and the tax base

Suffering in the face of the 2008 economic downturn, Albert Lea, Minnesota, was determined to transform its situation. Its leaders eagerly teamed up with Blue Zones in 2009, making Albert Lea the first Blue Zones Pilot Project, applying principles from areas around the world where people lived longer, healthier lives. Pleased with the results of the nine month pilot, Albert Lea has continued on as a Blue Zones Project community addressing built environment, tobacco policy, citizen engagement, and bringing back the downtown.

The commitment to well-being has resulted in numerous measurable impacts for Albert Lea leading incremental changes and sparking chain reactions. Impacts such as:

- \$8.6 million—savings in annual health care costs for employers as a result of a decline in smokers
- 34th place—in the Minnesota County Health Rankings (up from 68 out of 87 counties)
- 2.9 years—added to lifespans (projected) within one year of participating in the Blue Zones Project

When Blue Zones and Blue Zones Project began working with Albert Lea in 2009 to transform its policies, places, and people, the focus was on helping people move naturally, eat wisely, connect, and have the right outlook—all of which can lead to living longer, better. To make transformation a reality, city leaders and the Blue Zones Project identified key opportunities for impact and sought pledges from businesses and residents.

Community Design Improvements

In 2009, Blue Zones' expert Dan Burden led a walking audit of Albert Lea, identifying ways to create more active and healthy living environments centered around people. A Bike and Pedestrian Master Plan was created that identified areas needing improvement to align with the Complete Streets Policy, which Albert Lea was an early adopter of in 2009.

Armed with inspiration and grant money, Albert Lea created bump outs to ensure safe pedestrian crossings and wider sidewalks that provided space for outdoor dining. A five-mile route that was added around a lake within the city was affectionately named the Blue Zones Walkway by Albert Lea, and it now connects to neighborhoods, parks, downtown and past the local hospital. Stop signs were replaced with traffic lights to maintain a smooth traffic flow. Community message boards were added, and a complete park renovation with amphitheater seating provided additional community gathering space.

The improvements sparked a chain reaction of economic development. New businesses relocated to downtown Albert Lea, and the city initiated a mixed-use project to open room for income-limited housing units and commercial space in the historic downtown area.

Healthier Workplaces

Blue Zones Project offered local businesses the opportunity to become a designated Blue Zones Worksite® by completing an assessment and improvements to increase the long-term well-being of employees, customers, or students.

The simple changes were designed to provide lasting benefits to people's physical health, emotional health and social relationships. More than 45 worksites have registered with Blue Zones Project and made varying levels of change, the City of Albert Lea being one.

Blue Zones Project also recommended worksite clinics for some of the larger employers in Albert Lea to increase well-being for employees and reduce healthcare costs. Five of the top 20 partnered together to provide their employees with a dedicated worksite clinic, serving approximately 1,650 employees. Two other area worksite also opened clinics. These efforts resulted in considerable savings.

Healthy Foods

To make healthy food the easy choice for everyone in the community, Blue Zones Project provided guidance on how to offer and bring attention to foods that are more nutritious and tasty.

As a result, one of the local grocery stores implemented changes to its environment, selection of healthy options, and education and promotions to make healthier choices easier for customers.

Grab-n-go breakfast and healthy snack cart programs were introduced in various public schools to help children create healthy habits, and they've been highly received by students, educators and parents. An indoor sports arena added healthier options to its concession stand and saw a bump in sales. And the City of Albert Lea has expanded the community garden space 150%, giving residents an opportunity to grow healthy food and socialize in an agricultural environment.

Tobacco Cessation

Starting in 2009, Blue Zones Project began working with the City of Albert Lea to drive policy and environmental changes for a measured

reduction in tobacco usage.

This included changes for public housing, public parks and events, outdoor dining, as well as partnering with local businesses. Out of 18,000 residents, 4,140 were smokers in 2010, and success had the potential of reducing health care costs by \$6,000 per year, per smoker. Given the challenge of trying to implement this change and provide a new outlook toward this important public health issue, the city chose to make incremental moves over time, which have made a big impact.

MEASURABLE IMPACTS THAT TRANSFORMED THE COMMUNITY

The following progress indicators were reported by the City of Albert Lea in 2015, dating back to 2009 if the data was available.

Impact of Community Design Improvements:

- Added more than nine miles of new sidewalks and three miles of bike lanes
- More than a dozen businesses relocated to downtown Albert Lea
- Outdoor dining facilities created by three restaurants
- 96% increase in pedestrian traffic on Broadway from 2014 to 2018
- 38% average increase in biking and walking throughout the community since 2009
- Ranked above the national and state average for people feeling active and productive according to the July 2014 Gallup-Healthways Well Being Index®
- More than \$2.5 million invested in downtown building permits since 2013
- 25% increase in property value in the downtown area
- Year-over-year increase in lodging taxes due to an increase in visitors
- \$400,000 in revenue and a return of a \$1.2 million property to taxable status expected from the mixed-use downtown development

Impact of Healthier Workplaces:

- 300% increase in funds given to the City of Albert Lea by its insurance carrier for its wellness program in 2014, and medical premium increases avoided for city workers in 2014 and 2015

- \$128,000 in health care costs saved by a Blue Zones Project worksite within a year of opening a worksite clinic for its 500 employees
- The School District experienced no increase in Health Care Premiums and an 11% decrease in prescription costs as a result of their on-site clinic from 2014-2015

Impact of Healthy Foods Initiative:

- Increase sales of 130.35% from the Health Market, 12% from produce, 35.31% from frozen fruit and vegetables, 52.3% from water, and a decrease of 4.66% in soda sales at the Hy-Vee grocery store from 2009 through 2015
- 59% increase in concession sales from 2014 through 2018 at City Arena after healthy options were added
- 60% increase in breakfast participation from 2014 to 2015 in schools where the Grab-n-Go breakfast program was implemented
- 17% increased participation in the Healthy Snack Cart program in the 2014 - 2015 school year

Results of Tobacco Cessation Initiatives:

- Tobacco use eliminated at 550 units of public housing, 14 of the top 20 worksites as well as select other businesses, public parks, county fairs, other outdoor events, and outdoor dining
- Decline in smokers from 23% of adult residents in 2009 to 14.7% in 2016
- \$8.6 million savings in annual health care costs for Albert Lea employers from the decline in smokers

Additional impact:

- 2.9 projected years added to participants' lifespan within a year of participating in the Blue Zones Project
- \$120,000 worth of media impact created from being featured in local and nationwide media, publications, and websites
- Jump to 34th place in the Minnesota County Health Rankings (previously 68 out of 87 counties)
- Ranked third in "The top 10 most affordable small towns in the United States that you would actually want to live" by Realtor.com in the fall of 2015 (lakes, parks, walking paths and Blue Zones Project listed as "quality of life" indicators)

Analysis of Employer Medical Claims and Well-Being in Hawaii:

A Comparison between Certified Blue Zones Worksites and Blue Zones Project Approved Worksites and a Control Group

Health Economy, LLC | February 2019

Objectives: To determine whether employers who adopted Blue Zones Project® interventions had lower medical-claims costs or fewer patients for certain illnesses, and whether their employees had different health attitudes or behaviors, compared to employers who did not adopt any Blue Zones Project interventions.

Study design: Retrospective observational cohort study using medical claims, eligibility, and Healthways Well-Being Assessment (WBA) and Gallup-Healthways Well-Being 5 (WB5) survey data from people receiving medical coverage from Hawaii Medical Services Association (HMSA) over a 48-month period from January 1, 2014, through December 31, 2017 (1,869,480-member months total). Five employers were included in the Blue Zones Project intervention group: Hale Koa, Roya Kona Resort, Castle Medical Center, HMSA, and Foodland. Six employers constituted the control group: Pinahou School, Zippy's, Bank of Hawaii, Queens Medical Center, Costco, and Servco.

Methods: Compared slopes of medical costs for selected illnesses from intervention employers to those of control employers. Costs were broken down into each target illness, and comparisons were calculated for each. Target illnesses include anxiety, coronary heart disease, depression, diabetes (Type 2), hypertension, lipid metabolism, osteoarthritis, sleep apnea, and stroke. Frequency of the diagnosis was also calculated and compared between the intervention and control groups. Changes in health behaviors and attitudes were calculated from average responses to selected well-being survey questions, comparing the respondents' first responses to their last during the time period.

Results: The intervention group had lower medical-claims costs than the control group before Blue Zones Project interventions were adopted, and these costs became even lower over the four-year period of this study. At the twelfth month, the intervention group's weighted per-member, per-month (PMPM) cost was \$29.17, representing 83 percent of the control group's per-member, per-month cost of \$35.06. By the fourth year, the intervention group's PMPM cost was \$40.59, which was 62 percent of the control group's PMPM cost of \$64.96.

Frequency of the target illnesses was also slightly lower in the intervention group before Blue Zones Project interventions were adopted. However, the intervention group's frequency diverged further from the control group's from month 18 onwards. The difference became statistically significant in month 22, then grew until month 30, after which has remained steady (for the final 18 months).

Well-being survey respondents from the intervention group showed improvement in four out of five survey questions analyzed: life evaluation; two self-assessment questions about physical health; and produce consumption. Both control and intervention group respondents slightly worsened on getting adequate exercise, but the decline in the intervention group was less than in the control group.

Conclusions: The intervention group's trends in costs and frequency of selected illnesses were lower than the control's at the outset and became even lower during the 48-month time period. The intervention group would have had higher costs and more patients in Year Four if its performance compared to the control group had remained steady; instead, its performance improved, contributing to an estimated savings of \$1.8 million. The intervention group also had improvement (or less deterioration) in relevant health attitudes and behaviors compared to the control group.