

# BLUE ZONES PROJECT Southwest Florida

2014 Assessment Report





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# BLUE ZONES PROJECT\* by HEALTHWAYS

#### WORKING DOCUMENT

### **Section 1: Executive Summary**

The Blue Zones Project® comes to Southwest Florida at the invitation of NCH Healthcare System and other community leaders. Currently, NCH is partnering with Healthways to determine local readiness for bringing Blue Zones Project to Southwest Florida in support of a 10 year vision to make the community an even healthier, happier and more vibrant place to live.

Healthways and NCH Healthcare System (NCH) share a commitment to improving the well-being of Southwest Florida, thereby lowering healthcare costs, increasing productivity, and improving the economy and quality of life for all residents.

**Southwest Florida as a Viable Blue Zones Project Community:** From October to December of 2014, the Blue Zones Project team met with key community leaders and hosted small group meetings to learn about existing efforts to improve community well-being and identify strengths and opportunities that will inform a phased implementation approach in the county and specific community Blueprints.

A detailed assessment of Southwest Florida counties concludes this community, coupled with identified leadership and partners, can be a viable Blue Zones Project community. The current efforts underway with policy leaders, schools, worksites, healthcare, and civic organizations, combined with commitments of early adopters, demonstrate a community primed for transformation and improved well-being.

Community stakeholders from Southwest Florida demonstrated tremendous support and collaborative spirit in support of pursuing a Blue Zones Project initiative. Further conversations will be required to ensure alignment across the entire region (Golden, Gate, Immokalee, Ave Maria, Marco Island, etc). However, these communities will be critical to the success of the overall initiative.

This assessment summary outlines the recommended approach, findings by sector, and high-level implementation steps. Please reach out to Christy Catlin by email at <a href="mailto:Christine.Catlin@healthways.com">Christine.Catlin@healthways.com</a> if you find parts of this report to be inaccurate or misrepresentative of the community. We are open to your feedback and would be happy to visit with you about your concerns and/or suggestions.

**Proposed Results:** Based on the assessment team's findings, Healthways is confident the Blue Zones Project can deliver proven and measureable improvements in well-being, as seen in other cities. Based on experience with similar projects in California and Iowa, and projects underway in Texas and Hawaii, the goals of the Blue Zones Project are to:

- Improve well-being, as measured by the Gallup-Healthways Well-Being Index, beyond best comparable results in Florida and the region;
- Generate significant medical cost savings and productivity improvement over the project term;
- Lower the obesity rate;
- Lower smoking rates;
- Increase vegetable consumption;
- Boost economic vitality;
- Increase daily physical activity levels;



- Position Southwest Florida as nationwide innovators and leaders in preventative health, and
- Generate a high volume of media impressions in local/national press.

**Environmental and Research-Supported Change:** The Blue Zones Project focuses on driving environmental change so healthy options are easy options. The programs leverage best practices and tenets from Blue Zones, places where people live the longest, and other research-supported interventions. This approach aligns with and expands upon efforts already championed by city, county and public health leaders. Consistently noted as a primary value to Southwest Florida leaders was the potentially unparalleled ability to convene individuals across sectors, including competitors, to work together.

**Roll-out and High-level Approach:** The approach combines county-wide, city-wide and neighborhood level strategies. Healthways proposes the project roll-out over a series of consecutive community implementations spanning approximately ten years - involving every community in the region by the end of the period.

The first phase of work will require the recruitment and training of local leaders to lead and guide the Southwest Florida Blue Zones Project initiative over the 10 year period. This committee would oversee the creation of community specific "blueprints". A blueprint defines the goals and expected outcomes for the community with a detailed work plan for becoming a Certified Blue Zones Community®. From the beginning, sustainability is an important component of the project's design and implementation. The community leaders who write the blueprint will update its content annually to incorporate lessons learned and emerging priorities to improve well-being.

**Speed of Success across Sectors:** Consistently, our approach is to run concurrent, multi-sector processes to create an increased level of ownership for leaders of various sectors to inspire their peers to make the changes necessary to increase well-being. This collaboration, and sometimes friendly competition, then delivers results far faster than traditional more narrow campaigns focused on one health issue or one sector. Furthermore, the Blue Zones Project certification criteria establishes consistent, transparent criteria as guiding principles for all project work, while allowing each person, organization, and community to choose their priorities based on their goals.

**Measurement:** The Blue Zones Project utilizes rigorous metrics to inform strategies and track impact throughout the life of the project. These include both process and outcome metrics to ensure the work to transform a community is occurring and the anticipated outcomes are achieved. By utilizing a real-time instrument such as the Well-Being Index, the Blue Zones Project team can also report on the economic value derived from success.

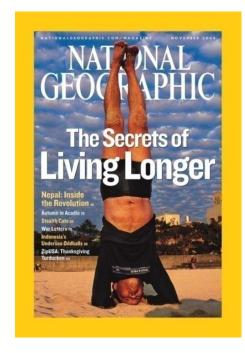
The Gallup-Healthways Well-Being Index® (WBI) is the official measurement tool for the Blue Zones Project. The WBI is the first-ever daily assessment of U.S. residents' health and well-being, giving governments, employers, and communities' unmatched insight into the health and prosperity of their populations. To-date, more than two million WBI surveys have been completed. Utilizing the WBI, the Well-being 5, and employer level measurements for Southwest Florida allows for unprecedented measurement of the specific challenges each community is facing, and the improvement through the course of the ten-year initiative.



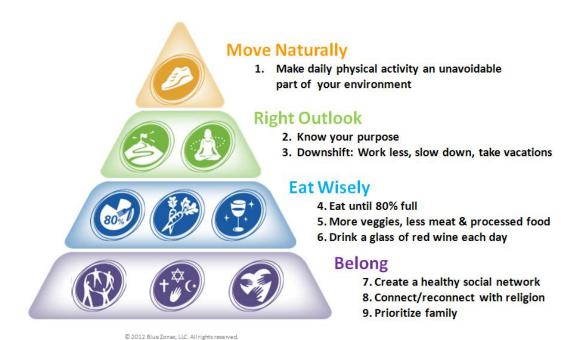
#### Section 2: Model Overview

#### What are Blue Zones areas?

Blue Zones® areas are places where people live measurably longer, happier lives with lower rates of chronic diseases and a higher quality of life. Scientists discovered five Blue Zones areas in different parts of the world; Dan Buettner documented those findings in *The New York Times* best-selling book, "The Blue Zones: Lessons for Living Longer from the People Who Have Lived the Longest" (Buettner, 2010). Physically, socially, and emotionally, these people are living their lives longer and better. This research, coupled with an ten-year worldwide longevity study, has been used to develop lifestyle management tools and programs that help people live longer, healthier, and happier lives by optimizing their surroundings. Central to the Blue Zones Project are the Power 9® principles, identified as shared lifestyle traits across all five identified Blue Zones areas:







**Move Naturally:** Individuals should strive to design their homes, communities, and workplaces with natural ways to move that nudge people into physical activity. Focus should be given to favorite activities, as the individual will be more likely to practice them regularly; for instance gardening, walking, and playing with one's family.

**Right Outlook:** Individuals must know and be able to articulate their sense of purpose and ensure their day is punctuated with periods of calm.

**Eat Wisely:** In most cases, fad diets do not provide sustainable results; individuals and families should use time-honored strategies for:

- Eating 20% less at meals;
- Avoiding meat and processed food;
- Eat primarily a plant-based diet and;
- Drink a glass of wine daily, if appropriate.

**Belong:** Research indicates it is exceedingly important that people surround themselves with the "right" people—the ones who make them happy. Time should be taken to put loved ones first, as well as maintain connection with their spiritual sides.



### **Blue Zones Project Partners**

Healthways and Blue Zones, LLC formed a partnership, known as the Blue Zones Project®, to work with select communities to improve their vitality and well-being. We combined Blue Zones' research around longevity and environmental transformation with Healthways' expertise in sustainable well-being improvement solutions, enlisting the support of numerous expert partners around a common purpose. Our purpose is to ignite and lead a broad-scale, city-by-city environment well-being transformation, creating healthier, happier, and more productive citizens—all living and working together in vibrant cities across America.

Healthways brings years of research and innovation to Southwest Florida's counties' population. This includes the Gallup-Healthways Well-Being Index and the Blue Zones Project™. The Well-Being Index® was founded in 2010 by Gallup and Healthways and merges decades of clinical research and development expertise, health leadership, and behavioral economics research to track and understand the key factors that drive well-being. Through the Well-Being Index, more than 2 million individuals around the country have been surveyed, creating the nation's largest database of well-being data. We leverage the Well-Being Index to benchmark national, state, and congressional district-level population well-being data captured in the Well-Being Survey. Because the survey leverages the same well-being areas that are central to the Gallup-Healthways Well-Being Index, Healthways is able to provide Southwest Florida counties unparalleled data comparisons. This powerful data affords clients a targeted approach to well-being improvement instead of a "one-size-fits-all" approach to population health management. It allows for a laser-focus on geographical areas with different needs.

In 2009, The Blue Zones Project began to develop a comprehensive strategy to impact community well-being based on the research and work of Dan Buettner and Blue Zones, LLC. Healthways partnered with Buettner and Blue Zones to create a scalable community well-being improvement model that includes focused collaboration and pledges between government leadership, businesses, schools, and community members, all working to create a healthier community. Lessons from the Blue Zones Project, including working with community leaders, schools, faith communities, grocery stores, employers, and restaurants to promote well-being, can be leveraged to support Southwest Florida counties.

Together, this collaborative approach engages the business community (including employers, grocery stores, and restaurants), government entities, non-profits, faith communities, schools, media, and citizens in a unifying campaign that drives permanent changes to encourage individuals to choose healthy options.

As mentioned above, The Blue Zones Project team will initially focus on Collier County before expanding to other areas of Southwest Florida. Therefore, our team focused primarily on Collier County for the demographics and health metrics assessment; however, it is important to note the team will continue to assess other counties as their start dates are identified.



### **Collier County Demographics**

With a population of 339,642, Collier County is very diverse. After two decades of accelerated population increases, Collier County's growth rate appears to follow the pace of the state of Florida through the year 2040. The county includes areas of high affluence and numerous areas of low income and poverty level communities. With the average household income at \$94,483, over 41% of the population reports an average household income below \$50,000. The table below illustrates average household income estimates as of March 31, 2013 according the Collier County Community Health Needs Assessment.

HOUSEHOLD	POPULATION	PERCENT	
\$0 - \$19,000	21,677	12.60%	
\$20,000 - \$49,999	49,395	28.80%	
\$50,000 - \$74,999	31,958	18.60%	
\$75,000 - \$99,999	21,258	12.40%	
\$100,000 - \$149,999	23,186	13.50%	
\$150,000 +	19,087	11.10%	
Source: Collier County Community Health Needs Assessment			

Collier County is also racially diverse. The table below illustrates the most recent breakdown of Collier County by race according to the Collier County Community Health Needs Assessment.

RACE	POPULATION	PERCENT
White	276,806	68.00%
Hispanic	99,133	24.40%
Black	21,477	5.30%
Asian	4,365	1.10%
Other	4,862	1.20%
Source: Collier County Community Health Needs Assessment		

The adult population accounts for over 80% of the population, with 26.4% of adults 65 years of age or older.

POPULATION AGE AND GENDER				
Population Age	Children under age 18: 19.50%			
	Adults (18-64)	54.10%		
	Adults (65+)	26.40%		
Population Gender	Male	49.30%		
	Female	50.70%		
Source: 2010 U.S. Census Bureau Data				

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#### **Health Metrics**

The Collier County Community Health Needs Assessment allowed our team to capture a clear picture of the physical health issues facing the residents of Collier County. The assessment revealed 77% of deaths are due to (in ranking order): cancer, heart disease, chronic lower respiratory disease, stroke, unintentional injuries, Alzheimer's disease, diabetes mellitus, chronic liver disease and cirrhosis, kidney disease and Parkinson's disease. Lung cancer is the leading cause of all cancer deaths in the county, which accounted for 27 percent of all cancer mortality in 2011. In addition, 50% of adults in Collier County have at least one chronic condition or disease. The burden of chronic disease affects the entire community. For individuals it limits functionality, well-being, and productivity. All of these outcomes affect an individual's quality of life, as well as the lives of families, friends, and coworkers. For the community, an individual's health impacts total medical spend and costs associated with absenteeism and productivity.

In Collier County, diabetes is the 7<sup>th</sup> leading cause of death and chronic liver disease and cirrhosis of the liver is the 8<sup>th</sup> leading cause of death for this population. Excessive alcohol consumption, chronic hepatitis C, and obesity are all risk factors for chronic liver conditions. Males engage in heavy or binge drinking at much greater rates than females in the county and income level appeared to be a predictor of consumption (the higher the annual income, the more prevalent the overconsumption). While physical health is very important, we know a person's well-being includes more than just the physical component. A person's financial health, social health, physical health, sense of purpose, and community infrastructure all impact longevity.

Collier County has varying levels of well-being, according to the 2014 Gallup-Healthways Well-Being Index. The Well-Being Index (WBI) score is an average of six sub-indexes: Life Evaluation, Physical Health, Emotional Health, Healthy Behavior, Work Environment, and Basic Access. To compile Gallup-Healthways Well-Being Index, Gallup completes 500 telephonic surveys globally, seven days a week.

#### **Well-Being Analysis: Florida Counties**

The figure below shows the variation in 2013 Gallup-Healthways Well-Being Index (WBI) scores by county across the state of Florida with green shading indicating counties in the top quintile of WBI for all counties in the United States (highest well-being scores) and red shading indicating counties in the bottom quintile of WBI for all counties in the United States (lowest well-being). Over 9,700 surveys were conducted across the state of Florida to produce this analysis (see *State of American Well-Being 2013* report at http://info.healthways.com/wellbeingindex for more information). There is great variation in the well-being of Floridians as evidenced by several counties falling into each of the five quintiles for well-being. Unfortunately, there are more Florida counties with low well-being (31 counties fall into the 4<sup>th</sup> and 5<sup>th</sup> quintiles) than with high well-being (20 counties fall into the 1<sup>st</sup> and 2<sup>nd</sup> quintiles). Hence, the state of Florida ranks 30<sup>th</sup> out of 50 states in the 2013 Gallup-Healthways WBI ranking of state well-being, indicating many areas for improvement. For Florida, the well-being domains of work environment (35<sup>th</sup>) and basic access to care (36<sup>th</sup>) had the lowest scores while the state ranked in the middle for all states in the emotional health (24<sup>th</sup>), physical health (25<sup>th</sup>), and life

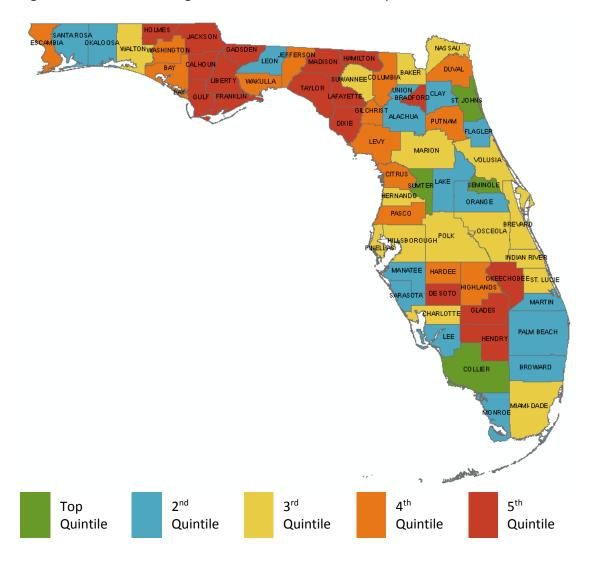


evaluation domains (29<sup>th</sup>). Florida's best well-being domain is its work environment, ranking 12<sup>th</sup> of all states in this area.

As indicated by green shading, Collier County ranks in the top quintile of all U.S. counties for well-being along with St. Johns, Seminole, and Sumter Counties. Lee County ranks in the second quintile along with 15 other counties in Florida. While these results indicate that Collier and South Lee Counties have relatively high well-being compared to most counties in the United States, a more detailed analysis of WBI scores by zip code within Collier and South Lee County reveal that high well-being is not present in all neighborhoods. While the aggregate WBI data for Collier and South Lee County indicates higher well-being, there are several zip codes and neighborhoods within these counties that have very low well-being. The next section describes the great variation in well-being by zip code/neighborhoods within Collier and South Lee Counties. This data is used to inform the Blue Zones Project strategy to focus resources on neighborhoods with the greatest room for well-being improvement and leverage strengths in one domain of well-being, such as work environment, to improve lower-scoring well-being domains such as basic access and life evaluation.



Figure 1. Relative Well-Being Scores for Florida Counties Compared to all Counties in the United States





#### WELL-BEING BASELINE ANALYSIS: COLLIER COUNTY AND SOUTH LEE COUNTY ZIP CODES

The table below ranks zip codes within Collier and South Lee Counties by WBI score (column titled "Well-Being Score"). The zip code with the highest aggregate well-being score is at the top of the list, and the zip code with the lowest aggregate well-being score is at the bottom of the list. Dark green shading indicates high well-being and dark red shading indicates low well-being with intermediate shading indicating the range between high and low well-being. The zip codes are further described by the Metropolitan Statistical Area (MSA) they fall within and the major neighborhoods they encompass. While zip codes are ranked by aggregate well-being score, we have also displayed relative rankings for each of the six well-being domains (life evaluation, emotional health, work environment, physical health, healthy behaviors, and basic access) for each zip code. Zip codes with higher aggregate well-being generally score higher in each of the six well-being domains than zip codes with lower aggregate well-being. However, every community has room for improvement. It is not uncommon for a community with high aggregate well-being to score poorly in one or more of the well-being domains. This detailed analysis by zip code/neighborhood and well-being domain allows Blue Zones Project to work in and engage all communities but focus resources on the specific well-being domains that have the greatest room for improvement within each community.

As demonstrated in the table below, the Central Naples (34105) neighborhood has the highest aggregate well-being score of all neighborhoods in Collier and South Lee County, closely followed by the Naples Park/Pelican Bay/Pine Ridge (34108), Venetian Bay/Doctors Bay/Moorings Bay (34103), and Marco Island (34145) neighborhoods. The Rural Estates (34117) area of Collier County has the lowest well-being of all zip codes in Collier and South Lee County, scoring poorly on all of the well-being domains, but particularly poorly on life evaluation, emotional health, healthy behaviors, and basic access. Immokalee/Ave Maria (34142), Golden Gate (34116), and Orangetree (34120) also have poor overall well-being, with particularly low scores in the well-being domains of life evaluation, healthy behaviors, and basic access to care. Interestingly, the bottom three zip codes for aggregate well-being in Collier and South Lee County (Rural Estates, Orangetree, and Golden Gate) have their best well-being scores in the work environment domain. This provides an important opportunity to leverage the work environment in these low well-being neighborhoods to improve the domains of basic access, healthy behaviors, and life evaluation where residents in these neighborhoods are reporting low well-being.

In South Lee County, the western part of Bonita Springs (34134) has higher well-being than the eastern part of Bonita Springs (34135); however, there are still several areas for improvement in western Bonita Springs as evidenced by low scores in the well-being domains of life evaluation, work environment, and physical health. Eastern Bonita Springs has the greatest areas for improvement in the well-being domains of physical health and basic access, but has better emotional health than zip codes with higher aggregate well-being such as Downtown Naples/Naples Bay (34102), Fiddler's Creek/Rookery Bay (34114), and North Naples/Naples Walk (34109). The South Lee County community of Estero (33928) has a similar aggregate well-being score to Bonita Springs West; however, its greatest areas for improvement differ, with the healthy behaviors domain having the greatest room for improvement and high emotional well-being a key strength in the community.



**Table 1.** Collier and South Lee County Zip Codes Ranked by Aggregate Well-Being Score and Relative Well-Being within each of the Six Well-Being Domains. *Dark green shading indicates high well-being and dark red shading indicates low well-being with intermediate shading indicating the range between high and low well-being.* 

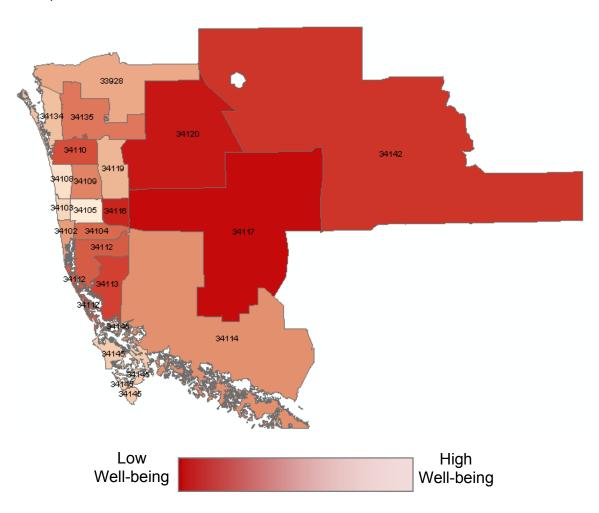
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34103										
MARCO   MARC	34108	NAPLES								
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	34120	NAPLES	Orangetree							
34117 NAPLES Rural Estates			-							
	34117	NAPLES	Rural Estates							

<sup>\*</sup>MSA=Metropolitan Statistical Area



The figure below is a mapped representation of the relative ranking of aggregate well-being scores for each zip code within Collier County and three zip codes in South Lee County(33928, 34135, 34134), corresponding to the communities of Bonita Springs and Estero. Dark red shading indicates zip codes with the lowest aggregate well-being scores (lowest well-being) and the lightest shading indicates zip codes with the highest aggregate well-being scores (highest well-being) within Collier and South Lee Counties. This graphical representation is aligned with the Table 1 above, showing Immokalee/Ave Maria (34142), Golden Gate (34116), Orangetree (34120), and Rural Estates (34117) shaded dark red as they have the lowest aggregate well-being compared to all of the zip codes/neighborhoods in Collier and South Lee Counties. The Central Naples (34105), Naples Park/Pelican Bay/Pine Ridge (34108), Venetian Bay/Doctors Bay/Moorings Bay (34103), and Marco Island (34145) neighborhoods all have light shading to indicate their relatively high well-being compared to all zip codes/neighborhoods in Collier and South Lee Counties.

**Figure 2.** Relative Rankings of Aggregate Well-Being Scores by Zip Code in Collier County and South Lee County





# WELL-BEING ANALYSIS: SOUTHWEST FLORIDA COUNTY ZIP CODES/NEIGHBORHOODS BY WELL-BEING DOMAIN

Figures 3 through 8 below map the relative well-being scores for each of the six well-being domains by zip codes in Collier and South Lee Counties. Dark red shading indicates zip codes with the lowest well-being score for the particular well-being domain and the lightest shading indicates zip codes with the highest well-being score for the particular well-being domain. In addition to all zip codes within Collier County, three zip codes from South Lee County are mapped (33928, 34135, 34134), corresponding to the communities of Bonita Springs and Estero. The following figures align with *Table 1. Collier and South Lee County Zip Codes Ranked by Aggregate Well-Being Score and Relative Well-Being within each of the Six Well-Being Domains*, mapping the relative well-being of each zip code within each of the six well-being domains.

Figure 3 shows the relative well-being scores by zip code in Collier County and South Lee County in the well-being domain of Life Evaluation. This domain captures how positively or negatively an individual perceives their life in the present moment and how positively or negatively they perceive their life will be like in five years. Orangetree (34120), Rural Estates (34117), Naples Manor/Lely Resort (34113), and Bonita Springs West (34134) have the lowest well-being in the life evaluation domain. Interestingly, Orangetree, Rural Estates, and Naples Manor/Lely Resort have their highest well-being scores in the work environment domain; therefore, the work environment may be the best avenue to engage people in these communities to improve their life evaluation. In Bonita Springs West, residents likely have low scores in life evaluation because they are unsatisfied with their work environment. Residents here have higher scores in emotional health and healthy behaviors but low scores in the work environment domain; therefore, helping worksites better engage their employees, create a healthy workplace environment, and help employees identify and utilize their skills in a more meaningful way may be the best avenue for improving life evaluation in this community.



Figure 3. Life Evaluation Relative Well-Being Scores by Zip Code in Collier County and South Lee County

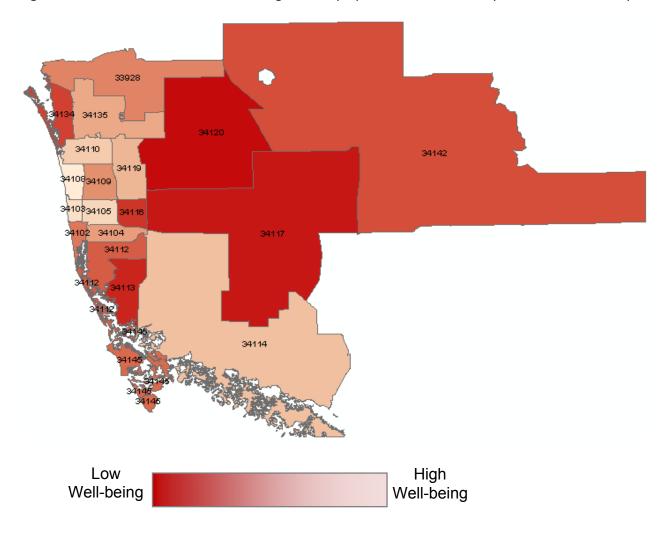


Figure 4 shows the relative well-being scores by zip code in Collier County and South Lee County in the well-being domain of Emotional Health. This domain captures how often an individual experiences feelings of sadness, depression, stress, worry, anger, enjoyment, and happiness. Rural Estates (34117) experiences the lowest emotional well-being with Golden Gate (34116), Naples Manor/Lely Resort (34113), and Orangetree (34140) only faring a little better in this domain. Of all of the zip codes in Collier and South Lee Counties, Rural Estates (24117) reported the highest levels of stress, the lowest levels of enjoyment, and the lowest percentage of people identifying themselves as thriving in their day to day life. People in this community also say that they do not feel well-rested and don't have friends or relatives to count on, and this community also has more residents who are caregivers for the elderly or disabled than all other zip codes analyzed with the exception of Downtown Naples/Naples Bay (34102). These factors undoubtedly contribute to high stress levels and low emotional health. Residents in Rural Estates, Golden Gate, Naples Manor/Lely Resort, and Orangetree would greatly benefit from the Blue Zones Project moai initiatives that bring people together to form new social connections and friendships

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around a common interest like walking, potlucks, and volunteering, forming a support network that has helped countless individuals better deal with stress, avoid loneliness, and transition into a thriving state.

**Figure 4**. Emotional Health Relative Well-Being Scores by Zip Code in Collier County and South Lee County

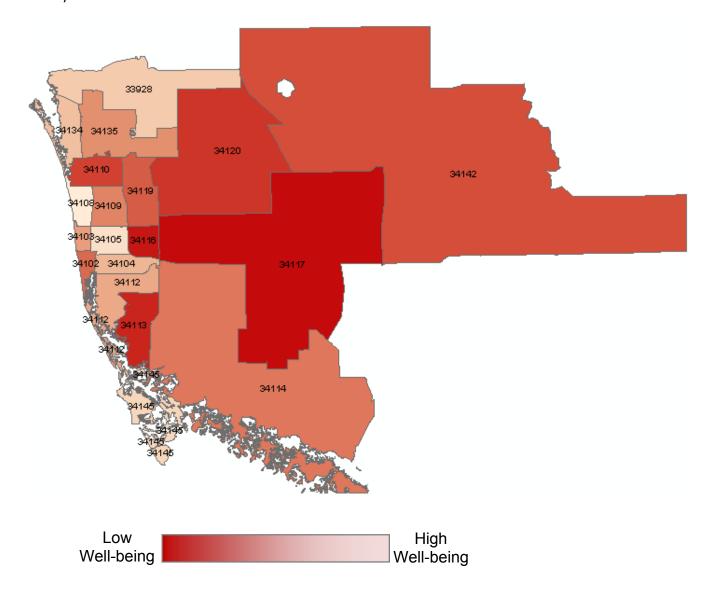
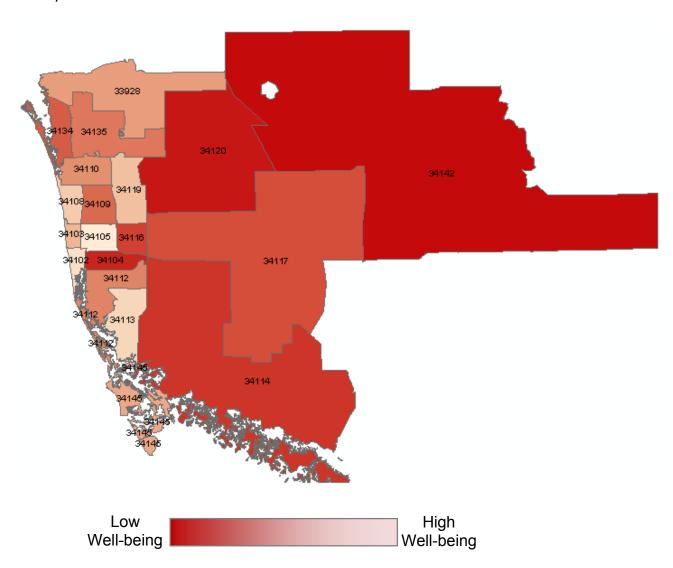


Figure 5 shows the relative well-being scores by zip code in Collier County and South Lee County in the well-being domain of Work Environment. This domain captures items such as job satisfaction, if an employee has a collaborative relationship with his/her boss, whether an employee views their workplace as a trusting, open environment, and whether the individual feels like they utilize their skills and talents and have the opportunity to learn something new each day. Immokalee/Ave Maria (34142), Orangetree (34120), Naples Airport/Radio Rd (34104), and Fiddler's Creek/Rookery Bay (34114) have



the lowest well-being scores in the work environment domain. In Immokalee and surrounding areas within the 34142 zip code, the high proportion of migrant and low-income residents working in physically demanding conditions for long hours in the agricultural sector is a major factor in the low workplace environment well-being scores. Given the unique demands of employment in the agricultural sector, it may be challenging to measurably improve the workplace environment in this region. In contrast, the economies in Orangetree, Naples Airport/Radio Rd, and Fiddler's Creek/Rookery Bay neighborhoods are not driven by agriculture, providing more opportunities to work closely with employers to improve the work environment for employees there.

**Figure 5**. Work Environment Relative Well-Being Scores by Zip Code in Collier County and South Lee County



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Figure 6 shows the relative well-being scores by zip code in Collier County and South Lee County in the well-being domain of Physical Health. This domain captures a number of objective and subjective measures including whether someone has been diagnosed with high blood pressure, diabetes, high cholesterol, heart disease, asthma, or cancer, as well as an individual's self-perception of their health status, how well they are managing their health, and interference of health problems on the activities of daily life. Residents in the Orangetree (34120) and North Naples (North of 846 to County Line) (34110) zip codes report the lowest physical well-being with Bonita Springs East (34135), Downtown Naples/Naples Bay (34102), and Vineyards/Urban Estates (34119) faring only a little bit better in physical health. Interestingly, only one of these five communities, Orangetree (34120), has very low aggregate well-being score, indicating that physical health is a well-being domain that communities with high or above average overall well-being in Collier County and South Lee County are still challenged with. Conversely, Immokalee/Ave Maria (34142) and Golden Gate (34116), communities with low overall wellbeing, report relatively good physical health despite low well-being scores in the other well-being domains. For communities that are struggling with poor physical well-being, it will be important to identify the root causes such as a built environment that is dangerous for people walking or biking, a lack of access to safe places to exercise, or a food environment where it is challenging to find affordable fruits and vegetables.

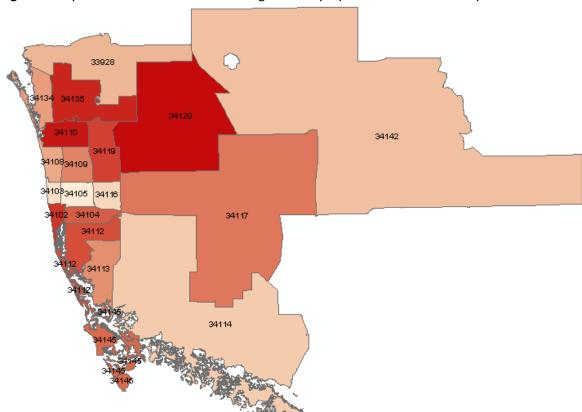


Figure 6. Physical Health Relative Well-Being Scores by Zip Code in Collier County and South Lee County



Figure 7 shows the relative well-being scores by zip code in Collier County and South Lee County in the well-being domain of Healthy Behaviors. This domain captures the frequency in which people engage in healthy behaviors such as eating fruits and vegetables, exercising, and getting enough sleep. Rural Estates (34117), Orangetree (34120), and Golden Gate (34116) zip codes report the lowest well-being scores in the Healthy Behaviors domain with North Naples/Naples Walk (34109), North Naples (North of 846 to County Line) (34110), Immokalee/Ave Maria (34142), and Estero (33928) also reporting low frequency of healthy behaviors. In Rural Estates, Orangetree, and Golden Gate, root causes for the low frequency of health behaviors include lack of access to fruits and vegetables, lack of access to safe places to exercise, and concerns about safety at night, which contribute to an environment that is not supportive of healthy eating and active living. In these communities, improving the built environment and food environment through new policies, programs, and infrastructure will be critical to improving individual well-being by making it easier to adopt and maintain healthy behaviors.

**Figure 7**. Healthy Behaviors Relative Well-Being Scores by Zip Code in Collier County and South Lee County

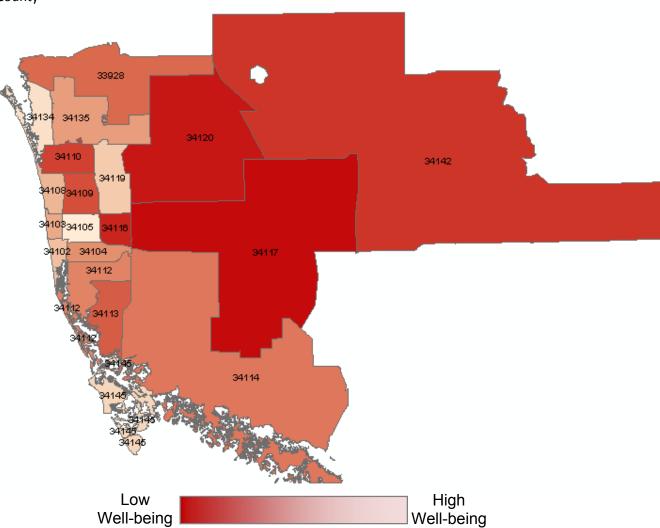
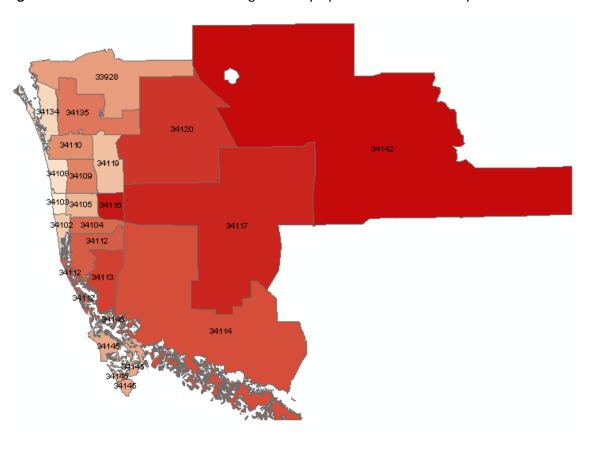




Figure 8 shows the relative well-being scores by zip code in Collier County and South Lee County in the well-being domain of Basic Access. This domain captures how difficult it is for a person to access basic needs and services such as medical care and housing. It also captures whether people feel safe, satisfied, and optimistic within their community. Of all the six well-being domains, well-being scores in the basic access domain most strongly correlate with aggregate well-being scores for a community. In other words, communities with high basic access scores generally have high aggregate well-being, and communities with low basic access scores generally have low aggregate well-being. The correlation between basic access and aggregate well-being is understandable given the significant impact that access to basic needs and services has on all other domains of well-being, from physical and emotional health to life evaluation and healthy behaviors. The relationship between poor basic access and low well-being holds true for Collier and South Lee Counties. Zip codes where people report the best access to basic needs and services, Venetian Bay/Doctors Bay/Moorings Bay (34103), Naples Park/Pelican Bay/Pine Ridge (34108), and Bonita Springs West (34134), also have high aggregate well-being. Meanwhile, the communities that report the poorest access to basic needs and services, Immokalee/Ave Maria (34142), Golden Gate (34116), Orangetree (34120), and Rural Estates (34117), also have the lowest aggregate well-being scores in the two Counties. As Blue Zones Project begins work in these communities, improving basic access through the work environment will be a key focus, and we will partner with community partners who are already working in this area to strengthen our mutual efforts to improve this important well-being domain.

Figure 8. Basic Access Relative Well-Being Scores by Zip Code in Collier County and South Lee County



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# **Section 4: Sector Summary**

The Blue Zones Project focuses on sectors, environments that impact the well-being of community members throughout a typical day. For each sector, a list of research-supported actions is available, from which an individual or organization can select the most appropriate goals for improving their well-being. The Blue Zones Project team conducted an evaluation of each sector to assess the feasibility of engaging a tipping point of participants that could lead to permanent, systemic improvements.

#### **SECTOR: SCHOOLS**

#### **Summary**

Schools play a key role in Blue Zones Project by creating an environment that teaches children about their health and well-being and what choices are available to them. School leaders are in a powerful position to dramatically improve students' well-being, resulting in students who are more engaged and perform better in the classroom. Overall, Collier County School District Leadership and stakeholders participating in the assessment demonstrated a commitment to improving student well-being and a desire to implement Blue Zones Project principles. Assessment participants included the superintendent, school board members, district leadership, teachers, public health, children's advocacy groups, parents, and community organizations.

Collier County schools serve more than 43,000 students, representing diverse socioeconomic and racial backgrounds. The District includes 48 school buildings, as well as 12 alternative programs and two career and technical centers. A successful school strategy will combine both a top-down and bottom-up approach. At the district level, the school board will be encouraged to establish or enhance existing wellness policies and programs to make individual school changes easier. Concurrently, the Blue Zones Project team will approach individual schools to explore options specific to their building and student population. This dialogue with individual schools will engage teachers, administration, and parents. While school tools will be available county-wide throughout the Blue Zones Project, Blue Zones Project team resources will focus on a phased geographic engagement approach where multi-sector coordination will foster greater success.

# SECTOR: RESTAURANTS Summary

There are over 2,300 restaurants between the two counties (IPC Naples, 2014). Restaurants play a key role in Blue Zones Project as more and more customers are seeking healthy options when eating out. By adopting best practices from around the country, restaurants can meet growing customer demand and even increase revenue, all while improving customers' health. Several Southwest Florida restaurants are offering healthier options and encouraging their customers to improve well-being; however, many additional opportunities exist for improvement.

The Blue Zones Project works primarily with locally owned restaurants bringing best practices and tools to increase consumer well-being. Interviews with independent restaurateurs and coalitions in Southwest Florida indicated there are many local champions willing to implement Blue Zones Project principles and prove the impact of changes. These local champions committed to share their successes and recruit



other restaurants. The civic-minded attitude of local restaurateurs is a positive indicator that early adopters can shift the local restaurant community to offer more healthy options over the coming years.

#### **SECTOR: GROCERY STORES**

#### **Summary**

Grocery stores play a key role in Blue Zones Project as more and more customers are seeking healthy options. By following best practices from around the country, grocery stores can meet this growing customer demand and increase revenue, all while improving customers' health. Grocers are already pointing customers toward healthier choices; however, there are many opportunities to expand upon what they are currently doing.

The counties are served primarily by large national level grocery chains, namely Publix and Winn-Dixie. Other national level grocers with a presence include Trader Joe's, Whole Foods, Walmart Neighborhood

Market, Fresh Market and Costco. There are independent grocers, like Wynn's Market and Food and Thought, along with smaller specialty stores in the area. A successful grocery store effort will need to be carefully coordinated to align with focused neighborhood level activity so the grocer's efforts are synchronized with increased local citizen awareness and participation.



#### **SECTOR: EMPLOYER**

#### **Summary**

Employers play a key role in Blue Zones Project by shaping the workplace environment to support health and, in turn, improve productivity, decrease turnover, and reduce healthcare costs. In short, healthy people cost less and are more productive. By supporting employees' well-being, employers also help the larger community as healthy employees become advocates for powerful change in other community organizations like schools, restaurants, grocery stores, and civic groups.

Southwest Florida is shaped in part by a vibrant, civic-minded employer community. With well-connected, collaborative Chambers of Commerce, the Blue Zones Project team should be able to reach employers efficiently and directly through a trusted partner. Conversations with numerous employers found very high awareness of typical employer health programs and a willingness to innovate and utilize more comprehensive well-being tools from the Blue Zones Project.



To drive utilization, the Blue Zones Project team would initially focus efforts on both early adopters from large public and private employers in areas with high employer concentration. Once these initial efforts gain traction and record successes, the Blue Zones Project team can leverage these stories to inspire other employers to participate.

#### **SECTOR: INDIVIDUAL ENGAGEMENT**

#### **Summary**

By making changes to personal habits and surroundings, individuals can improve their well-being, resulting in better health, increased quality of life, and longevity. In the Southwest Florida counties, we have the opportunity to reach approximately 400,000 full-time residents (inclusive of both Collier County and South Lee population). Engagement of this population is critical. Research suggests for an organization or community to change, at least 15% of the population must be actively practicing and promoting an idea. This is known as "tipping point" theory. For Blue Zones Project, we strive to engage more than the *tipping point* of a population or sector in our work. Blue Zones Project seeks to reach, educate, and interact with as much of the population as possible. We strive to reach the entire community with our communication efforts and have been able to achieve 90+ percent brand recognition in our lowa communities according to a Gallup poll. Through broad awareness we are then able to find the tipping point of deeply committed individuals and organizations, who will inspire and encourage their friends and neighbors to participate.

Blue Zones Project will strive to engage at least 20 percent of adults to actively improve their well-being. There are a variety of actions individuals can take ranging from independent activities to group programs. This is no small task. Our success will be highly dependent upon engaging the community at large—a large, diverse, aging, geographically dispersed, and migrant population. We believe that the confluence of committed partnerships with large institutions, coupled with the support found from smaller organizations, can penetrate deep into social networks and inspire high levels of individual participation. This is contingent upon these institutions being actively involved and committed to engaging their members in well-being improvement both individually and for their community. Securing the partnerships of major organizations and employers is the critical next step.

#### SECTOR: COMMUNITY POLICY AND BUILT ENVIRONMENT

#### **Summary**

Municipal governments play a key role in Blue Zones Project by shaping policies and building infrastructure in a way that supports active living and healthier lifestyles. This results in: enhanced quality of life and well-being for citizens, competitive positioning for financing/grants for community improvement projects, vibrant local economy, and attractive place for business and individuals to locate.

A comprehensive tour of Collier County (which included Naples, Golden Gate, Golden Gate Estates, Immokalee, Ave Maria and Marco Island) was conducted. There are areas of the county, and some local constituents, that remain to become familiar with. The county is big and diverse, reflected by a Walk Score of 46. (Walk Score is a tool that measures the walkability of any address from 1-100. To learn



more, visit walkscore.com.) Naples has excellent connectivity with a Walk Score 88, short blocks, a compact and walkable downtown, a bike Master Plan and bike lanes evident with great wayfinding, which residents want to improve on. Particularly, Naples has an engaged neighborhood association who meet with city staff monthly. This is key to public input and advocacy for the built environment; supporting elected leaders and is to be applauded. Naples is challenged by US 41, Collier Boulevard, Airport Road, Immokalee Rood, Goodlette-Frank Road and other major four-to six-lane roads which are designed for automobiles and not for active transportation. According to a study by Smart Growth America, Dangerous by Design, 2014, Florida ranks number one for the most dangerous states to walk. And Collier County is no different.

In Immokalee, the team observed significant levels of active transportation (both bikes and pedestrian), lane widths were reasonable and some well-marked crossings. Golden Gate had single family homes in close proximity to retail. Ave Maria is a well- designed planned community for active transportation as it anticipates future growth. Marco Island seems to have good population density and location to retail for active transportation (some sidewalk infill remains in need). While the county is sparsely populated, numerous bike lanes and wide pedestrian trails were evident, yet with significant travel distances to retail or commercial places, so this lower density does not yield active transportation usage. Arterials in the county are wide multi-lane and high speed roadways, which seem overbuilt for the traffic.

Collier County's population has grown by 88,000 or 35% since the year 2000 and its diversity is increasing. Significant growth has been realized in gated communities which are often separated from places where residents work or receive daily services. For example, Pelican Bay has 6500 homes on 2300 acres of land and an internal tram system, yet residents need to leave the property to access some essential services. This generally creates auto dependency for residents and contributes to traffic gridlock and single entry-exit points into and from these areas. Collier County Activity Centers, which are designed to create mixed-use hubs, were toured. These areas provide a solid example for built environments which support active transportation. The County has addressed growth via planned unit development which typically focus on single development projects rather than an integrated approach for the whole county. So Collier County has unintentionally realized neighborhoods which are disconnected and developments which are homogenous, not to mention a precedence for future developers to replicate.

Tobacco Free Collier is working to enact policy and educate residents to prevent tobacco usage. This group is working to establish tobacco free beaches and parks, multi-unit housing and electronic cigarette issues, to name a few. Collier County and the State of Florida have enacted tobacco legislation designed to reduce usage by limiting sales and usage to persons age 18 and over. The County has also limited open display and placement of tobacco products so they are not accessible to minors. While Florida passed its Clean Indoor Air Act in 1985, it recently failed to pass Senate bill 258 which was designed to address outdoor usage, so there is work to be done.

Collier County produces 90% of the tomatoes grown in the United States and other high volume crops include cucumbers, peppers, and citrus. The school district has a well-established farm to school program. There are a limited, yet growing number of farmers markets in place (Immokalee and Naples are two examples). Despite the abundance of locally produced food, over 100,000 residents belong to

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and utilize a grocery club which does not source local food. There seems to be some interest in community gardens due to seasonal residents and lifestyles.

In summary, a combined transportation and land use plan utilizing smart infill and connectivity planning will serve to create places where multi-modal options are present, convenient and safe for all Collier County residents. There is interest and need to influence tobacco usage and electronic products in Collier County. The abundance of locally produced vegetables establishes a great opportunity for impacting availability and consumption of healthy fruits and vegetables by Collier County residents.

### **SECTION 5: Proposed Approach**

#### **Community Definitions**

The focus of the Blue Zones Project is to positively impact well-being by creating environments that promote the Power 9 principles. This public-private collaboration around a common approach makes the Blue Zones Project initiative unique in its geographic approach. We deploy a unifying campaign that drives permanent changes by engaging the business community (employers, grocery stores, and restaurants), government entities, non-profits, schools, the faith-based community, the media, and individual community members.

Our approach to improved well-being is to enhance policies throughout critical community sectors at a state, county, local and organizational level. Coupled with an extensive outreach/marketing program and active support from civic and faith-based leaders, we drive heightened awareness, support, tools, and programs for individuals and community organizations to improve well-being. We accomplish this by increasing and strengthening social connections that work in concert with policy enhancement to assure well-being improvement is viewed as a sustainable course-of-action for immediate and long-term results.

To impact an entire region, we must appropriately pace and sequence the work to ensure that it is measurable, manageable and sustainable. Healthways proposes breaking Southwest Florida down in to defined communities that would roll out focused implementations and blueprints over the ten year period. The timing and total number of community roll-outs will be dependent on the steering committees recommendations as well as continued funding considerations. The proposed defined communities are as follows:

- 1. East Naples
- 2. Bonita Springs
- 3. North Naples
- 4. Golden Gate City
- 5. Golden Gate Estates
- 6. Immokalee
- 7. Marco Island
- 8. Naples



#### **Staffing Model**

The Blue Zones Project model is to facilitate a community-led approach using the support and leadership of community volunteers and stakeholders. Full-time local resources will be hired to drive the planning and implementation process at a community level. These full time colleagues will also coordinate and liaise with the Blue Zones Project Steering Committee and Leadership Teams. Healthways proposes the following resources for immediate hire in in 2015:

**Executive Director**: Responsible for managing the local initiative including all deliverables and Healthways' staff.

**Organizations Leader**: Responsible for supporting the work with businesses including but not limited to employers, restaurants, groceries, faith based organizations and schools.

**Engagement Leader**: Responsible for coordination of marketing, PR, media and promotional activities.

**Project/Programs Manager**: Responsible for the coordination of strategic deliverables and planning, stakeholder meetings, events and logistics.



#### Blue Zones Project Southwest Florida Steering Committee

**Purpose:** The Steering Committee will guide the development of the regional well-being improvement strategy and approve community blueprints for implementation of Blue Zones Project<sup>®</sup>. This committee of community leaders will also help break down barriers, facilitate connections with key organizations and individuals in the community, and serve as a sounding board for community leadership teams, which are responsible for implementation of the blueprint locally.

**Members:** The Steering Committee consists of key civic leaders who are representative of the breadth of the county. These are local men and women who have been recognized publicly for their commitment to the community and have played active roles in the civic arena over a number of years. They understand how to get things done and how to implement policy efficiently. Because there are so many varied interests at stake, members should be geographically representative and possess different areas of expertise:

Area	Expertise	Number of People
Government	County and community leadership	4 - 6
Business	Chamber of commerce president/leaders from	2 - 4
	large companies/economic development	
Schools	Superintendent or School Board member	1
Healthcare/Public	Key role in a local hospital, healthcare provider	2
Health	group, or public health agency	
Other	To be determined based on community	1-2
	(Examples – civic organizations, restaurant	
	associations)	

*Time Commitment*: There will be approximately two or three two-hour meetings per month in addition to assignments between meetings for the first five-six months. Throughout this period, your community will be recruiting committee members and volunteers, conducting training, and developing the Blueprint. After the first six months, the Steering Committee will meet once a month. There may also be occasional meetings around a specific focus area for a sub-set of the group, as well as opportunities to help drive specific initiatives based on interests, skills and availability.

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#### **Leadership Team (Committees)**

**Purpose:** The community blueprint includes several initiatives to help nudge people toward healthy behaviors and better well-being through permanent changes to the environment, policies and social networks that influence individuals and organizations. Each Blue Zones Project initiative is supported by Committees comprised of community leaders and civically-engaged residents.

Initiatives (Examples)	Focus Area	Expertise (in addition to general organizational and planning skills)
Leadership Team Co-	Overall strategy	Team leadership and coordination.
Chairs		
Community Policy		Experience or interest in developing and advancing
		county or city policy related to built environment,
		food policy, and tobacco policy.
School Policy & Walking	Community	Experience working with schools/policy making,
School Bus		organizing and implementing schools/school
		initiatives.
Restaurants		Restaurateur or interested party willing to help
		organize other restaurants to optimize
	Organizations	menus/environment.
Grocery Stores		Interest/ability to work with local grocery stores to
•		highlight healthy foods.
Worksites		Interest working with worksites to improve well-
		being.
Faith-based Organizations		Interest in engaging faith-based organizations to
		improve well-being of members.
Purpose		Ability to plan, schedule, and implement events that
		allow individuals to explore their purpose.
Volunteering	Individual	Ability to organize volunteers and help people align
		their time and talents with community needs.
Engagement		Ability to inspire and invite people to participate in
		the Blue Zones Project.
Moais		General coordinating/organizing skills. Interest in
		creating small groups around walking, purpose, and
		healthy eating.

Leadership Team Members: The leadership team is comprised of committees that oversee the planning and implementation of the initiative they are focused on. Committee members are typically well-connected, well-organized, "get-it-done" type people. Time commitment will vary by role, but it is not expected to exceed two to four hours/week. The group will likely meet at least once per month. Each community will create its own Leadership Team. Community specific Leadership Teams will not be created until the launch of that respective community. Healthways proposes building out the Naples Leadership in 2015. Recommended committees and their representative on the leadership team are in the following chart.

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#### **Proposed 2015 Work plan and Milestones**

#### January 2015

- Continue county stakeholder conversations and information sessions
- Finalize Southwest Florida Blue Zones Project Steering Committee
- Define Leadership Committee Co-Chairs
- Post positions for community project (defined above)
- Deliver Assessment Report and findings to NCH Board of Directors and Community Leaders

#### February 2015

- Finalize and hire open positions for community project
- Boot camp and onboarding training for new hires

#### March 2015

- Conduct Steering Committee and Leadership Team Orientation training series
- Commence committee recruitment process for community implementation
- Finalize Local leadership committees
- Define ongoing measurement and survey approach using Gallup Healthways Well-being Index
- Begin planning for Policy Workshops

#### **April 2015**

- Ongoing committee training Blueprint overview, milestones, action plans
- Conduct built environment, tobacco and food policy workshops
- Define ongoing measurement and survey approach using Gallup Healthways Well-being Index

#### May through July 2015

- Coaching and recruitment of volunteer base
- Community Blueprint drafting milestones, action plans, scorecard

#### August 2015

Community Blueprint presented to community leaders

#### **September through December 2015**

• Implementation and execution of community Blueprint. Specific milestones and activity to be determined during the creation of the Blueprint.



#### Integration with Existing Efforts

Numerous related projects or programs are already underway in Southwest Florida, some of which are called out in the findings section of this report. The Blue Zones Project is committed to integrating with well aligned existing efforts, not duplicating them. To ensure that happens, Blue Zones Project team members will continue detailed conversations with community based organizations throughout the blueprint development process to understand their existing goals, staff, collaborative partners, resources, and plans. The optimal outcome is to make sure scalable best practices are implemented and that the knowledge to lead this work is shared. This outcome ensures sustainability.



# **Appendix**

- A Blue Zones Project: Proven
- B Southwest Florida Value Proposition
- C Assessment Schedule Overview: October through December
- D Blue Zones Walkability & Bike-ability Observations and Recommendations
- E Florida 2013 State Report
- F Leadership Pledges
- G Assessment Resource List



**Appendix A:** Blue Zones Project: Proven







# **Creating Real Change**

The world we create for ourselves has an impact on our everyday lives—whether we're aware of it or not. Where we choose to live, work, play, and even the community of people with whom we spend our time, all influence the lifestyle choices we make.

Blue Zones Project is a community movement to help people live longer and better through permanent changes in the environment to make the healthy choice the easy choice. We do this by working hand in hand with key stakeholders in the community to implement best practices in improving well-being in worksites, schools, restaurants, grocery stores, and government. Every one of our best practices is supported by academic literature or time-tested experience showing that well-being improves as a result.

Here, we highlight some of the research that supports why we know that Blue Zones Project is creating real change in well-being.

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### The Cost of Doing Nothing

America's health continues to deteriorate as the rates of obesity and preventable chronic diseases continue to rise year after year. Poor health leads to higher healthcare costs and a less productive workforce:

- Seventy-five percent of all medical costs are associated with chronic, mostly preventable diseases.<sup>1</sup>
- Workplace stress, anxiety, and depression are estimated to cost the U.S. economy over \$300 billion annually in lost productivity, employee turnover, and legal, medical, and insurance bills.<sup>2</sup>
- Total direct incremental annual healthcare costs for an obese person are estimated at \$1,558 more than average-weight individuals. This adds up to \$147 billion every year in healthcare costs in the U.S.<sup>3</sup>
- Total direct incremental annual healthcare costs for a smoker are estimated to be \$2,056 more than those of non-smokers.<sup>4</sup> Workers who smoke cost the U.S. economy \$278 billion annually.<sup>5</sup>
- A 1 percent reduction in health-risks factors like weight, blood pressure, glucose, and cholesterol would save \$83 to \$103 annually in medical costs per person, much of which could accrue to employers in reduced premiums.<sup>6</sup>
- The typical employer loses \$2,598 in lost productivity per worker per year based on health-related absenteeism and presenteeism.<sup>7</sup>

The projected cost of doing nothing is typically in the hundreds of millions to billions of dollars.<sup>8</sup> Researchers estimate that the impact of genetics on health ranges from just 10 to 30 percent.<sup>9</sup> Instead, the single largest determinant of health is the environment we live in. Reversing poor health trends and controlling costs is possible, but only with significant coordinated efforts to transform the physical, social, and economic environments around us. We cannot afford to do nothing.

- Centers for Disease Control and Prevention. (2009). Chronic diseases: The power to prevent, the call to control. Atlanta, GA. http://www.cdc.gov/chronicdisease/resources/publications/aag/pdf/chronic.pdf
- <sup>2</sup> The American Institute of Stress http://www.stress.org/workplace-stress/
- <sup>3</sup> Finkelstein, E., Trogdon, J., Cohen, J., & Dietz, W. (2009). Annual medical spending attributable to obesity: Payer-and service-specific estimates. Health Affairs, 28 (5), w822-831.
- Berman, M., Crane, R., Seiber, E., & Munur, M. (2013). Estimating the cost of a smoking employee. Tobacco Control, 1-6.
- These findings are based on more than 67,000 interviews conducted as part of the Gallup-Healthways Well-Being Index from Jan. 2-Aug. 21, 2013, with American adults who work at least one hour or more per week.
- <sup>6</sup> Henke, R., Carls, G., Short, M., Pei, X., Wang, S., Moley, S., Sullivan, M., & Goetzel, R. (2010). The relationship between health risks and health and productivity costs among employees at Pepsi Bottling Group. Journal of Occupational and Environmental Medicine, 52(5), 519-527.
- <sup>7</sup> Gensler Report (2013). Moving towards a well-being based workplace.
- Based on a simulation model developed by Healthways and the Boston Consulting Group that can project future medical expenditures and productivity losses for a community over the next 5-10 years.
- Rappaport, S. & Smith, M. (2010). Environment and disease risks. Epidemiology, 330 (6003), 460-461. http://www.sciencemag.org/content/330/6003/460.summary



### **Results from Blue Zones Project Sites**

Within a matter of three to five years, Blue Zones Project can have a substantial impact on the many environments that affect well-being, healthcare costs, and productivity. The primary metric by which we measure success is the Gallup-Healthways Well-Being Index® (WBI). The WBI has been proven to strongly correlate to healthcare costs and chronic-disease trends. We also measure success using publically available data, critical process measures, and on-the-ground reporting.

Below, we highlight some of the real changes we have seen in Blue Zones Project sites across the United States.

#### Albert Lea, MN (2009-2010)

• Smoking rates declined from 23 percent to 19 percent from 2010–2012 according to county health rankings by the Robert Wood Johnson Foundation.

## Beach Cities, CA—Hermosa Beach, Manhattan Beach, and Redondo Beach (2010–present)

- The obesity rate dropped 14 percent from 2010–2013, equating to \$2.35 million dollars in savings in healthcare–related costs for businesses, insurers, and residents.
- The smoking rate dropped 27 percent from 2010–2013. The rate in 2013 was 8 percent—the lowest in the country and well below the national average of 20 percent.
- Cities pursued and won \$3.8 million in new funding for infrastructure improvement; the city believes it was largely due to Blue Zones Project presence.

#### Iowa—fifteen communities state-wide (2011-present)

- lowa moved up from #16 to #10 on the Well-Being Index ranking all fifty states.
   The state consistently increased their ranking from 2011–2013.
- Fifteen Iowa communities are Blue Zones Project demonstration sites, with three cities having achieved Blue Zones Community® certification to date—Spencer, Cedar Falls, and Mason City.
- More than 150,000 lowans statewide have pledged their support for Blue Zones Project.
- Thousands of lowans have quit smoking since the Healthiest State Initiative and Blue Zones Project were introduced in 2011, equating to hundreds of millions of dollars in savings in healthcare-related costs for lowa.
- In the past three years, lowans have also made strides in eating produce more frequently, going to the dentist regularly, and learning new and interesting things, all of which contribute to greater well-being.

## **Beach Cities Results:**

"The positive well-being trend in the Beach Cities is both authentic and impressive. The rate at which the community has improved since 2010 far surpasses what has been measured in the large majority of other communities nationwide.

Given the timing of this progress, we believe Blue Zones Project has been a strong driver of the Beach Cities' success."

Dan Witters,
 Principal at Gallup



### **Worksite Sector**

Employers play a key role in Blue Zones Project by shaping the workplace environment to support well-being and, in turn, improving productivity, decreasing turnover, and reducing healthcare costs. Business leaders are in a powerful position to dramatically improve their employees' well-being and reap the many benefits:

- Employees with higher well-being have lower healthcare costs, higher productivity, and reduced absenteeism, giving companies a competitive advantage.
- Employers that support employee well-being experience less turnover and greater ability to attract talented individuals.
- Supporting employee well-being attracts media attention, increasing brand awareness in the community and beyond.

#### **Employer Successes in Blue Zones Project Sites**

- One employer in the Beach Cities, CA, reported that in the last two years workman's compensation claims drastically decreased from \$360,000 to only \$12,000. They attribute this decrease in large part to a renewed focus on worksite wellness and safety practices through Blue Zones Project.
- Sálo, a staffing agency in Minneapolis, Minnesota, saw their year-to-year revenue increase by 19 percent, growth in new clients increase by 38 percent, and Facebook and Twitter reach increase by over 500 percent as a result of becoming a designated Blue Zones Worksite®. Notably, the number of employees who reported eating fast food weekly decreased by 50 percent, and the number who reported volunteering weekly increased by 14 percent.
- The city of Spencer, Iowa, reported a more than 20 percent decrease in city workers' healthcare claims. Nearly half of city employees eliminated at least one of the risk factors for cardiovascular disease and diabetes.
- Spencer Hospital in Spencer, Iowa, reported that insurance-paid claims increased by only
  1.4 percent between 2011 and 2012 compared to the national trend of 7 percent. Their
  average was 15 percent over the previous five years. Spencer Hospital also reported
  that their spring 2013 wellness screening revealed that more than half of those screened
  eliminated one or more risk factors for cardiovascular disease and diabetes compared to
  the previous year. Only 6 percent experienced an increase.
- Principal Financial in Mason City, Iowa, had 90 percent of colleagues participate in health screenings, and 40 percent of employees had a reduction in BMI from 2012 and 80 percent are considered low-risk today as compared to 65 percent in 2005. The wellness vendor estimated that the company's participation in Blue Zones Project resulted in over \$10 million in avoided claims costs from 2009 to 2013.

This collection of academic literature highlights some of the research behind the best practices we suggest employers adopt and implement.

#### **Featured Articles:**

- The Economics of Well-Being
- Overall Well-Being as a Predictor of Health Care, Productivity, and Retention Outcomes in a Large Employer
- Treadmill Workstations: The Effects of Walking while Working on Physical Activity and Work Performance
- Association Between Building Design, Point-of-Decision Stair Prompts, and Stair Use in Urban Worksites

### The Economics of Well-Being

Rath T, Harter J
Gallup Consulting, 2010

#### **Introduction to Report:**

Whether you manage a few people, lead a large group, or run an entire organization, you are already in the business of managing employee wellbeing.

The research on this topic is quite clear: Your workforce's wellbeing directly affects your organization's bottom line.

Even if you have never thought of your employees' wellbeing as your business, each person's wellbeing is critical to achieving an organization's goals and fulfilling its mission. Every day in your organization, some employees don't show up, don't give their best effort, erode your productivity, and cost you millions of dollars because they are struggling or suffering in important areas of their lives. Other employees engage their colleagues and customers, generate new ideas, and save your organization thousands of dollars in healthcare costs because they take responsibility for their health and overall wellbeing. Simply put, your employees' wellbeing can be measured, managed, and quantified.

#### **Key Takeaways:**

- Employees who are thriving in well-being have 41percent lower health-related costs, amounting to \$2,993 per person, than employees who are struggling, and 62 percent lower costs than employees who are suffering.
- The health-related costs for a sixty-year-old with higher well-being are lower than for a thirty-year-old with low well-being.
- Thriving employees have 35 percent lower turnover rates, amounting to \$1,948 less per person, than employees who are struggling. For ten thousand employees, this represents \$19.5 million saved.
- Only 12 percent of employees strongly agree that they have substantially higher overall well-being because of their employer, and the vast majority think that their job is a detriment to their well-being.
- Among employed U.S. adults, only 29 percent are engaged in their jobs. Actively
  disengaged employees report similarly poor health as the unemployed. People
  in disengaged workgroups are also more than twice as likely to be diagnosed
  with depression and are at greater risk of heart disease.
- Employees who have high-quality friends on the job are seven times as likely to be engaged in their work. Social relationships at work have been shown to boost employee retention, safety, work quality, and customer engagement.
- Having employees who are thriving in community well-being and actively
  engaging in a community group or organization improves an organization's
  image and increases its positive effect in the community.



#### PDF available at:

http://www.gallup. com/strategicconsulting/126908/Economics-Wellbeing.aspx

# Overall Well-Being as a Predictor of Health Care, Productivity, and Retention Outcomes in a Large Employer

Sears L, Shi Y, Coberley C, Pope J Population Health Management, 2013

#### Abstract

Employers struggle with the high cost of health care, lost productivity, and turnover in their workforce. The present study aims to understand the association between overall well-being and these employer outcomes. In a sample of 11,700 employees who took the Well-Being Assessment, the authors used multivariate linear and logistic regression to investigate overall well-being as a predictor of health care outcomes (total health care expenditure, emergency room visits, hospitalizations), productivity outcomes (unscheduled absence, short-term disability leave, presenteeism, job performance ratings), and retention outcomes (intention to stay, voluntary turnover, involuntary turnover). Testing this hypothesis both cross-sectionally and longitudinally, the authors investigated the association between baseline well-being and these outcomes in the following year, and the relationship between change in overall well-being and change in these outcomes over 1 year. The results demonstrated that baseline overall well-being was a significant predictor of all outcomes in the following year when holding baseline employee characteristics constant. Change in overall well-being over 1 year also was significantly associated with the change in employer outcomes, with the exception that the relationship to change in manager-rated job performance was marginally significant. The relationships between overall wellbeing and outcomes suggest that implementing a well-being improvement solution could have a significant bottom and top line impact on business performance.

#### **Key Takeaways:**

- The Healthways Well-Being Assessment® (WBA) is a significant predictor of employer costs from healthcare, lost productivity, and turnover.
- Improvements in employee well-being over one year were significantly associated with lower costs from healthcare, lost productivity, and turnover.
- Implementing a well-being improvement solution can have a significant impact on business costs.



PDF available at: http://www.ncbi.nlm. nih.gov/pmc/articles/ PMC3870481/

## Treadmill Workstations: The Effects of Walking while Working on Physical Activity and Work Performance

Ben-Ner A, Hamann DJ, Koepp G, Manohar CU, Levine J *PLOS One*, 2014

#### Abstract

We conducted a 12-month-long experiment in a financial services company to study how the availability of treadmill workstations affects employees' physical activity and work performance. We enlisted sedentary volunteers, half of whom received treadmill workstations during the first two months of the study and the rest in the seventh month of the study. Participants could operate the treadmills at speeds of 0–2 mph and could use a standard chair-desk arrangement at will. (a) Weekly online performance surveys were administered to participants and their supervisors, as well as to all other sedentary employees and their supervisors. Using within-person statistical analyses, we find that overall work performance, quality and quantity of performance, and interactions with coworkers improved as a result of adoption of treadmill workstations. (b) Participants were outfitted with accelerometers at the start of the study. We find that daily total physical activity increased as a result of the adoption of treadmill workstations.

#### **Key Takeaways:**

- Making treadmill workstations available to employees increases daily total physical activity at work.
- Compared to standard chair-desk office stations, the use of treadmill workstations increased employees' overall work performance, quality and quantity of performance, and interactions with coworkers.



#### PDF available at:

http://dx.plos. org/10.1371/journal. pone.0088620

## Association Between Building Design, Point-of-Decision Stair Prompts, and Stair Use in Urban Worksites

Ruff R, Rosenblum R, Fischer S, Meghani H, Adamic J, Lee K *Preventive Medicine*, 2014

#### **Abstract**

**Objective:** Incidental forms of physical activity such as stair use offer frequent opportunities for energy expenditure and may contribute to the prevention and control of chronic diseases. This study analyzes the associations between building characteristics, stair prompts, and stair use in large urban worksites.

**Methods:** Bootstrapped generalized mixed models were used to analyze self-reported stair use, using data from 1348 surveys of city employees and fourteen building assessments conducted in New York City in 2012.

Results: 57% of respondents reported climbing ≥ 1 flights of stairs daily at the work-place. Model results show that stair prompts were associated with a 3.21 increased likelihood of stair use. Naturally lit stairwells and stairwell visibility were also positively associated. Higher floor residency and BMI were negatively related, as were gender, stairwell distance from lobby entrances, the total number of floors in each building, and building averages for BMI and gender. Residual heterogeneity measured by adjusted median odds ratios indicates that buildings can have a moderate effect on the likelihood of stair use beyond those of individual characteristics.

**Conclusions:** Specific building features and stair prompts may potentially be leveraged to positively influence rates of incidental physical activity and contribute to improvements in population health.

#### **Key Takeaways:**

- Stair use over elevator use increases daily physical activity in the workplace and may contribute to the prevention and control of chronic diseases.
- Prompts to encourage stair use make employees more than three times more likely to use the stairs.
- Creating stairwells that are naturally lit and easily visible from the main office area also increases the likelihood that employees will take the stairs.



#### PDF available at:

http://www.sciencedirect.com/ science/article/pii/ S009174351300460X





### **Community Policy Sector**

City governments play a key role in Blue Zones Project by shaping policies and building infrastructure in a way that supports active living and healthier lifestyles. City leaders are in a powerful position to dramatically improve their citizens' well-being and reap the many benefits:

- A government that supports community well-being attracts new businesses and talented individuals.
- Policies that support community well-being are correlated to improved safety, reduced operating costs, greater economic investment, and a competitive edge for winning federal, state, and private grant funding.
- Investing in the well-being of city employees increases their productivity and lowers their healthcare costs, reducing financial strain on the city.
- Investing in the well-being of citizens increases their productivity and lowers their healthcare costs, resulting in a thriving business community and stronger tax base.

#### **Community Policy Successes in Blue Zones Project Sites**

- The cities of Hermosa Beach, Manhattan Beach, and Redondo Beach, CA, collectively won over \$3.8 million in grant funding for infrastructure-improvement projects with support from Blue Zones Project.
- As part of Blue Zones Project, several cities have adopted Complete Streets policies.
  In 2013, the National Complete Streets Coalition ranked the policy adopted by Hermosa
  Beach, CA, as the second strongest policy in the nation. In 2014, policies adopted
  by three Blue Zones Project sites in Iowa (Muscatine, Cedar Falls, and Waterloo) were
  ranked in the top fifteen strongest policies out of over eighty policies adopted in the
  same year.
- The city of Spencer, Iowa, established three new community gardens, increasing the number of plots from seven to seventy. The city also plans to complete all of the sidewalks in the City, appropriating \$200,000 to new sidewalk construction in 2013 and \$100,000 for 2014.
- Mason City, Iowa, committed \$1.8 million to fund the first five years of recommended projects in their newly adopted Bicycle and Pedestrian Master Plan; allocated \$150,000 in 2014 to create bike lanes, shared lane markings, and street-crossing markings; and won a \$25,000 grant to fund the installation of exercise stations in city parks.

This collection of academic literature highlights some of the research behind the best practices we suggest city governments adopt and implement.

#### **Featured Articles:**

- Walking the Walk: How Walkability Raises Home Values in U.S. Cities
- Smoking Ban Policies and Their Influence on Smoking Behaviors Among Current California Smokers: A Population-Based Study
- Bicycle Commuting and Facilities in Major U.S. Cities: If You Build Them,
   Commuters Will Use Them

### Walking the Walk: How Walkability Raises Home Values in U.S. Cities

Cortright J, Impresa, Inc. CEOs for Cities Report, 2009

#### **Introduction to Report:**

More than just a pleasant amenity, the walkability of cities translates directly into increases in home values. Homes located in more walkable neighborhoods—those with a mix of common daily shopping and social destinations within a short distance—command a price premium overotherwise similar homes in less walkable areas.

Houses with the above-average levels of walkability command a premium of about \$4,000to \$34,000 over houses with just average levels of walkability in the typical metropolitan areas studied.

#### **Key Takeaways:**

- Consumers and housing markets attach a real positive value to living within walking distance of shopping, services, schools, and parks.
- Analyzing over 90,000 recent home sales in fifteen metropolitan areas across the U.S., the
  report concludes that homes with above-average levels of walkability command a premium
  of \$4,000 to \$34,000 over homes with just average levels of walkability in the same
  metropolitan area.
- Just a one point increase in Walk Score is associated with a \$700 to \$3,000 increase in home values.
- Property-value premiums for walkability are higher in more populous urban areas and areas with access to transit as people have real alternatives to living without an automobile.



#### PDF available at:

http://www.ceosforcities.org/research/ walking-the-walk/

## Smoking Ban Policies and Their Influence on Smoking Behaviors Among Current California Smokers: A Population-Based Study

Zablocki R, Edland S, Myers M, Strong D, Hofstetter R, Al-Delaimy W *Preventive Medicine*, 2014

#### Abstract

**Objective:** To assess whether smoking ban policies are associated with smoking reduction and quit attempts among California smokers.

**Methods:** Data were examined for 1718 current smokers from follow-up telephone interviews conducted in 2011 of persons previously identified as smokers in a representative sample of the adult population of California. Population weighted logistic regressions controlling for demographic and other variables were used to evaluate the association between smoking ban policies (home, work, and town) and changes in tobacco use (past year quit attempt or reduction in smoking rate).

**Results:** Living in a home with a total ban was significantly associated with smoking reduction (adjusted odds ratio, AOR: 2.4, 95% CI: 1.4–4.2) and making a quit attempt (AOR: 2.3, 95% CI: 1.3–3.9) compared to living in a home with no home ban. Self-reported perception of an outdoor ban in one's city/town was associated with smoking reduction (AOR: 1.7, 95% CI: 1.02–2.7) and making a quit attempt (AOR: 1.8, 95% CI: 1.05–2.9).

**Conclusion:** These results indicate that smoking bans not only protect nonsmokers from the harms of secondhand smoke, but are also associated with smoking reduction and cessation.

### **Key Takeaways:**

- Community-wide outdoor smoking bans have a significant impact on smoking reduction and cessation, making smokers almost two times more likely to reduce smoking or make a quit attempt.
- Outdoor smoking bans can benefit smokers as well as nonsmokers by facilitating smoking reduction and cessation.



#### PDF available at:

http://www.sciencedirect. com/science/article/pii/ S0091743513004520

## Bicycle Commuting and Facilities in U.S. Cities: If You Build Them, Commuters Will Use Them

Dill J, Carr T Transportation Research Record, 2003

#### Abstract

Some surveys indicate that providing bicycle lanes and paths may encourage more people to commute by bicycle. The presence of a striped lane or separated path can increase a cyclist's perception of safety. With growing concerns over traffic congestion and vehicle pollution, public policy makers are increasingly promoting bicycling as an alternative for commuting and other utilitarian trip purposes. State and local spending on bicycle facilities has increased significantly over the past decade. Previous studies have linked higher levels of bicycle commuting to various demographic and geographic variables. At least one analysis showed that cities with higher levels of bicycle infrastructure (lanes and paths) witnessed higher levels of bicycle commuting. Research was conducted that affirms that finding by analyzing data from 43 large cities across the United States. This cross-sectional analysis improves on previous research by including a larger sample of cities, not including predominantly college towns, and using consistent data from the Bureau of the Census 2000 Supplemental Survey. Although the analysis has limitations, it does support the assertion that new bicycle lanes in large cities will be used by commuters.

#### **Key Takeaways:**

- Each additional mile of Type 2 bike lanes per square mile is associated with a 1 percent increase in the number of workers commuting by bicycle.
- A 1 percent increase in bicycle commuting would double the average number of bicycle commuters for most cities.
- To increase bicycle commuting, bike lanes and paths need to connect popular origins and destinations, greater efforts should be taken to educate commuters about bicycling as an option, and commuters need adequate and safe bike parking at work.



#### PDF available at:

http://trb.metapress.com/content/ a2485322g1249615/





### **School Sector**

Schools play a key role in Blue Zones Project by creating an environment that teaches healthy lifestyle choices today and for years to come. As school leaders, you are in a powerful position to dramatically improve your students' well-being and reap the many benefits:

- Students with high well-being are more engaged in the classroom and earn higher test scores than students with low well-being.
- Healthier students have higher attendance rates.
- Healthier students tend to be better adjusted and socially connected.
- Schools that support student well-being are more attractive to families deciding where to send their children to school.

#### **School Successes in Blue Zones Project Sites**

- Fourteen schools in the cities of Hermosa Beach, Manhattan Beach, and Redondo Beach, CA, started Walking School Bus (WSB) programs. A third of all Beach Cities students now walk to school, resulting in approximately eleven thousand miles walked and fifteen thousand car trips saved.
- Elementary schools in Spencer, Iowa, increased the number of WSB programs from one to six, resulting in a 10 percent increase in the number of students walking or biking to school in one year.
- During the 2012–13 school year, schools in Cedar Falls, Iowa, saw a 2 percent reduction in BMI in the eighty-fifth or higher percentile among men and a 1 percent reduction among females.
- In the Beach Cities, CA, almost six thousand students in 234 classes participated in MindUp, a program that helps students learn to self-regulate behavior and mindfully engage in the classroom.
- Johnson Elementary School in Spencer, Iowa, introduced three new programs to keep students active throughout the day. Students now complete 150 minutes of structured physical activity weekly, as recommended by the National Association for Sport and Physical Education.
- Inspired by Blue Zones Project, the University of Northern Iowa in Cedar Falls, Iowa, established a student-run, sustainable campus garden that has provided over seven hundred pounds of fresh produce for the UNI cafeteria, local food banks, and community events since its inception in 2012. The university's dining team also made several changes in the cafeteria environment to promote healthy choices; dining staff have seen student's eating habits improve as a result.

This collection of academic literature highlights some of the research behind the best practices we suggest schools adopt and implement.

#### **Featured Articles:**

- The Walking School Bus and Children's Physical Activity: A Pilot Cluster Randomized Control Trial
- Effectiveness of Breakfast in the Classroom in Five Exemplary Districts
- School Lunch Debit Card Programs are Associated with Lower Nutrition and Higher Calories
- Effects of Mindful Awareness Practices on Executive Functions in Elementary School Children

## The Walking School Bus and Children's Physical Activity: A Pilot Cluster Randomized Control Trial

Mendoza J, Watson K, Baranowski T, Nicklas T, Uscanga D, Hanfling M *Pediatrics*, 2011

#### Abstract

**Objective:** To evaluate the impact of a "walking school bus" program on children's rates of active commuting to school and physical activity.

**Methods:** We conducted a pilot cluster randomized controlled trial among 4th-graders from 8 schools in Houston, Texas (N = 149). Random allocation to treatment or control conditions was at the school level. Study staff walked with children to and from school up to 5 days/week. Outcomes were measured the week before (time 1) and during weeks 4 and 5 of the intervention (time 2). The main outcome was the weekly rate of active commuting, and a secondary outcome was moderate-to-vigorous physical activity. Covariates included sociodemographics, distance from home to school, neighborhood safety, child BMI z score, parent self-efficacy/ outcome expectations, and child self-efficacy for active commuting. A mixed-model repeated measures regression accounted for clustering by school, and stepwise procedures with backward elimination of non-significant covariates were used to identify significant predictors.

**Results:** Intervention children increased active commuting (mean  $\pm$  SD) from 23.8%  $\pm$  9.2% (time 1) to 54%  $\pm$  9.2% (time 2), whereas control subjects decreased from 40.2%  $\pm$  8.9% (time 1) to 32.6%  $\pm$  8.9% (time 2) (P < .0001). Intervention children increased their minutes of daily moderate-to-vigorous physical activity from 46.6  $\pm$  4.5 (time 1) to 48.8  $\pm$  4.5 (time 2), whereas control children decreased from 46.1  $\pm$  4.3 (time 1) to 41.3  $\pm$  4.3 (time 2) (P = .029).

**Conclusions:** The program improved children's active commuting to school and daily moderate-to-vigorous physical activity.

#### **Key Takeaways:**

- Walking School Bus programs significantly increase the number of students walking to school and the amount of moderate-to-vigorous physical activity these children complete.
- The percentage of children actively commuting to school more than doubled from 24 percent to 54 percent in schools where a Walking School Bus (WSB) program was started. In comparison, over the study period, the percentage of children actively commuting decreased from 40 percent to 9 percent in schools without a WSB program.
- Children participating in a WSB program increased their minutes of daily
  moderate-to-vigorous physical activity while children who did not participate in
  a WSB program decreased their minutes of daily moderate-to-vigorous physical activity.



#### PDF available at:

http://pediatrics.aappublications.org/content/128/3/e537.full

## Effectiveness of Breakfast in the Classroom in Five Exemplary School Districts

Rainville A, King A, Nettles M Journal of Child Nutrition and Management, 2013

#### Abstract

**Purpose/Objectives:** A national trend to improve school breakfast participation is the integration of breakfast within the school day. Breakfast in the classroom programs increase student access to school breakfast. Service models include grab and go distribution of breakfasts to each classroom, and mobile breakfast carts in hallways. The purpose of this study was to determine the effectiveness of breakfast in the classroom using financial records and student outcomes.

Methods: Using case study research methodology, the National Food Service Management Institute, Applied Research Division, conducted a study to determine the effectiveness of breakfast in the classroom. State agencies recommended exemplary districts offering breakfast in the classroom programs. After a pilot visit to a USDA Midwest Region district, four districts of varying sizes in USDA's Mid-Atlantic, Northeast, Western, and Mountain Plains Regions were visited. Preparation, distribution, and service of breakfast were observed in elementary, middle, and high schools. School nutrition directors, principals, teachers, and other school personnel were interviewed.

Results: Schools that offer breakfast in the classroom have experienced impressive increases in participation which leads to increased revenue. A high school that served 50 breakfasts per day increased participation to 950 breakfasts per day. A K-8 elementary school with breakfast in the classroom earned \$70,412 yearly in additional revenue compared to a similar school that did not offer it (\$29,813). Four of five districts had limited data on financial outcomes. A middle school that began breakfast in the classroom in 2011 experienced a drop in disciplinary referrals from 377 to 171 from 2010 to 2011. School personnel perceived improvements in the school atmosphere and a number of student-related issues following implementation of a breakfast in the classroom program.

Applications to Child Nutrition Professionals: Increased breakfast participation leads to improved nutrition for children and can result in increased revenue for districts. Breakfast in the classroom can improve school culture and have a positive effect on student behavior. The outcomes of this study should be shared with school nutrition personnel, school administrators, teachers, school staff, and parents.

#### **Key Takeaways:**

- Schools that have started breakfast-in-the-classroom programs have increased revenue, some by as much as \$70,000 yearly.
- Breakfast-in-the-classroom programs improve nutrition for children. Additional benefits may include a drop in disciplinary referrals and improvements in school culture and student behavior.



#### PDF available at:

http://www. schoolnutrition. org/5--News-and-Publications/4--The-Journal-of-Child-Nutrition-and-Management/Spring-2013/ Volume-37,-Issue-1,-Spring-2013---Rainville,-King,-Nettles/

# School Lunch Debit Card Payment Systems are Associated with Lower Nutrition and Higher Calories

Just D, Wansink B *Obesity,* 2014

#### Abstract

**Objective:** Debit card payment systems are known to induce more frivolous purchases in adults, but their impact on children is unknown.

**Design and Methods:** Using a national survey of 2,314 public school students in the United States, food purchases in schools with debit-only systems to those in schools with both debit and cash options are compared.

**Results:** Students in debit and cash schools purchase more fresh fruit and vegetables and fewer total calories.

**Conclusions:** Payment systems with cash options have a lower purchase incidence of less healthy foods and higher purchase incidence of more healthy foods.

#### **Key Takeaways:**

- Students purchase more healthy foods and fewer unhealthy foods when cafeterias have the option to purchase with cash instead of or in addition to debit cards.
- Students in debit-only schools purchased more candy (35 percent vs. 24 percent) and fries (14 percent vs. 2 percent), translating into consuming sixty-three more calories per meal of unhealthy foods and twenty-two fewer calories per meal of healthy foods than students in debit/cash schools.
- Students in debit/cash schools purchased more fresh fruits (47 percent vs. 31 percent) and fresh vegetables (31 percent vs. 11 percent) compared to students in debit-only schools.



#### PDF available at:

http://onlinelibrary. wiley.com/doi/10.1002/ oby.20591/pdf

# **Effects of Mindful Awareness Practices on Executive Functions in Elementary Children**

Flook L, Smalley S, Kittil J, Galla B, Kaiser-Greenland S, Locke J, Ishijima E, Kasari C

Journal of Applied School Psychology, 2010

#### Abstract

A school-based program of mindful-awareness practices (MAPs) was evaluated in a randomized control study of 64 second- and third-grade children ages 7-9 years. The program was delivered for 30 minutes, twice per week, for 8 weeks. Teachers and parents completed questionnaires assessing children's executive function immediately before and following the 8-week period. Multivariate analysis of covariance on teacher and parent reports of executive function (EF) indicated an interaction effect between baseline EF score and group status on posttest EF. That is, children in the MAPs group who were less well regulated showed greater improvement in EF compared with controls. Specifically, those children starting out with poor EF who went through the MAPs training showed gains in behavioral regulation, metacognition, and overall global executive control. These results indicate a stronger effect of MAPs on children with executive function difficulties. The finding that both teachers and parents reported changes suggests that improvements in children's behavioral regulation generalized across settings. Future work is warranted using neurocognitive tasks of executive functions, behavioral observation, and multiple classroom samples to replicate and extend these preliminary findings.

#### **Key Takeaways:**

- School programs teaching mindful awareness practices significantly improve children's executive functions, the self-regulating skills that help with planning, organizing, making decisions, shifting between situations or thoughts, controlling emotions or impulsivity, and learning from past mistakes.
- Children with poor executive functions show greater improvements in these functions after learning mindful-awareness practices.



#### PDF available at:

http://www.tandf online.com/doi/abs/1 0.1080/153779009033 79125#.U2qf6PldXmc





#### **Restaurant Sector**

Restaurants play a key role in Blue Zones Project by making it easier for customers to find healthy options. As more and more customers are demanding healthy options, restaurants can follow our best practices to better meet this demand and increase their revenue while improving their customers' health.

#### **Restaurant Successes in Blue Zones Project Sites**

- At Weasy's restaurant in Spencer, Iowa, training servers to offer vegetables when taking orders boosted vegetable sales by 50 percent.
- Daily Bread Bakery in Algona, Iowa has seen a 37 percent increase in lunch sales since becoming a Blue Zones Restaurant®.
- Good Stuff restaurant in Beach Cities, CA, has seen an increase in sales and community support as a result of becoming a Blue Zones Restaurant.
- In Spencer, Iowa, The Bear restaurant is now using local ingredients from the local farmers market, and Weasy's restaurant is using fresh vegetables straight from their own garden.

This collection of academic literature highlights some of the research behind the best practices we suggest to restaurant owners.

#### **Featured Articles:**

- Better-For-You Foods: An Opportunity to Improve Public Health and Increase Food Industry Profits
- Do Descriptive Menu Labels Influence Restaurant Sales and Repatronage?
- Menu Positions Influence Food Orders

# Better-For-You Foods: An Opportunity to Improve Public Health and Increase Food Industry Profits

Cardello H, Wolfson J, Yufera-Leitch M, Warren L, Spitz M Hudson Institute Report, 2013

**Background:** In 2010, our aggregate food supply provided 2,534 calories per person per day, 458 more than in 1970. Of this 22.1 percent increase, 242 calories came from added fats and oils; 167 calories from flour and cereal products; and 35 calories from sugar. For the average consumer eating one meal a week away from home, this roughly translates to two extra pounds of weight gained each year. For the average consumer eating one meal a week away from home, this roughly translates to two extra pounds of weight gained each year. Given these figures, it is not surprising that organizations such as the Institute of Medicine have called for consumer packaged goods companies, chain-owned full-service restaurants, and quick-service restaurants to substantially reduce the number of calories served to children and their families.

**Methods:** The overarching goal of our research was to test whether increasing better-for-you (BFY)/lower-calorie products could help corporations improve the key performance metrics demanded by their shareholders and Wall Street, while at the same time addressing obesity. To assess restaurant performance, we examined servings, traffic data, and sales trends to determine if sales of BFY/lower-calorie menu items resulted in improved performance. We analyzed 21 chains and 6,217 menu items across nine quick-service and 12 full-service restaurant chains.

### **Key Takeaways:**

- Restaurant chains growing their better-for-you (BFY)/lower-calorie menu servings saw a 5.5 percent increase in same-store sales, while those that did not suffered a 5.5 percent decline.
- The nine companies with above-average BFY sales percentages recorded operating profit growth of 49.6 percent, while the six companies with below-average BFY percentages recorded a 14.3 percent increase in operating profits; more than 35 percentage points lower than their counterparts.
- Across the twenty-one chains, the BFY/lower-calorie items were the key growth engine. For total food and beverages, overall chain servings decreased by 832.5 million. But when these servings are broken down by BFY/lower-calorie and traditional foods, servings of BFY/lower-calorie foods actually increased by 472.4 million, while servings of traditional foods declined by 1.3 billion.
- The ten restaurant chains that increased their BFY/lower-calorie food servings also saw a 10.9 percent increase in total traffic, compared to a 14.7 percent decline in total traffic at the eleven restaurant chains whose BFY/lower-calorie food servings declined.



PDF available at: http://www.hudson. org/content/researchattachments/attachment/1096/better\_for\_ you\_combinedfinal.pdf

# Do Descriptive Menu Labels Influence Restaurant Sales and Repatronage?

Wansink B, Painter J, van Ittersum K Cornell Hotel and Restaurant Administration Quarterly, 2001

#### **Abstract**

How do descriptive menu labels influence customers? In a six-week field experiment involving 140 customers, descriptive menu labels (such as "Grandma's zucchini cookies" or "succulent Italian seafood filet") increased sales by 27% and improved attitudes towards the food, attitudes toward the restaurant, and intentions toward repatronage. Such labels did not, however, directly increase the amount a person is willing to pay for the labeled item. If descriptive labels are used sparingly and appropriately, they can improve sales and post-consumption attitudes of the food and the restaurant.

#### **Key Takeaways:**

- Descriptive menu labels increase sales by 27 percent and increase the likelihood that customers will repurchase the item at a future visit.
- Customers who order menu items with descriptive labels rate the menu items as being of higher quality and a better value than menu items without descriptive labels.
- Offering menu items with descriptive labels leads customers to have more positive attitudes toward a restaurant and believe that a restaurant keeps up-to-date on the latest food trends



PDF available at: http://foodpsychology. cornell.edu/sites/default/files/pdf/descriptivemenulabels-2001.pdf

#### Menu Positions Influence Food Orders

Dayan E, Bar-Hillel

Judgment and Decision Making, 2011

#### **Abstract**

"Very small but cumulated decreases in food intake may be sufficient to have significant effects, even erasing obesity over a period of years" (Rozin et al., 2011). In two studies, one a lab study and the other a real-world study, we examine the effect of manipulating the position of different foods on a restaurant menu. Items placed at the beginning or the end of the list of their category options were up to twice as popular as when they were placed in the center of the list. Given this effect, placing healthier menu items at the top or bottom of item lists and less healthy ones in their center (e.g., sugared drinks vs. calorie-free drinks) should result in some increase in favor of healthier food choices.

#### **Key Takeaways:**

- Placing menu items at the beginning or end of their category increases their popularity by 20 percent.
- The boost in sales for placement at the beginning or end of the category was not affected by the type of foods in the category (i.e. appetizers, entrees, desserts) or the number of menu items in the category.
- Placing healthier menu options at the beginning or end of their category will increase their sales and nudge customers to choose better-for-you options.



PDF available at: http://journal. sjdm.org/11/11407/ jdm11407.pdf





#### **Grocery Store Sector**

Grocery stores play a key role in Blue Zones Project by making it easier for customers to find healthy food options. As more and more customers are demanding healthy options, grocery stores can follow our best practices to better meet this demand and increase their revenue while improving their customers' health.

#### **Grocery Store Successes in Blue Zones Project Sites**

- At Fareway grocery store in Spencer, IA, sales of water cases increased by over 50 percent and sales of individual water bottles increased 36 percent compared to sales in the year prior to starting Blue Zones Project. Produce sales also increased in percent of produce compared to other grocery items purchased, average amount spent on produce, and average produce sales per customer (up 5 percent).
- HyVee grocery store in Cedar Falls, IA, replaced unhealthy options in checkout lanes and beverage coolers with healthier options and saw a 99 percent increase in sales of healthy snack bars and a 151 percent increase in sales of healthy beverages.

This collection of academic literature highlights some of the research behind the best practices we suggest to grocery store owners.

#### **Featured Articles:**

- Hy-Vee Boosts Sales with Healthier Options
- Helping Shoppers Overcome the Barriers to Choosing Healthful Foods
- Point-of-Purchase Health Information Encourages Customers to Purchase Vegetables:
   Objective Analysis by Using a Point-of-Sales System

GROW's experience becoming a Blue Zones Grocery Store was not only good for our customers but good for our family, our employees and our business. The process helped us learn more about the items we offer and to give advice to customers to help them make a healthier choice when shopping. From a business stand point, the cross marketing of Blue Zone foods has helped our sales, but the Blue Zone labels in the shop have had the most positive effect for GROW. Combining the marketing Blue Zones Project has done in the Beach Cities to help improve the health of our citizens with their logo in our shop reaffirms to our customers that GROW cares about our community.

- Barry Fisher, Owner

### **Hy-Vee Boosts Sales with Healthier Options**

#### Overview

Hy-Vee is an employee-owned grocery store with 235 locations throughout the Midwest. They consistently rank among the top 25 supermarket chains and the top 50 private companies in the United States with annual sales of more than \$8 billion. Hy-Vee began working with Blue Zones Project® lowa in 2012 as a way to build on their mission statement of making lives easier, healthier and happier.

In 2013 Blue Zones Project Cedar Falls participant Hy-Vee worked to increase sales of healthy alternatives for sugar-sweetened beverages and candy bars at checkout aisles and in beverage coolers. These changes led to an increase in sales of healthy snack bars by 99 percent and healthy drinks by 151 percent over a 3-month period (June 1–August 31).

#### **Strategy and Approach**

Hy-Vee replaced candy bars in checkout aisles with healthy snack bars and baskets of fruit. Hy-Vee also converted three beverage coolers into Blue Zones® coolers by removing sugar-sweetened beverages and replacing them with healthier options like coconut water and unsweetened tea. Though distributors initially expressed concern over potential decreases in sales, they eventually worked with Hy-Vee to select best-selling healthy beverage options.

#### Measurable Outcomes over a Three-Month Trial

- Healthy snack bars: an increase of 97 percent in units sold and a 99 percent increase in sales.
- Healthy beverages: an increase of 122 percent in units sold and a 151 percent increase in sales.
- The store yielded an overall increase in revenue during the three-month trial. three-month trial.

"This was one of our biggest successes. Sales of carbonated beverages have been declining nationally, but these figures indicate that Cedar Falls is ahead of the trend."

Jeff Sesker,
 Hy-Vee Store Director

### Helping Shoppers Overcome the Barriers to Choosing Healthful Foods

Food Marketing Institute Report, 2010

#### **Introduction to Report**

The choices we make in every aisle of the supermarket ultimately affect our health. Helping customers purchase and prepare nutritious foods is a key priority for many retailers, manufacturers and health agencies. Many have intensified their focus and resources to promote positive food choices, yet many supermarket operators and manufacturers are asking common questions:

- Are we meeting shopper needs?
- How can we most effectively build trial, usage and advocacy of healthful products?
- What are the most compelling ways to help shoppers make healthful food choices and manage their personal health concerns?

We sought to answer these crucial questions with quantitative shopper research designed to uncover what shoppers really want and how to design programs or services that best align with their needs. The research quantifies the hurdles that make it difficult for many to consume healthy meals, and measures shopper interest in a wide range of services supermarkets might provide to help customers overcome these hurdles to healthful eating.

72 percent of grocery shoppers acknowledge that their local supermarket stocks a wide variety of healthful foods and beverages. Yet just half feel that same store promotes healthy living. Many consider health concerns — such as weight management, heart health or cholesterol levels — important when shopping for groceries, while just 38 percent feel their grocery store provides information on foods and beverages that can help manage their personal health concerns.

This study provides guidance on how supermarket operators and product marketers can best help shoppers make positive choices in nutrition and lifestyle management.

#### **Key Takeaways:**

- Sixty-six percent of grocery shoppers are looking for ways to improve their health
- Consumers are receptive to programs and services that can help them make healthful food choices and manage health concerns.
- Grocery shoppers are most interested in coupons, recipes, and information conveyed in simple formats at the shelf, checkout, and online.
- Supermarkets are uniquely positioned to positively impact the health of their shoppers through wellness strategies that make use of current assets.



PDF of full report available at: http://info.catalinamarketing.com/ files/133/Healthful\_ Foods\_Study.pdf

## Point-of-Purchase Health Information Encourages Customers to Purchase Vegetables: Objective Analysis by Using a Point-of-Sales System

Ogawa Y, Tanabe N, Honda A, Azuma T, Seki N, Suzuki T, Suzuki H Environmental Health and Preventive Medicine, 2011

#### Abstract

**Objectives:** Point-of-purchase (POP) information at food stores could help promote healthy dietary habits. However, it has been difficult to evaluate the effects of such intervention on customers' behavior. We objectively evaluated the usefulness of POP health information for vegetables in the modification of customers' purchasing behavior by using the database of a point-of-sales (POS) system.

**Methods:** Two supermarket stores belonging to the same chain were assigned as the intervention store (store I) and control store (store C). POP health information for vegetables was presented in store I for 60 days. The percent increase in daily sales of vegetables over the sales on the same date of the previous year was compared between the stores by using the database of the POS system, adjusting for the change in monthly visitors from the previous year (adjusted  $\Delta$ sales).

**Results:** The adjusted  $\Delta$ sales significantly increased during the intervention period (Spearman's p = 0.258, P for trend = 0.006) at store I but did not increase at store C (p = -0.037, P for trend = 0.728). The growth of the mean adjusted  $\Delta$ sales of total vegetables from 30 days before the intervention period through the latter half of the intervention period was estimated to be greater at store I than at store C by 18.7 percentage points (95% confidence interval 1.6-35.9).

**Conclusions:** Health-related POP information for vegetables in supermarkets can encourage customers to purchase and, probably, consume vegetables.

#### **Key Takeaways:**

- Providing information on the health effects of vegetables at the point-ofpurchase (POP) increases sales of those vegetables by over 18 percent.
- Health information at POP must be provided continuously for more than four weeks to see an impact on sales.
- A point-of-sales (POS) system that can track sales data for particular grocery items is a very useful tool for measuring the effectiveness of interventions such as providing health information at the POP.
- Calling out healthier grocery items with signage and health information at POP increases sales of those items and has the potential to improve customer health through greater consumption of these healthier items.



PDF available at: http://www.ncbi. nlm.nih.gov/ pubmed/21431791/



### **Engagement Sector**

Engaging individuals is a critical component of Blue Zones Project. Studies have shown that Americans are increasingly experiencing more isolation, depression, anxiety, and stress, all of which contributes to lower well-being. Blue Zones Project works to combat these obstacles to living happier, healthier lives by connecting individuals to each other to move naturally together, cook together, and discover their purpose together.

#### **Individual Engagement Successes in Blue Zones Project Sites**

- In the Beach Cities, CA, over eighteen hundred people and two hundred teams have participated in Walking Moais, groups of community members who meet regularly to walk together.
- In 2013, residents in Spencer, Iowa, formed twenty-one Walking Moais with 246 participants, logging over one hundred thirty-six thousand minutes walking.
- In 2013, more than ninety-five hundred people volunteered in the Iowa communities of Cedar Falls and Waterloo, amounting to more than forty-nine thousand volunteer hours.

This collection of academic literature highlights some of the research behind the best practices we employ to engage individuals.

#### **Featured Articles:**

- How Much Does the Well-Being of Others in the Same Household Influence Our Own Well-Being?
- Household Smoking Bans and Adolescent Antismoking Attitudes and Smoking Initiation: Findings from a Longitudinal Study of a Massachusetts Youth Cohort
- Religious Involvement and U.S. Adult Mortality
- Dinner Rituals that Correlate with Child and Adult BMI

The Blue Zones Project has motivated me to make positive changes in my life. I initially chose one Power 9® principle and it has led me to implement others. I have lost 35 pounds and I have more energy. I have participated in several Moais and am more outgoing and less concerned about myself and more about others. My five daughters are eating healthier as well. Small changes are making a big impact!

-Deb Muller, Spencer resident

## How Much Does the Well-Being of Others in the Same Household Influence Our Own Well-Being?

Agrawal S, Harter J
Gallup Consulting, 2010

#### Abstract

How much does the wellbeing of others affect our wellbeing? Would living in a household with someone who has high wellbeing dramatically boost our chances of having high wellbeing? Using a sample of more than 2,000 Gallup Panel member pairs who live in the same household, we studied the within-household wellbeing correlations of overall wellbeing and daily experience. We also studied the within-household correlations of each of the five dimensions of wellbeing (Career, Social, Financial, Physical, and Community). After controlling for income and geographical location of the household, we found that the overall wellbeing correlation between two people from the same household was 0.45. A person is more than two times as likely to be thriving when he or she is living in a household with another person who is thriving — compared to living with a person who is not thriving. Although the relationship was positive for all five wellbeing dimensions, it was stronger for Financial, Community, and Social Wellbeing compared to the other two dimensions.

#### **Key Takeaways:**

- Lifting the well-being of one person in a household has a significant impact on lifting the well-being of others in the same household.
- A person is more than two times as likely to be thriving when he or she is living in a household with another person who is thriving.
- The positive effect of a person with high well-being on others in the household is strongest for the three well-being areas of financial, community, and social well-being.



PDF available at: http://www.gallup. com/strategicconsulting/157241/wellbeingothers-household-influence-own-wellbeing.aspx Household Smoking Bans and Adolescent Antismoking Attitudes and Smoking Initiation: Findings from a Longitudinal Study of a Massachusetts Youth Cohort

Albers A, Biener L, Siegel M, Cheng D, Rigotti N American Journal of Public Health, 2008

#### Abstract

**Objectives:** We sought to determine whether adolescents living in households in which smoking was banned were more likely to develop antismoking attitudes and less likely to progress to smoking compared with those living in households in which smoking was not banned.

**Methods:** We completed a longitudinal 4-year, 3-wave study of a representative sample of 3834 Massachusetts youths aged 12 to 17 years at baseline; 2791 (72.8%) were reinterviewed after 2 years, and 2217 (57.8%) were reinterviewed after 4 years. We used a 3-level hierarchical linear model to analyze the effect of a household ban on antismoking attitudes and smoking behaviors.

**Results:** The absence of a household smoking ban increased the odds that youths perceived a high prevalence of adult smoking, among both youths living with a smoker (odds ratio [OR] = 1.56; 95% confidence interval [CI] = 1.15, 2.13) and those living with nonsmokers (OR = 1.75; 95% CI = 1.29, 2.37). Among youths who lived with nonsmokers, those with no home ban were more likely to transition from nonsmoking to early experimentation (OR = 1.89; 95% CI = 1.30, 2.74) than were those with a ban.

**Conclusions:** Home smoking bans may promote antismoking attitudes among youths and reduce progression to smoking experimentation among youths who live with nonsmokers.

#### **Key Takeaways:**

- Household smoking bans reduce the initiation of smoking among youth by changing norms about the prevalence and social acceptability of smoking.
- Youth who live in households without a smoking ban perceive a higher prevalence of adults smoking in their town and perceive smoking to be more socially acceptable compared to youth who live in homes with a smoking ban.
- Youth who live in a household without a smoking ban are more likely to experiment with tobacco, even if both of their parents do not smoke, compared to youth who live in a household with a smoking ban.
- Designating your home as a smoke-free zone eliminates exposure to tobacco smoke in the household and reduces the chances that youth in the household will experiment with tobacco.



PDF available at: http://www.ncbi.nlm.nih. gov/pubmed/18703438

### Religious Involvement and U.S. Adult Mortality

Hummer R, Rodgers R, Nam C, Ellison C Demography, 1999

#### Abstract

We use recently released, nationally representative data from the National Health Interview Survey-Multiple Cause of Death linked file to model the association of religious attendance and sociodemographic, health, and behavioral correlates with overall and cause-specific mortality. Religious attendance is associated with U.S. adult mortality in a graded fashion: People who never attend exhibit 1.87 times the risk of death in the follow-up period compared to people who attend more than once a week. This translates into a seven-year difference in life expectancy at age 20 between those who never attend and those who attend more than once a week. Health selectivity is responsible for a portion of the religious attendance effect: People who do not attend church or religious services are also more likely to be unhealthy and, consequently, to die. However, religious attendance also works through increased social ties and behavioral factors to decrease the risks of death. And although the magnitude of the association between religious attendance and mortality varies by cause of death, the direction of the association is consistence across causes.

#### **Key Takeaways:**

- People who attend religious services more than once a week have a seven-year longer life expectancy at age twenty than people who do not attend religious services.
- There is a graded relationship between religious attendance and mortality with increases in life expectancy for people who attend any religious services, even if less than once a week, compared to those who do not attend at all.
- If you are religious, you can increase your life expectancy by attending religious services regularly.



PDF available at: http://www.ncbi. nlm.nih.gov/ pubmed/10332617

#### Dinner Rituals that Correlate with Child and Adult BMI

Wansink B, van Kleff E *Obesity*, 2014

#### Abstract

**Objective:** What predicts whether a child will be at risk for obesity? Whereas past research has focused on foods, eating habits, feeding styles, and family meal patterns, this study departs from a food-centric approach to examine how various dinner rituals might influence the BMIs of children and adults.

**Methods:** In this study of 190 parents (BMI= $29.1\pm7.2$ ) and 148 children (BMI= $20.3\pm4.4$ ), the relationship between their BMIs and everyday family dinner rituals was examined using both correlation and regression analysis (controlled for educational level of parents).

**Results:** Families who frequently ate dinner in the kitchen or dining room had significantly lower BMIs for both adults (r=-0.31) and children (r=-0.24) compared to families who ate elsewhere. Additionally, helping cook dinner was associated with higher BMI for girls (r=0.26), and remaining at the table until everyone is finished with eating was associated with lower BMI for boys (r=-0.31).

**Conclusions:** Dinner tables may be one place where social support and family involvement meet—both of which relate to the BMI of children as well as parents. Family meals and their rituals might be an underappreciated battleground to fight obesity.

#### **Key Takeaways:**

- Families who eat dinner together in the kitchen or dining room weigh less than families who eat dinner elsewhere or do not eat together.
- Adults and children have lower BMIs if they eat together as a family in the kitchen or dining room.
- Family dinner nights centered around the kitchen or dining table not only result in lower body weight for adults and children but also foster social support and family involvement, higher academic achievement, and a lower risk of adolescent substance abuse.



PDF available at: http://onlinelibrary.wiley.com/ doi/10.1002/ oby.20629/abstract





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## **Appendix B: Southwest Florida Value Proposition**

Over the next five years, Southwest Florida has the *opportunity to unlock millions of dollars in value generation and savings*, benefiting employers, government entities, and communities at-large through cumulative savings in medical expenses, improvements in workforce productivity, and overall benefits within the regional economy. Unlocking this value is predicated on improving well-being across the area—specifically, improving elements of individual and collective well-being that are proven to positively drive medical cost savings and productivity —through a broad-scale, community-wide intervention with high levels of engagement among individuals, schools, worksites, food retail, faith-based groups, and other sectors.

# BLUE ZONES PROJECT® by HEALTHWAYS

## **WORKING DOCUMENT**

## **Appendix C:** Assessment Schedule Overview: October through December

#### October 24, 2017

#### Blue Zones Project Kick-Off, presented by Tony Buettner

200+ community leaders in attendance

#### October 27, 2014

#### 1:30 – 3:30 pm Schools Assessment

- o Organizations Represented:
  - Juicelation
  - National Association for the Advancement of Colored People
  - o University of Florida Institute of Food & Age Science
  - o Safe and Healthy Children's Coalition
  - o Collier County Public Schools
  - o DOH Collier
  - o Education Partners
  - o Early Learning Coalition of Southwest Florida
  - City of Naples

#### October 28, 2014

#### 8:00 - 10:00 am

#### **Schools Assessment**

- Organizations Represented:
  - Collier County Public Schools
  - o Fellowship of Christian Athletes
  - Healthcare of Southwest Florida
  - o Inner G Health
  - Sea Gate Elementary parent
  - o Wholesome Tummies Café of Collier
  - Sea Gate Elementary
  - o NCH / Safe & Healthy Children's Coalition

#### 10:30 am - 12:30 pm

#### **Community Policy**

- Organizations Represented:
  - o City of Naples Councilmember
  - City of Naples Mayor
  - o Juicelation
  - National Association for the Advancement of Colored People
  - o Children's Advocacy Center



- Drug Free Collier
- Naples Pathway Coalition
- City of Naples Airport Authority
- o Safe & Healthy Children's Coalition

#### 1:30 – 3:30 pm Community Policy

- Organizations Represented:
  - Naples Pathway Coalition
    - o Department of Health, Collier County
    - o Healthcare of Southwest Florida
    - FGCU professor
    - o Department of Health, Collier County
    - o Junior Achievement Southwest Florida
    - City of Naples
    - Collier County

4:00 – 5:30 pm Worksites

- Organizations Represented:
  - Department of Health, Collier County
  - Collier County
  - Naples Air Force and Food for Life Cooking

#### October 29, 2014

8:00 – 9:30 am

Restaurants

Worksites

Organizations Represented:

PBS Contractors

Collier County

Arthrex

Talent Force Solutions

City of Naples

10:30 am – 12:00 pm American Cancer Society and Girls on the Run

12:00 – 1:30 pm Media

12:30 – 2:00 pm Grocery Stores

Organizations Represented:



- University of Florida Institute of Food & Age Science
- Wynn's Market
- o Walmart
- Costco
- o NCH Heart Institute

2:30 - 4:00 pm

#### **Restaurants Meeting**

- Organizations Represented:
  - o University of Florida Institute of Food & Age Science
  - Food and Thought Café
  - o Drug Free Collier
  - o Green Scene
  - o Fundamental Health Solutions

4:00 - 5:30

#### **Engagement – Civic and Faith-based meeting**

#### October 30, 2014

8:00 - 10:00 am

**Grocery Stores** 

10:30 am - 12:00 pm

Media

1:00 - 2:30 pm

**United Way of Collier County** 

3:30 - 5:00 pm

## **Engagement – Civic and Faith-based meeting**

- Organizations Represented:
  - o Department of Health, Collier County
  - o Green Scene
  - Fellowship for Christian Athletes
  - United Way Collier County
  - Sea Gate Elementary parent
  - Collier County Medical Society
  - Community Volunteer
  - o Girls on the Run
  - o Parental Centering, LLC
  - o BMO Private Bank

#### Monday, November 3

1:30 - 2:30 pm

**Naples Daily News Office** 



#### **Tuesday, November 4**

9:00 am Meeting with Well Vending

12:00 – 1:00 pm Eileen Connelly of Community Foundation Collier

2:30 – 4:00 pm Collier County Government Building

Commissioner Fiala2:30-3:00 pmCommissioner Nance3:00-3:30 pmCounty Manager Leo Ochs3:30-4:00 pm

Wednesday, November 5

8:30 – 10:00 am Presentation to United Way - Jim Warnken

11:00 – 11:30 am WGPS TV

1:30 – 3:00 pm Safe & Healthy Children's Coalition of Collier County

3:30 pm Drug Free Collier

Thursday, November 6

8:30 am Safe & Healthy Children's Coalition year end meeting

10:30 am Faith-Based Leadership

11:00 am 5<sup>th</sup> Ave South Business Improvement District

1:30 – 2:30 pm Michael Wynn of Wynn's Market and Wynn's Catering

4:00 – 5:00 pm Collier County School District Leadership Committee

Tuesday, December 9

7:00 – 9:00 am Bonita Springs Chamber of Commerce Presentation

10:30 am – 12:30 pm Community Foundation of Collier County board retreat

2:00 – 3:00 pm Collier County Early Childhood Network

3:00 – 4:00 pm Naples Pathway Coalition

3:00 – 4:30 pm Community Health Partners year end consortium

Wednesday, December 10



	8:30 – 9:15 am	HOA of Golden Gate Estates
	9:15 – 9:45 am	NAACP
	10:00 – 10:45 am	Wyndemere Country Club
	11:00 – 11:40 pm	Vin DePasquale of Dock 5, Inc.
	12:00 – 1:00 pm	Rotary Club of Naples
	1:30 – 2:00 pm	Commissioner Penny Taylor (district 4)
	3:00 – 3:45 pm	Suzanne Fundingsland, Family Nutrition Program
	4:00 – 5:00 pm	Safe & Healthy Children's Coalition
Thursday, December 11		
	8:00 – 9:00 am	Faith-based Organizations
	11:00 – 11:30 am	Councilwoman Linda Penniman
	11:00 – 11:45 am	Grace Place
	3:00 – 4:00 pm	American House Bonita Springs
	3:30 – 4:30 pm	Steve Carnell (Public Service Division Admin for CC Gov)
Friday, December 12		
	8:00 – 8:45 am	Naples, Marco Island, Everglades Convention & Visitors Bureau
	9:30 – 10:30 am	Chamber Administrative Office
	10:45 – 11:30 am	Community Foundation of Collier County Board



**Appendix D:** Blue Zones Walkability and Bike-ability Observations and Recommendations

# Initial Observations and Recommendations: The Built Environment

Collier County, Florida
Prepared by Blue Zones
October 2014

The following memo summarizes observations and recommendations made by Blue Zones Dan Burden, Director of Innovation and Inspiration and national walkability expert and associate Samantha Thomas during an October 2014 "discovery visit" to Collier County, Florida. These initial recommendations are based on a short visit to the community and shouldn't be considered exhaustive. However, the visit did include: walks, a 10-mile bicycle tour, photo-documentation and driving tours in the City of Naples, several unincorporated communities of Collier county, and several meetings with City of Naples leaders.

Thus, these findings and recommendations provide a strong starting point for identifying many of the initiatives that will improve health and well-being through better built environments.



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## Introduction

A walking renaissance is upon us. We are walking more as a nation, for fun, health and to access daily goods and needs—grocery stores, coffee shops, pharmacies, friend's houses, or places of worship—in our neighborhoods. At least 80% of Americans now want walkable neighborhoods. More and more, we turn to WalkScore.com when figuring out where to live. For example, a one-point increase in WalkScore is associated with a \$500 to \$3,000 increase in home values (CEOs for Cities, 2009). Our most walkable places are not only worth more, they are often among the most economically and socially vibrant in the community. A 2011 study reported in the Journal of Physical Activity and Health found that a majority of adults view neighborhood infrastructure as highly important to physical activity. Health organizations today are taking a lead in the walkability and livability movement by investing in systematic, environmental approaches that better support individual and community health transformation.

However, we are still dealing with a legacy of roadways that fail to account for the safety and accessibility of people on foot or bicycle. According to a study by Smart Growth America, Dangerous by Design, 2014, Florida ranks number one for the most dangerous states to walk. Too many arterial roads—expected to move the most automobile traffic possible with minimal delay over long distances— are built wide and for higher vehicle speeds to achieve this purpose, even in urban areas. At the same time these roads have become the Main Streets of many communities and are typically lined by apartment complexes, shopping centers and office parks. Vehicle speed is a major factor, nearly 60 percent of pedestrian fatalities in Florida from 2000 to 2009 occurred on roads with speed limits of 40 mph or greater (Smart Growth America). Pedestrians have only a 15 percent chance of surviving a collision with a car traveling 40 mph.

Tides are changing. Florida Department of Transportation (FDOT) in 2011 appointed District One Secretary, Billy Hattaway, to lead and champion a progressive initiative for Complete Streets and pedestrian and bicycle safety. FDOT issued a Pedestrian and Bicycle Strategic Safety Plan (PBSSP) in February 2013, providing a multidisciplinary approach and setting comprehensive objectives and strategies to improve pedestrian and bicycle safety.

We know that street design matters. The good news is that communities choosing to prioritize pedestrian safety and invest in safer street design see fewer deaths and injuries, while improving the overall health and quality of life of the community. When the needs of all users—all ages, abilities and modes of travel—are properly balanced, our streets are safer and easier to navigate for everyone

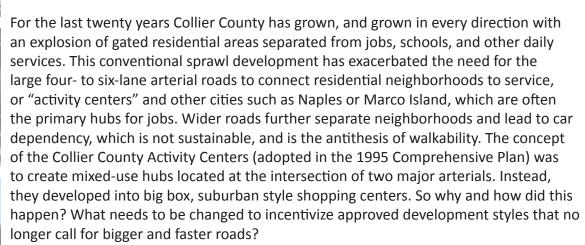
The big dividend: if we design streets to not just be safer, but to also be more comfortable and inviting for people we see walking and bicycling, as well as business,

increase. As motorists see more people in their environment their behavior changes. They form a "signature" of a person on foot or bike, and therefore alter their searching and behavior, such as yielding. Real safety is a result of having many more people walking and bicycling, and it is then when we see the greatest decline in motorist injuries.

## **General Observations: Collier County**

Located at the southwestern tip of Florida, Collier County is boarded by the Everglades to the east, the Gulf of Mexico to the west and coastal mangrove to the south. Its historic, built-up, waterfront communities include the more affluent cities of Naples and Marco Island (two of three incorporated cities in the county, the other being the City of Everglades), which mark the southern tip of a string of beach communities that extend north some 150 miles. Collier County is known as a destination for beaches, golf and Florida's most abundant natural beauty.

Any entry into Collier County forces visitors and residents alike to view the most unpleasant environment: US 41, Collier Boulevard, Airport Road, Immokalee Road, Goodlette-Frank Road, and other major four- to six-lane roads. These are the main major arterial roads in Collier County; everyone that drives drives on these roads. Yet these roads could leave you feeling that you are anywhere in Florida, or suburban America for that matter. Coupled by land settlement patterns of strip development, big-box commercial centers, and cul-de-sac gated residential communities; these roads create a highly auto-dependent, high speed environments. Over time, these corridors can become signature boulevards that residents are proud of by taking the people-first approach and adding a greater abundance of street trees, landscaped medians, sidewalks, on-street parking, buildings fronting the streets and addressing intersections to make them more safe and compact for all street users.



In the County's need to address growth [and mandated by the state] they adopted a growth management plan that broke the County up into three basic parts: urban, rural and pre-existing: Golden Gates Estates lots. The zoning tool of choice used to address Collier County's growth management plan was the planned unit development, or PUD. This is a catchall zoning classification that replaces compliance with standard regulations with a negotiated approval process that is largely focused on a single development







The above images are examples of major arterials found in Collier County.

project, rather than on how that project will integrate with adjoining neighborhoods or add to the character of the County. The reliance on this planning tool has cost the County. Instead of generating livable communities—walkability, density, destinations, interconnectedness and placemaking—communities developed commonly as individual uses disconnected and sprawling, separated in a manner consistent with conventional zoning and thus negating a key objective of the PUD.

The unintended consequence of the PUD trend to create an easier approval process has resulted in pedestrian-unfriendly streets, neighborhoods that are disconnected, and homogenous developments. And today, almost all PUD approvals burden the County Commission with a decision that causes political turmoil due to the pressure to approve projects that resemble comparable peer projects to maintain an appearance of fairness and equality.

In 2000, Dover, Kohl & Partners led a community-input process to inform the Toward Better Places: The Community Character Plan For Collier County that provides a framework, or blueprint, to support the County in more sustainable built environment development and revitalization. This is a strong document, and in many ways was the beginning of an urban design manual that many communities are now adopting, but implementation has been slow. A next-step is to work with County department's staff, elected leaders and developers through training processes to understand where current roadblocks exist in policy and/of implementation. Collier Metropolitan Planning Organization (MPO) is currently updating their Long-Range Transportation Plan (public comment period is occurring November through December 2014).

Past patterns still prevail. During a short two day visit the following observations were made on a handful communities or areas visited, two of which (Naples and Immokalee) will be highlighted further on pages to come.

- **City of Naples:** Naples is a destination within Florida and the county. A more affluent community, Naples takes pride in right-sized or near right-sized streets with strong models of traffic-calming treatments and landscaping. The historic neighborhood, Old Naples, is a key economic driver largely due to the transformation of 5th Avenue into a premier pedestrian area, and serves as a model for the region.
- Mercato Activity Center: The Mercato Activity Center is located on Tamiami Trail (US 41) and Strada Place. Buildings have yet come to line Tamiami Trail, but the internal street—Strada Place—has stronger form with mixed-use buildings fronting the street. Travel lanes are too wide, but strong placemaking features help contribute to the sense of arrival, and likely appropriate speeds. Connectivity to adjacent developments is an issue. The adjacent land is yet to be developed, providing an opportunity to create strong street connectivity between the developments. Opposite the Mercato, across the Tamiami Trail, is Naples Park one of the older subdivisions of Collier County—a model with its internal connectedness due to a strong grid street pattern. Naples Park does however lack sidewalks. Safe pedestrian and bicycle connections along and across Tamiami Trail into the Mercato is another challenge and opportunity that should be addressed. Over time, key activity centers, like Mercato, can transform from suburban to village bringing to life the initial vision for these areas to be higher density, mixed-use, with strong street connectivity and





Above Images: Strada Place in the Mercato Activity Center. The buildings are mixed-use with the ground-level reserved for restaurants and retail while condos placed above.

placemaking.

- Golden Gate: Golden Gate is a four square mile development with a population of about 24,000 people and 7,000 housing units, making it one of the higher density developments in the county. Golden Gate Parkway is a four-lane divided road lined with strip-style commercial, wide intersections, and missing sections of sidewalks. Located within the development are six schools where many kids walk and bike to school. Overall, the community is auto-focused and has issues with connectivity and the pedestrian environment. Opportunities include: enhancing pedestrian crossings and connections into the shopping center; Safe Routes to School programing and infrastructure to improve walkability and bikability for kids to and from the schools; and long-term transforming the strip commercial area into a village center.
- Golden Gate Estates: The largest subdivision—112,000 acres, 880 miles of roads, 183 miles of canals, and 2 ½ acre lots of affordable housing—in Collier County. Historically, the community has been against Smart Growth principles. A recommendation (over time) is for the community to undergo a process of identifying areas where new village centers can be located, allowing for densification with mixed-use development and connector roads that honor the area's rural character. Due to a lack of diverse land use, almost all trips, whether for worship, entertainment, shopping or work, requires long auto-based trips. This land use type overloads roads, and fails to be affordable or sustainable.
- Immokalee: Immokalee is an agriculture-based town in Northeast Collier County
  and is the most culturally diverse community in Collier County. Many people are
  walking and bicycling largely out of necessity. However, many of the streets do not
  reflect or support people walking and bicycling. Opportunities abound to create
  streets as public places by including all people and modes while building from the
  strong market culture the town is so distinctly known for.
- Ava Maria: Ava Maria is the County's newest planned college-town, located about a 30 minute drive inland from Naples. Once complete, the town will be home to 11,000 households with a mix of neighborhoods, housing styles and services. The town came to fruition with a partnership between Barron Collier Companies, a pioneer in the development of Collier County since the early 1900s, and Tom Monaghan, founder of Domino's Pizza. The town is centered both physically and philosophically around the catholic religion. Buildings watch over the streets and church plaza. Most streets within the town core are near right-sized, although there have been some misses. Almost all curb radii (right-hand turns) are overly wide, and today paint has been applied to designate the space. There is an abundance of surface parking at the Publix and the entrance road is overbuilt—it is a four-lane divided road. Current traffic modeling and planning practices should be addressed to identify opportunities for policy change. This area may be a good candidate to convert the outer two lanes into a buffered bike lane.
- Marco Island: The Island is now an incorporated city within Collier County. Significant development in the 1960s made it into the tourist destination it is known for today. Street connectivity is limited, but an opportunity exists to enhance active transportation by developing a network of on-street and off-street public trails.





Above Images: Ava Maria is "a town where children bike to school or walk to the ice cream shop. Where neighbors are friends and life is good," reads the newest planned town's brochure.

It is apparent that the County and its cities are shifting into a new culture of transportation and land use planning. There is a strong growth rate in the county, which creates opportunity for change. The County in particular needs marquee projects and other models that showcase public-private partnerships in achieving a new quality of economic prosperity as well as health, accessibility, safety and quality of life. Looking forward, many opportunities are emerging to bring better health and well being to Collier County.







Above: A photo vision of Naples Park at the intersection of 6th Street and 106th Avenue, created for the Community Character Plan for Collier County. It illustrates the transition of a neighborhood park into a place by first public investment and then private investment to make the neighborhood more walkable. The photo vision shows the marriage of land use and transportation planning in creating a sense of security and comfort--key elements needed to encourage more people to walk--by the addition of street trees that buffer new sidewalks, placemaking, enhanced crosswalk markings and "eyes on the street" (buildings fronting the street).

# How to Get to Livability

Livability calls for combining transportation with land use. People will walk when we design places and streets to make walking a natural activity again. Sidewalks, bike lanes and crosswalks are not enough. We can start by providing people with destinations within reach and both safe and comfortable routes to get them there. Generally, people will prefer to walk five-minutes to reach a destination; this is about a quarter-mile for the average person. If the built environment is well shaded, homes watch over streets, and there are decent destinations, then a 10-20-minute walk (or about one-half to a full mile) is acceptable to many people. Add to this bicycling. A bicyclist riding a leisurely 12 mph covers a mile in eight minutes, two miles in 16 minutes and three miles in about 24 minutes. When communities make moving naturally the easy choice a person is achieving a heart-healthy lifestyle.

The benefits of walkability, livability and broad use of active modes of transportation are numerous and include safety, health and well—being, equity, social engagement, opportunity, affordability, sustainability and economic vitality. Walkability and its associated placemaking is the source of future job growth. Walkability helps incentivize the placement of buildings, streets, parks and other infrastructure in ways that reduce the growth of traffic and ease congestion. In addition, walkability reduces environmental and economic costs associated with expanding roads, parking, and drainage. In short, walkable communities put people in healthy motion, and keep taxes low. Recent research reveals that sprawl-friendly Atlanta, Georgia had to increase its taxes 27% during a period where Portland, Oregon, more walkable in focus, reduced their taxes 21%. Street connectivity is key to the decrease of taxes. For example, a well connected street system keeps the cost of fire service down to about \$157 per household, where disconnected patterns in neighborhoods force costs upwards of \$750 per household. Walkability makes sense, winning on almost every count.

## Where to Invest First?

To shift from current sprawl and strip inducing practices that largely characterize Collier County will require a disciplined plan and program. Strategically, it may be necessary to begin important shifts in the incorporated and unincorporated communities likely to create the most new housing, retail and overall economic health. Implementing early wins in one or all of these communities will provide sufficient added capital to invest to bring back those communities that are key to overall good housing and location—proximity to daily services.

Launch infill and connectivity projects first to create the most community benefit. Attract the best developers and show bankers the successes of the new model of walkability and livability; the Mercato Activity Center has this potential in the making. Consider a form-based code overlay district here, and identify new tools that can be

applied to adjacent arterial roads, specifically intersections, to begin to make these streets into places.

Placing focus on the City of Naples, Mercato Activity Center/Naples Park, Golden Gate and Immokalee first makes sound economic sense. Some more distant neighborhoods will require additional capital investments that incorporate livability design principles from the start at greater ease than retrofitting older infrastructure. Ava Maria is an example where some walkability and livability principles have been successfully applied for a new community within the County. Model projects in a variety of neighborhoods are needed. Meanwhile, any incentives that induce inappropriate growth must be identified and revised. New policies and practices that incentivize density need to be adopted such as an urban design guide and street connectivity index for permitting developers. In addition, new street design policies and practices are needed, including adopting a Complete Streets policy, making narrower—ten foot—vehicle lanes the default, adopting and adapting a street design guide, and safer, more efficient intersection treatments such as roundabouts.

Set in motion those actions that will achieve early wins. Collier County has many opportunities to do so. Most of them can be achieved with no other resource than paint and signage. Others enable youth, adults and seniors to make their own commitment, get their hands dirty, and engage in helping to make their community, their county even better.

Several marque, or model, projects emerged in Naples and Immokalee. In Naples study US 41, also known as Tamiami Trail, for potential marque projects. Bring vehicle speeds down to appropriate levels, make pedestrian crossings easy, and create a gateway into the City. The City of Naples and Collier County are located within District One of FDOT. The time is now for state-local model partnership projects as District One's secretary, Billy Hattaway, is an advocate for pedestrian safety improvements and new tools such as the modern roundabout. Observe the results, and see how these changes are indicators of success for larger-scale efforts to be undertaken later.

Immokalee is another opportunity for initial investment, specifically New Market Road. With the addition of gateways, sidewalks, on-street parking, and crossing islands, there is potential to create a corridor with a strong sense of place—a sense of arrival, a destination, instead of a local barrier to people walking or bicycling. The County currently has \$1 million dollars for sidewalks along New Market. This is a great opportunity to leverage these funds to create a marquee project.

The following pages outline key short- to long-term recommendations and principles that can be applied, with more community engagement, to communities throughout Collier County. To help illustrate the potential marquee projects (introduced above) the following pages also highlight the character of both Naples and Immokalee and the emerging opportunities in more detail.

















# **Immokalee**

"My Home" is the meaning of Immokalee in Saminole language, one of the native peoples of the region. Today, Immokalee continues to be a rich microcosm of diversity.

Located in northeastern Collier County about 45 miles from Naples, Immokalee is an agriculture-base town—the center to the region's agriculture industry and leading producer of winter vegetables in the United States—and home to many immigrant and migrant families—75 percent of the population is Hispanic and 19 percent is African-Haitian. According to the 2010 U.S. Census 45% of the population was below poverty level. The estimated 2010 permanent population of Immokalee is 24,154. The population almost doubles during the winter months due to the agricultural industry, making affordable and transitional housing a major need.

"When you want to seed a place with activity, put out food." - William H. Whyte

Tucked off New Market Road is the Immokalee Farmers Market, a center of activity and life-blood of this agricultural-based town, bringing together residents and visitors alike to enjoy the bold tastes, smells and colors of produce near and far. Historically, cities and towns grew around their marketplaces—bustling centers of commerce and activity. As communities grew they became market cities. Immokalee has the opportunity to broaden the conversation and expand beyond the traditional farmers market—to encompass all of its districts to seed local economy while creating great gathering places. Markets not only have strong cross-culture roots, but are great catalysts for the creation of organic growth; they offer the raw material for a broader rebirth of local economy and place.

Many people of all ages were observed walking and bicycling. There is a disconnect from how the streets are designed and how people who live in the community are trying to use them.

Many of the community roads including Immokalee Drive, New Market Road, Lake Trafford Road, 1st Street (CR 846), and Main Street (SR 29) after 9th Street are designed for higher vehicle speeds, are lacking sidewalks or only have sidewalks on one side, and are lined by older



Main Street (SR 29) is still overbuilt for the automobile, however many positive treatments such as well marked pedestrian crossings and landscaped medians are in place.

strip-style buildings. Today, many of the streets are over designed for one mode—the automobile—and underdesigned for the person walking or bicycling.

Positive pedestrian investment has been made on Main Street (SR 29) through the heart of town, or the downtown core. The section from 1st Street to 9th Street is a four-lane section and has been enhanced with a landscaped median, wellmarked pedestrian crossings, on-street parking and sidewalks on both sides. Opportunities still exist to further enhance Main Street and prime the corridor for future economic development while enhancing the overall walkability and human-scale. For example, the average daily traffic (ADT) volumes for Main Street are 10,000 vehicles a day making this section of Main Street a good candidate for a road diet. In addition, the posted speed on Main Street is 35 mph. This is too fast for a main street, the recommended target speed and posted speed for a market area is 20 mph.

Along the Main Street there are acts of love with the tile mural on the community center, benches, plaques that read,

"Children our most precious gift; our number one resource; our investment in the future,"

which highlight the pride of the community and community values in children and intergenerational connections. Another newer public investments along Main Street is the Immokalee Zocalo—a public square.

Immokalee is ripe for continued investment in streets as public places. Streets can no longer be viewed as arteries for carrying cars. Rather streets should build communities, as well as provide ways of connecting other places, as streets link communities of all sizes together.





The before (top image) shows existing conditions of a section of New Market Road, at Alachua Street. Today, this intersection is skewed, overtime with a community vision and plan Alachua Street can be realigned with a beautiful gateway -- modern roundabout-- leading into the Immokalee Farmers Market. The roundabout's coral truck apron accommodates oversized trucks and emergency vehicles. New Market Road has the potential to transform into a key neighborhood hub within Immokalee. Placemaking is improved through the efficient intersection design, head-out angled parking, midblock crossing, murals, street trees, and people-scale street furniture 13 (benches, lighting) setting the stage for new buildings and

businesses that honor the street. (Note: the center of the roundabout is a great place for a community garden or art, this was intentionally not illustrated to allow the full street treatments to be visible.)

The photo-vision (bottom photo) illustrates how mixeduse buildings can fill-in, providing "eyes on the street." Consider, adopting a form-based code overly for the Farmers Market district, requiring any new development to prioritize affordable housing (second story) and incubator storefronts that allow the Farmers Market to come to the street.

















# **Naples**

"Naples is a premier City that offers a high quality of life exemplified by cleanliness, safety, well-maintained homes and businesses, distinctive architecture, tree-lined streets, landscaped medians, a high level of municipal services, environmental corridors, pristine beaches, and tropical climate. In addition to these assets, the mix and location of residential, commercial, institutional, and recreational land uses within a neo-traditional framework fosters the small town character and charm."

-Vision from Naples Comprehensive Plan

Naples downtown, located within the neighborhood called Old Naples, indeed offers lessons for other locations with an attractive, well-landscaped, energetic streetscape and an eclectic mix of restaurants and retail along the commercial corridors of 5th Avenue South and 3rd Street. A close-in park, Cambier Park, a block off of 5th Avenue South, features a play area where children run around climbing, swinging and sliding, while adults of all ages gravitate to the shaded outdoor benches taking pause from the buzz of the retail and restaurant life, or play a game of tennis at one of the many courts. The treeshaded residential neighborhood of Old Naples is built within a grid street pattern and connected, in many cases, by sidewalks, which have been a recent initiative by the City to better connect residents to the commercial and beach destinations.

Expanding outward, are eleven other planning neighborhoods, which begin to loose their small block and grid street pattern. In some cases, this is due to intersecting waterways.

On balance, Naples' neighborhoods provide a solid framework for creating a more pedestrian- and bike-friendly setting. While some roads are too wide and some intersections could be more compact, the City also offers models, with a vibrant downtown pedestrian core and traffic calming tools, such as neighborhood mini circles and short medians designed to keep vehicle speeds low. The City is launching an updated wayfinding initiative, but already has nicely illustrated maps. Additional bike racks



This section of Gulf Shore Boulevard (above) has overly-wide travel lanes. The travel lanes are 13 feet; the recommended travel lane width is 10 feet. Using paint the lane can be narrowed by adding a painted buffer to the bike lane.



Tamiami Trail (US 41) is overbuilt for one mode—the automobile—and becomes a barrier to those who are biking or walking to the beach, the grocery store, work, school or to visit a loved one at the hospital.

are needed, especially near the beach entrances; the community should consider a bicycle library, as well.

There are opportunities for improvement. In some cases, all that's needed is paint and/or new signage to buffer pedestrians and bicyclists from vehicular traffic and make them more visible, while in other cases the city should spend time rethinking a particular street, intersection or block to make more substantial changes.

Consider US 41, also known as the Tamiami Trail, is a state road designed primarily for the automobile, with wide travel lanes, high vehicle speeds, and long street crossings at intersections for people on foot. Tamiami Trail North is a six-lane divided road with long block lengths 1,000 to 1,500 feet between signalized intersections. No mid-block crossings exist, and the land-use is primarily strip commercial lining the corridor. The hospital district is located on the Tamiami Trail between 4th and 2nd Avenue North, as well as the only grocery store—Wynn's Market. This configuration of streets and land uses presents a pedestrian-unfriendly pocket that stands in sharp contrast to the inviting environment of the 5th Avenue South just a couple blocks away.

Overall, the city of Naples has laid a solid foundation for active living. It could readily increase the number of people walking or bicycling for transportation by tweaking existing programs and developing plans to address any shortcomings in street design, signage and the built environment. Some roads are wider than necessary, for example, and the city should readjust signal timing and work to identify other active transportation needs and incentives, such as capturing the true cost of parking. Naples would benefit from the adoption of Complete Streets policies as well.





The before (top image) shows existing conditions of the intersection of Tamiami Trail (US 41) and Goodlette-Frank Boulevard. This is a complex intersection due to the multiple travel lanes and turning movements. There are 46 vehicle-to-vehicle conflicts at a conventional intersection with double-lanes and a left-turn lane in each direction, and 28 vehicle-to-pedestrian conflicts. A double lane roundabout reduces vehicle-to-vehicle conflicts to 24, eliminating the most deadly

crash—the t-bone. Vehicle-to-pedestrian conflicts are reduced to 16. In this case because the intersection is a t-intersection conflicts are further reduced.

A double lane roundabout will honor the future development that is coming to this area, creating a gateway into the city, while moving traffic more safely and efficiently.

The following recommendations are organized to include short-term changes—those 'low-hanging fruit' that will generate momentum towards livability and should be prioritized—as well as mid- and long-range initiatives that will capitalize on early efforts and the additional capacity they build. The recommendations are, in general, ones that should be applied to any of the communities within the County.

## Short-Term Recommendations

#### **Reduce Posted Neighborhood Speeds**

This is the most important change that is needed for walkability and livability, and it is straightforward to address. Neighborhood streets in Naples are posted with 30-mph speed limits. In Immokalee Main Street and other collector streets that boarder neighborhoods are posted at 35 to 40 mph. Large arterials throughout the County are posted at 40 to 50 mph. Enforcement of speed limits usually isn't successful until the car is going at least 5 mph over the posted speed, so impact speeds often are higher than the posted speed. Half of all people hit by a car traveling at 30 mph will not survive, and of the survivors, many will suffer severe life-long injuries. About 85 percent of people hit at 40 mph will die, with others suffering incapacitating injuries.

Reduce speed limits to 20 mph on local streets in neighborhoods, and in some areas, 15 to 19 mph, such as near schools, medical centers, transit stations, and other places cars should go slower. Reduce posted speed limits to 25 to 30 mph on collector roads that border neighborhoods. Main streets or downtown shopping streets should be 15 - 20 mph. Alleys should be posted at 10 mph. Although there may be regional or state insistence of following the 85th percentile (the speed at or below which 85% of all vehicles are travelling), research now demonstrates that lower posting can bring down speeds up to 7 mph. This can have a low cost, dramatic effect on rates of walking, livability and safety.

## **Design for "Target Speed"**

Most drivers don't drive a speed limit; rather, they drive the "design" of the road, using cues such as lane width, street texture, the distance buildings and trees are set back from the street, and site-line distances. Streets should be designed for a "target" speed: the speed at which the designers want cars to travel with a particular focus on a standard lane with of 10 feet. This design standard will reduce construction, drainage and maintenance costs over the life of the road. A new design manual will be needed. We recommend setting the default lane width at 10 feet; then allow increased width where warranted by curves, or high truck/bus volumes. Start with model or pilot projects. Although there are a number of model street design manuals that are available for downloading and adoption, one of the most accessible and popular for counties is the Model Design Manual for Living Streets (Los Angeles County, 2011). This manual was designed to be adapted by municipalities across the country to improve the

livability of streets. The manual encourages transportation engineers to apply flexible standards to accommodate all modes of travel, encourage economic development, and revitalize neighborhoods. Other manuals include the NACTO guide, a recent FHWA Walkable Thoroughfares guide, and the Charlotte, N.C. Street Design Guide.

## Eliminate Unnecessary Lanes in Immokalee

Main Street and 1st Street in Immokalee appear to have too many vehicle lanes and could use the next level of focusing on people. On these streets, lanes can be converted. Main Street parking can be changed to head-out angled parking with a buffer of transition lane, while on 1st Street lanes can be converted to buffered bike lanes and parking lanes, or both. A strategy for these conversions is needed. Only a few streets warrant more than two lanes. This is a low-cost change, something that should be considered low-hanging fruit.

#### **Improve Pedestrian Crossings in Downtown Naples**

People should not have to push a button to be included in the signal phasing, especially in downtowns or areas of high pedestrian activity. Reprogram the signals in Old Naples to 'pedestrian lead intervals,' where the pedestrian is given a 'walk' signal a few seconds before the green phase appears for vehicles. This will enhance their visibility to motorists, and provide other pedestrian enhancement tools. On 5th Avenue and 3rd Avenue remove the push buttons entirely.

#### **Use More Paint**

Street paint can be one of the most cost-effective traffic-calming tools available. The city should address this inadequacy soon, and be aware of the risk of difficult tort law cases if streets aren't maintained properly. In Naples, use paint on Gulf Shore Boulevard to narrow travel lanes to ten-feet and add a buffer to the bike lane. In Immokalee and other residential streets in other developments, such as Naples Park and Golden Gate that do not have sidewalks, paint bold edge stripes (eight to 10 inches) leaving a driving space of 18 feet. If a centerline exists, and traffic volumes are under 6,000 vehicles a day, consider the removal of the yellow centerline. This preserves the life of the road and provides cues to the motorist to give more room to a person walking, bicycling, parking or unparking.

#### **Conduct Further Studies**

Collier County's unincorporated population is just over 300,000 people. Trying to temper traffic growth—not building more traffic—is in the interest of many funding sources, including schools and school boards, Collier MPO, FDOT, and the Federal Highway administration, among others. Look to them for funding studies and model projects that help put a lid on traffic growth. With the right level of incentives and policies in place, it is even possible to grow the population and still shrink traffic.

Study and transform ten intersections that are most dangerous for pedestrians and bicyclists. The study should identify problems in common, principles, solutions, tools and best practices. Once model projects are built and evaluated, their design solutions can be applied to hundreds of similar intersections.

Study and improve routes to four to eight schools. The model schools can be chosen for how well the design solutions can be applied to all schools.

To this regard, in Naples there is an opportunity to work with FDOT on Tamiami Trail (US 41) at Goddlette-Frank Road to study and apply new tools, such as the modern roundabout to solve a major intersection and create a gateway into the community.

## Mid- and Long-Term Recommendations

## **Incentivize Density**

Incentivize and set new policies to support the highest density within a five-minute walk of a well-designed, popular corridor, such as Tamiami Trail in Naples or again Tamiami Trail at Marcado Activity Center and Naples Park development, although these sections of the Tamiami Trail need to be studied and humanized. Create many destinations near the highest-density development. These practices, especially when combined, will yield the highest number of walking trips.

It may be reasonable when designs complement one another to lighten parking requirements, and charge for parking—which in turn incentivizes more walking. Prioritize intersections, street target speeds and routes up to three miles in all quadrants for the greatest return on investment.

Block patterns matter. Blocks that are short, such as 300-400 foot long blocks, maximize walking by making many routes of travel easy. A useful guide for policy is to permit developers who achieve 1200-2100 foot block perimeters. Another way to achieve good connectivity is to require a proven link to node ratio. The state of Virginia passed legislation to level the playing field for all developers. Such lengths also act as natural traffic calming, greatly enhancing livability. The near center of town neighborhoods, which often have historic patterns, are the best areas for re-investment of homes, small friendly shops, and other destinations.

#### **Apply Traffic-Calming Tools**

Naples makes strong use of traffic-calming tools such as mini-circles and short medians. The City would benefit in identifying traffic-calming treatments such as mini-circles along Gulf Shore Drive to bring vehicle speeds down to the desired target speed.

The County should consider creating a neighborhood traffic-calming program. A good model program can be found from Clearwater Beach, Florida.

#### **Address Parking**

"The cost of all parking spaces in the U.S. exceeds the value of all cars and may even exceed the value of all roads," says UCLA urban planning researcher Donald Shoup. The lost opportunity cost can be high as well. The City of Naples should consider shifting the cost of parking from the general public to the users, especially at the two parking garages. The ideal parking garages are mixed-use garages that provide ground-level retail; then two or three stories of parking, with condos or apartments on the top floor. Such designs can provide an immediate supply, and then permit reductions over time. As the need for parking declines some or many of the parking spaces can be converted into offices or living units. Over time, Naples can consider converting the ground-level of parking garages into retail.

#### Put Overly Wide Streets on a 'Diet'

Due to land settlement patterns and state highway dollars many roads in Collier County were overbuilt having too many lanes. Many of these roads will need to be studied from a systems approach, and new intersection tools will need to be applied. Looking for opportunities for additional street connectivity will also benefit the current road system. Streets that can easily reduce vehicle lanes and convert them to buffered bike lanes or on-street parking, such as Main Street and 1st Street in Immokalee are sometimes called a "road diet," but also falls into the category of a "traffic safety improvement." In Naples, Central Avenue is a perfect candidate for a road diet, and one that the City is working towards doing. However, education and community ownership — a well informed community —are needed.

Traffic safety improvements like road diets and lane width reductions can reduce topend speeding, and bring down the average vehicle speed, making walking, bicycling and driving more comfortable and safe. These improvements can help re-purpose a neighborhood and make it a better place for retail, and to therefore create more momand-pop stores for food, medicine, and to better meet everyday neighborhood needs. These practices also reduce the maintenance cost of roadways, allowing limited county or city funds to be spent where they will have the greatest benefit.

#### Make Narrower Vehicle Lanes the Default

Set the default lane width for new construction and resurfacing at 10 feet. This will encourage more appropriate vehicle speeds, reduce construction, drainage and maintenance costs, and provide more space for on-street parking and bicycle and pedestrian facilities. This action still meets the needs of the fire service. A fire lane is 20 feet wide, so reducing vehicle lanes to 10 feet still allows 20 feet of clear space on a two-lane roadway.

#### Identify Sidewalk Gaps and ADA Compliance, Prioritize Sidewalks

The County and cities should take an inventory of built sidewalks. Consider whether these are purely quantitative assessments (lines on paper where they are built), and whether these surveys include qualitative analysis such as pedestrian comfort levels, perceived speed of adjacent roadways, and ease of traversing the pavement. Features need to be measured, including actual sidewalk width, condition, ramps, shade cover, planter strips and driveway treatments.

Then prioritize sidewalk improvements based on completing gaps, location i.e. near or is on a route to school, links residents to a commercial center, etc. Once sidewalks are identified and priority areas are identified funding can become the barrier to implementation. Consider a policy to set aside three to five percent of the transportation budget to fund the backlog of needed sidewalks, trails and other active-transportation amenities.

#### Improve and Complete the Bicycle Network

Naples and Marco Island can continue to enhance their bicycle network with bike lanes and add buffers between bike lanes and vehicle lanes when possible, as well as share the road markings or sharrows. Additionally, consider a city bicycle library (where bikes are checked out like a book) and continue to identify places for bicycle racks and other bicycle parking. Continue to create encouragement programs such as starting a biking moai.

Immokalee would benefit from bike lanes, and ideally buffered bike lanes or cycle tracks on higher volume roads as many young children and families are biking.

#### **Enhance School Site Access**

In general, school-related vehicle trips increase peak-hour traffic by about 30 percent. This creates a system collapse, and greatly increases the cost of roadway projects. Work with the local MPO to secure funding for a Safe Routes to School plan for six to eight schools. Principles and opportunities associated with these select schools can then become models and applied county-wide. Apply for Safe Routes to School funding regularly, and use these funds to create better bicycle and pedestrian networks in school zones. Retrofit existing sidewalks and trails that are unsafe or uncomfortable for children.

Identify remote drop-off locations for each school, and create a walking school bus program. This will reduce congestion at school sites, and give children a chance to be active and socialize with their peers before school.

Move staff parking to on-street spaces and minimize the need for off-street parking. Of course, retain off-street parking as needed to provide ADA access to school. On-street parking doubles as a buffer between pedestrians and traffic, and helps bring vehicle speeds down to appropriate levels.

## **Policy Recommendations**

Polices and incentives need to shift to favor people, to then help people change their behavior and lead more active lifestyles. This becomes even more important for Collier County with its aging population. On average men outlive their ability to drive by seven years, women 14 years. Smart public investment can ensure development occurs where it makes oases for active transportation. The solution to achieve this transformation is a strong, well-informed leadership that has staying power and directs investments toward quality of life, livability and walkability.

## **Update Transportation and Land Use Tools**

The County should adopt and apply form-based code, as well as other modern town-making tools. Enhance healthy community development opportunities, improve the local economy, and help assure that only the best type of development is incentivized.

#### Adopt and Adapt A Leading Urban-Design Guide

In addition to the Los Angeles County manual referenced above, evaluate the Collingwood [Ontario] Urban Design Manual, consider adapting appropriate sections for the county, and provide government staff and consultants training in its use. Feedback indicates that many developers continue to build more single-use suburban style development because that is what is code and elected leaders are allowing. To build walkable communities often requires investors and a developer to take the longest route for acceptance; and what is least desired is the easiest route to acceptance. The advantage of allowing developers to follow an urban design manual is that it creates an approved fast track for desired development. The guide will need to be endorsed by the county commission, enabling developers to use better land development practices. In time, a model language guide can be further customized for more specific application

to Collier County, meeting its scale, climate and context-specific needs.

Adopting a modern street-design guide also better protects the city, local engineers and engineering firms now working to improve the quality of streets. Examples can be found in a new guide on Thoroughfares for Walkable Communities, jointly published by FHWA/CNU/ITE and NACTO guide. Consider integrating the context-sensitive street policy into the County's street standards. In time, this manual also can be customized for specific application to Collier County.

## **Buildings should Front the Street.**

Buildings and homes should "front" the street—instead of being set back far from the street—to create a pedestrian-scale landscape and to put "eyes on the street" so that people feel watched over. Establish maximum allowable setbacks for homes and commercial buildings in places of emphasis. Encourage placement of buildings and homes so that they create natural surveillance and maximize opportunities for people to meet or say hello. This practice is especially important near schools and parks, and within civic, retail, and commercial districts. Look for opportunities to support a developer in implementing linear buildings.

## **Adopt a Roundabout Policy First**

Whenever a project includes reconstructing or constructing an intersection, analyze the feasibility of using a roundabout instead. This approach is recommended by the U.S. Department of Transportation's Federal Highway Administration and backed by the Insurance Institute for Highway Safety.

## Adopt Complete Streets Policy

The overarching goal of Complete Streets is to create streets that work equally well for automobiles, bicycles, pedestrians and people of all ages and abilities. As a first step, adopt a resolution committing to this path and convene an advisory group to begin reviewing Complete Streets policy options drawn from the growing number of communities that have adopted them nationwide. In the near-term, adopt a temporary street design manual, with the commitment to begin making any necessary changes to make it permanent. And begin developing any ordinances and/or specific Complete Streets policies and practices for eventual adoption.

#### **Encourage Street Connectivity**

Prohibit or limit the use of cul-de-sacs, which tend to discourage walking and funnel all traffic onto arterials, calling for wider roads and intersections, and creating high volume and higher speed travel. Walkable communities call for evenly distributing traffic flow throughout a community, which creates slower and safer travel.

In 2006, the State of Virginia prohibited cul-de-sacs, as developer built roads became a state repair and maintenance responsibility. A turn of politics overturned this rule five years later, but the effect of this provision provided considerable local government and developer education on the benefits of a gridded and connected street network for suburban developments.

Require pedestrian-scaled street connectivity by requiring a specific intersection density, e.g., a minimum number of intersections per acre.



**Appendix E: Florida 2013 State Report** 

# STATE OF LONG BEING

2013 STATE, COMMUNITY, AND CONGRESSIONAL DISTRICT ANALYSIS





# Gallup & Healthways: Working Together to Improve the Health of Populations and Individuals

The Gallup-Healthways Well-Being Index® is the preeminent source for well-being data in the United States and globally. A definitive measure and empirical database of real-time changes in well-being throughout the world, the Well-Being Index provides insights needed to improve health, increase productivity, and lower healthcare costs within any community.

The analysis contained in this individual state report contains six years of longitudinal data on Americans' perceptions of their well-being within this state. It includes topics such as physical and emotional health, healthy behaviors, work environment, social and community factors, financial security, and access to necessities such as food, shelter, and healthcare. The report includes analyses of these topics and provides a composite well-being rank and score for each community.

Business, healthcare, community, and government leaders leverage Well-Being Index data on the factors proven to impact well-being to inform and prioritize tangible policies to help their populations thrive and grow. It is an invaluable source of benchmark and comparability data by industry, occupation, city, state, and country. As communities and organizations increasingly put

well-being on their dashboards as a crucial business metric, the Well-Being Index can confirm that investments in health and quality of life can be measurably improved and have substantive impact on both improving performance and reducing costs.

With more than 2 million surveys completed, the Well-Being Index is the world's largest dataset on well-being, and it has garnered significant national and international recognition. Over the next decades, Gallup and Healthways will continue to survey millions of individuals around the globe, advancing the science of well-being and providing timely and in-depth information to leaders who are trying to solve some of the most pressing healthcare challenges of our time.

For more information on Gallup and Healthways ongoing well-being research, please visit www.well-beingindex.com.

To access the full report, the State of American Well-Being: 2013 State, Community, and Congressional District Analysis, please visit http://info.healthways.com/wbi2013.



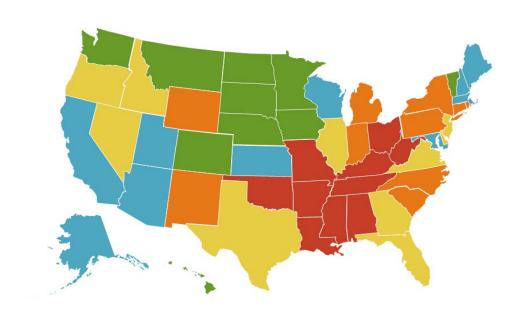
## STATE OF AMERICAN WELL-BEING

# **Florida**

	Rank	ings
	2013	2012
Well-Being Overall	30	34
Life Evaluation	29	41
Emotional Health	24	33
Work Environment	35	33
Physical Health	25	30
Healthy Behaviors	12	13
Basic Access	36	42

Scores						
2013	2012					
66.2	65.8					
47.4	46.4					
79.4	79.2					
46.7	46.4					
76.6	76.9					
66.0	65.9					
80.8	79.9					

For rankings, #1 signifies the top rank; #50 the bottom rank. For scores, 0 is the bottom score; 100 the top score (see methodology for descriptions) Source: Gallup-Healthways Well-Being Index N = 178,072 (2013) and N = 353,564 (2012)



## **COMMUNITY RANKINGS**

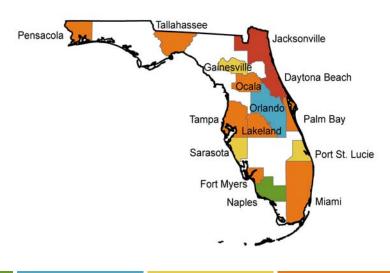
# **Florida**

	Overall	Life Evaluation	Emotional Health	Work Environment	Physical Health	Healthy Behaviors	Basic Access
Bradenton-Sarasota-Venice	77	139	22	135	112	17	69
Cape Coral-Fort Myers	149	177	68	153	102	50	154
Deltona-Daytona Beach-Ormond Beach	161	172	66	184	131	53	136
Gainesville	112	123	131	144	57	91	96
Jacksonville	159	148	115	173	130	101	147
Lakeland-Winter Haven	138	171	145	30	104	121	167
Miami-Fort Lauderdale-Pompano Beach	124	117	167	152	53	35	163
Naples-Marco Island	7	57	2	4	4	15	100

Ranking of 189 Metropolitan Statistical Areas, following U.S. Census Bureau Definitions for Metropolitan Statistical Areas

\*\*On January 1st, 2013 the Gallup-Healthways Well-Being Index N = 178,072 (2013) and N = 353,564 (2012)

\*\*On January 1st, 2013 the Gallup-Healthways Well-Being Index methodology changed from 1,000 surveys per day to 500. In this report, we have combined 2012 & 2013 data for all U.S. Metropolitan Statistical Areas (MSAs) to ensure adequate sample size.



Top Quintile 2nd Quintile 3rd Quintile 4th Quintile 5th Quintile

## **COMMUNITY RANKINGS**

	Overall	Life Evaluation	Emotional Health	Work Environment	Physical Health	Healthy Behaviors	Basic Access
Ocala	121	124	93	60	160	66	165
Orlando-Kissimmee	62	34	48	80	59	85	155
Palm Bay-Melbourne-Titusville	139	167	82	130	94	49	139
Pensacola-Ferry Pass-Brent	136	84	128	160	135	123	134
Port St. Lucie	105	160	16	145	32	12	145
Tallahassee	125	96	81	121	93	138	151
Tampa-St. Petersburg-Clearwater	152	155	155	137	147	70	146

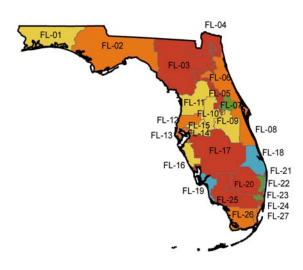
## **CONGRESSIONAL DISTRICT RANKINGS**

# **Florida**

	Overall	Life Evaluation	Emotional Health	Work Environment	Physical Health	Healthy Behaviors	Basic Access
Congressional District - 01	226	279	210	167	286	217	278
Congressional District - 02	342	343	187	320	335	270	341
Congressional District - 03	386	400	361	347	361	226	337
Congressional District - 04	356	382	228	381	283	215	299
Congressional District - 05	384	320	259	364	278	290	411
Congressional District - 06	299	370	161	361	292	101	250
Congressional District - 07	48	40	85	58	77	138	158
Congressional District - 08	309	384	186	330	231	124	295

Ranking of 434 Congressional Districts in the 113th Congress. The results reflect the change in district boundaries.

Source: Gallup-Healthways Well-Being Index N = 178,072 (2013) and N = 353,564 (2012) \*\*On January 1st, 2013 the Gallup-Healthways Well-Being Index methodology changed from 1,000 surveys per day to 500. In this report, we have combined 2012 & 2013 data for all Congressional Districts to ensure adequate sample size.



Top Quintile 2nd Quintile 3rd Quintile 4th Quintile 5th Quintile

## **CONGRESSIONAL DISTRICT RANKINGS**

	Overall	Life Evaluation	Emotional Health	Work Environment	Physical Health	Healthy Behavior	Basic Access
Congressional District - 09	203	71	181	270	170	266	362
Congressional District - 10	241	344	160	153	333	198	255
Congressional District - 11	255	393	125	248	359	28	257
Congressional District - 12	305	312	383	304	313	190	271
Congressional District - 13	276	363	336	107	334	207	277
Congressional District - 14	283	112	209	378	349	106	368
Congressional District - 15	257	375	177	284	123	153	261
Congressional District - 16	247	387	93	324	248	51	198
Congressional District - 17	380	431	88	321	396	70	334
Congressional District - 18	148	177	96	316	48	64	235
Congressional District - 19	151	331	65	149	165	43	199
Congressional District - 20	391	350	311	408	201	304	379
Congressional District - 21	79	172	111	159	159	21	71
Congressional District - 22	149	156	397	317	118	10	163
Congressional District - 23	84	50	145	281	32	67	194

## **CONGRESSIONAL DISTRICT RANKINGS**

	Overall	Life Evaluation	Emotional Health	Work Environment	Physical Health	Healthy Behavior	Basic Access
Congressional District - 24	425	420	427	427	272	76	429
Congressional District - 25	378	395	428	155	270	156	410
Congressional District - 26	301	318	292	384	59	61	380
Congressional District - 27	306	187	431	290	84	172	389

## STATE RANKINGS & SCORES BY YEAR & DOMAIN

Rankings	2013	2012	2011	2010	2009	2008
Overall	30	34	42	37	36	29
Life Evaluation	29	41	45	46	37	31
Emotional Health	24	33	35	36	37	23
Work Environment	35	33	47	39	43	30
Physical Health	25	30	29	32	26	26
Healthy Behaviors	12	13	17	16	13	16
Basic Access	36	42	44	42	43	40
Scores	2013	2012	2011	2010	2009	2008
Overall	66.2	65.8	64.9	65.1	65.2	65.8
Life Evaluation	47.4	46.4	45.6	45.4	45.7	42.4
Emotional Health	79.4	79.2	78.7	78.2	77.9	79.1
Work Environment	46.7	46.4	43.8	46.4	47.1	50.5
Physical Health	76.6	76.9	76.8	76.3	76.4	76.8
Healthy Behaviors	66.0	65.9	65.2	65.0	64.6	64.5
Basic Access	80.8	79.9	79.5	79.0	79.7	81.6
Top Quintile 2n	d Quintile	3rd Qui	intile	4th Quintile		5th Quintile
rop Quintile 21	a Quintile	Srd Qui	ittile	4th Quintile		oth Quintile

# **Florida**

#### Overall

	2013/2012	2011	2010	2009	2008
Bradenton-Sarasota-Venice	77	70	92	118	47
Cape Coral-Fort Myers	149	86	135	141	80
Deltona-Daytona Beach-Ormond Beach	161	157	156	152	174
Gainesville	112	-	8	47	46
Jacksonville	159	153	140	156	94
Lakeland-Winter Haven	138	184	148	116	152
Miami-Fort Lauderdale-Pompano Beach	124	146	129	140	120
Naples-Marco Island	7	73	37	12	5
Ocala	121	177	104	163	166
Orlando-Kissimmee	62	144	116	81	68
Palm Bay-Melbourne-Titusville	139	178	157	94	87
Pensacola-Ferry Pass-Brent	136	104	85	173	147
Port St. Lucie	105	186	79	109	140
Tallahassee	125	159	45	49	102
Tampa-St. Petersburg-Clearwater	152	139	146	158	144
Top Quintile 2nd	d Quintile	3rd Quintile		4th Quintile	5th Quintile

# **Florida**

#### Life Evaluation

	2013/2012	2011	2010	2009	2008
Bradenton-Sarasota-Venice	139	155	171	158	133
Cape Coral-Fort Myers	177	158	154	175	153
Deltona-Daytona Beach-Ormond Beach	172	165	172	159	166
Gainesville	123	-	60	7	18
Jacksonville	148	160	130	125	52
Lakeland-Winter Haven	171	172	173	146	158
Miami-Fort Lauderdale-Pompano Beach	117	153	120	107	135
Naples-Marco Island	57	168	162	32	118
Ocala	124	183	178	112	171
Orlando-Kissimmee	34	116	48	69	82
Palm Bay-Melbourne-Titusville	167	182	175	109	144
Pensacola-Ferry Pass-Brent	84	112	116	138	81
Port St. Lucie	160	184	167	161	143
Tallahassee	96	98	20	26	51

	_	
l ife	Eva	luation

	2013/2012	2011	2010	2009	2008
Tampa-St. Petersburg-Clearwater	155	145	156	168	141
Emotional Health					
	2013/2012	2011	2010	2009	2008
Bradenton-Sarasota-Venice	22	6	45	28	72
Cape Coral-Fort Myers	68	122	118	126	88
Deltona-Daytona Beach-Ormond Beach	66	78	141	116	133
Gainesville	131	-	16	41	18
Jacksonville	115	129	104	140	55
Lakeland-Winter Haven	145	104	48	71	59
Miami-Fort Lauderdale-Pompano Beach	167	174	151	164	152
Naples-Marco Island	2	7	7	14	12
Ocala	93	38	90	68	132
Orlando-Kissimmee	48	72	107	93	27
Palm Bay-Melbourne-Titusville	82	155	114	160	76
Pensacola-Ferry Pass-Brent	128	140	54	154	66

# **Florida**

#### **Emotional Health**

	2013/2012	2011	2010	2009	2008
Port St. Lucie	16	183	156	67	93
Tallahassee 81		128	169	161	159
Tampa-St. Petersburg-Clearwater	155	126	147	132	103
Work Environment					
	2013/2012	2011	2010	2009	2008
Bradenton-Sarasota-Venice	135	113	112	178	53
Cape Coral-Fort Myers	153	34	122	108	31
Deltona-Daytona Beach-Ormond Beach	184	164	95	129	149
Gainesville	144	-	1	155	99
Jacksonville	173	167	156	153	131
Lakeland-Winter Haven	30	187	72	107	63
Miami-Fort Lauderdale-Pompano Beach	152	134	146	167	106
Naples-Marco Island	4	144	60	157	1
Ocala	60	175	2	179	71
Orlando-Kissimmee	80	170	147	47	101

# **Florida**

## **Work Environment**

	2013/2012	2011	2010	2009	2008
Palm Bay-Melbourne-Titusville	130	181	90	33	91
Pensacola-Ferry Pass-Brent	sacola-Ferry Pass-Brent 160		57	166	153
Port St. Lucie	145	188	5	97	168
Tallahassee	121	183	32	46	113
Tampa-St. Petersburg-Clearwater	137	135	103	127	95
Physical Health					
•	2013/2012	2011	2010	2009	2008
Bradenton-Sarasota-Venice	112	35	60	44	46
Cape Coral-Fort Myers	102	96	108	56	115
Deltona-Daytona Beach-Ormond Beach	131	158	171	100	172
Gainesville 57		-	30	114	17
Jacksonville	130	118	80	135	87
Lakeland-Winter Haven	104	172	81	136	173
Miami-Fort Lauderdale-Pompano Beach	53	55	77	18	44
Naples-Marco Island	4	17	22	2	18

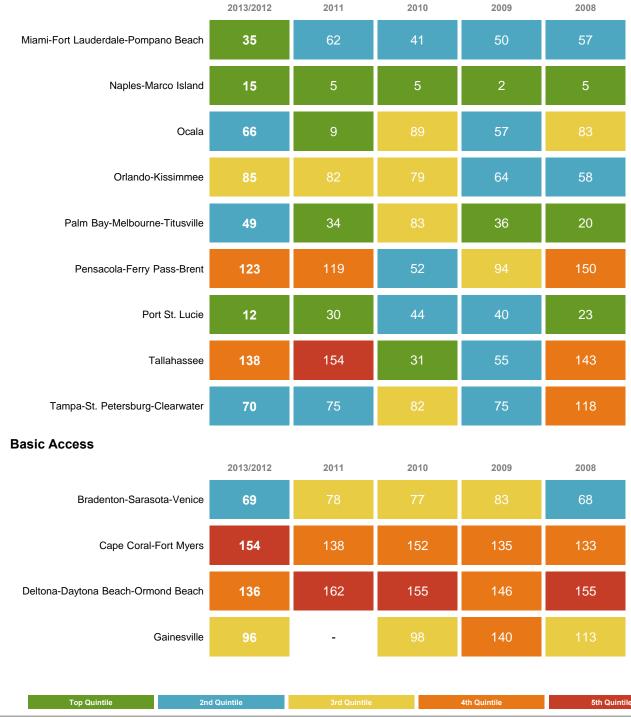
# **Florida**

## **Physical Health**

	2013/2012	2011	2010	2009	2008
Ocala	160	180	158	172	178
Orlando-Kissimmee	59	95	114	67	26
Palm Bay-Melbourne-Titusville	94	143	139	160	140
Pensacola-Ferry Pass-Brent	135	138	85	182	138
Port St. Lucie	32	184	90	42	37
Tallahassee	93	67	121	119	113
Tampa-St. Petersburg-Clearwater	147	112	126	143	154
Healthy Behaviors					
	2013/2012	2011	2010	2009	2008
Bradenton-Sarasota-Venice	17	21	8	21	16
Cape Coral-Fort Myers	50	23	29	39	28
Deltona-Daytona Beach-Ormond Beach	53	67	49	117	100
Gainesville	91	-	105	23	107
Jacksonville	101	96	78	109	111
Lakeland-Winter Haven	121	64	125	28	103
Top Quintile 2nd Quintile		3rd Quintile		4th Quintile	5th Quintile

# **Florida**

## **Healthy Behaviors**



# **Florida**

#### **Basic Access**

	2013/2012	2011	2010	2009	2008
Jacksonville	147	147	156	157	131
Lakeland-Winter Haven	167	178	170	149	168
Miami-Fort Lauderdale-Pompano Beach	163	175	169	164	165
Naples-Marco Island	100	82	78	97	84
Ocala	165	161	175	160	174
Orlando-Kissimmee	155	168	161	163	150
Palm Bay-Melbourne-Titusville	139	126	144	121	89
Pensacola-Ferry Pass-Brent	134	115	135	169	147
Port St. Lucie	145	158	148	143	163
Tallahassee	151	149	130	88	85
Tampa-St. Petersburg-Clearwater	146	145	140	139	136

## **ABOUT THE 2013 WELL-BEING REPORTS**

#### **SURVEY DATES**

The most recently updated data in this report were based on data collected in these time periods:

State Results:

January 2 through December 29, 2013

Community and Congressional District Results: January 2 through December 30, 2012 and January 2 through December 29, 2013

#### SAMPLE INFORMATION

# Yearly Gallup-Healthways Well-Being Index surveys completed by respondents aged 18 and older:

2013: 178,072 2012: 353,564 2011: 353,492 2010: 352,840 2009: 353,849 2008: 355,334

# Maximum sample sizes for most recent results included in this report:

States: 17,053 respondents Communities: 23,003 respondents Congressional Districts: 3,308 respondents

# Minimum sample sizes for most recent results included in this report:

States: 547 respondents Communities: 459 respondents

Congressional Districts: 344 respondents

#### MARGIN OF ERROR

In years that overall national results were based on more than 350,000 respondents, one can say with 95% confidence that the margin of sampling error for those results is  $\pm 0.2$  percentage points. In 2013, for results based on 178,072 respondents, one can say with 95% confidence that the margin of sampling error for those results is  $\pm 0.3$  percentage points.

## Margin of sampling error of composite results at various sample sizes:

0 (bottom) - 100 (top) Scale

- For results based on 5,000, ±0.4
- For results based on 1,000, ±0.9
- For results based on 500, ±1.3
- For results based on 300, ±1.6

In addition to sampling error, question wording and practical difficulties in conducting surveys can introduce error or bias into the findings of public opinion polls.

## WELL-BEING COMPOSITE RESULTS

The Well-Being Index composite result is an average of six domains: Life Evaluation, Emotional Health, Physical health, Healthy Behaviors, Work Environment and Basic Access. Among states, overall Well-Being Index results ranged from a high of 70.4 (North Dakota) to a low of 61.4 (West Virginia). The 2013 national average for Well-Being was 66.2, Life Evaluation 48.2, Emotional Health 79.2, Physical Health 76.4, Health Behaviors 63.7, Work Environment 48.0 and Basic Access 81.9.

## **POSITION SCALE**

Each state is positioned from 1-50, based on composite scores as compared to all states. Each congressional district is positioned from 1-434, based on composite scores as compared to all congressional districts. Each Metropolitan Statistical Area (community) is positioned from 1-189, based on composite scores as compared to all Metropolitan Statistical Areas.

## WELL-BEING INDEX METHODOLOGY

Interviews are conducted with respondents on landline telephones and cellular phones, with interviews conducted in Spanish for respondents who are primarily Spanish-speaking. Each sample of national adults includes a minimum quota of 50% cellphone respondents and 50% landline respondents, with additional minimum quotas by time zone within region. Landline telephone and cellphone numbers are selected using random-digit-dial methods. Landline respondents are chosen at random within each household on the basis of which member had the most recent birthday.

Samples are weighted to correct for unequal selection probability, nonresponse, and double coverage of landline and cell users in the two sampling frames. They are also weighted to match the national demographics of gender, age, race, Hispanic ethnicity, education, region, population density, and phone status (cellphone only/landline only/both, cellphone mostly, and having an unlisted landline number). Demographic weighting targets are based on the most recent Current Population Survey figures for the aged 18 and older U.S. population. Phone status targets are based on the most recent National Health Interview Survey. Population density targets are based on the most recent U.S. census. All reported margins of sampling error include the computed design effects for weighting.

## **WELL-BEING INDEX DOMAINS**

The Gallup-Healthways Well-Being Index Composite Score is comprised of six sub-indices: Life Evaluation, Emotional Health, Physical Health, Healthy Behavior, Work Environment and Basic Access. The Life Evaluation Sub-Index is partially based on the Cantril Self-Anchoring Striving Scale and combines the evaluation of one's present life situation with one's anticipated life situation five years from now. The Emotional Health Sub-Index is primarily a composite of respondents' daily experiences, asking respondents to think about how they felt yesterday along nine dimensions. The Physical Health Sub-Index is comprised of questions related to: Body Mass Index, disease burden, sick days, physical pain, daily energy, history of disease and daily health experiences. The Healthy Behavior Sub-Index includes items measuring life style habits with established relationships to health outcomes. The Work Environment Sub-Index surveys workers on several factors to gauge their feelings and perceptions about their work environment. The Basic Access Sub-Index is based on thirteen items measuring resident's access to food, shelter, healthcare and a safe and satisfying place to live.

For detailed descriptions of the domains, visit the methodology section of www.well-beingindex.com.







## **Appendix F:** Leadership Pledges

Over 100 leadership pledges were signed across Southwest Florida during the assessment. The pledges were signed as indication of support for the project and a desire to see Southwest Florida become the healthiest community in the nation. All signed leadership pledge copies are available upon request.

## **BLUE ZONES® LEADERSHIP PLEDGE**

The Blue Zones Project® focuses on long-term changes to the environment of our community to make the healthy choice the easy choice, thus enhancing the well-being of citizens. The Blue Zones Project comes to Southwest Florida at the invitation of NCH Healthcare System and other community leaders. Currently, NCH is partnering with the Blue Zones Project to bring the initiative to Collier County in support of a 10 year vision to make Southwest Florida an even healthier, happier and vibrant place to live. Blue Zones Project brings key resources to the community such as trained staff, renowned experts, outcomes measurement through the Gallup-Healthways Well-Being Index®, national and international publicity, web-based tools and proven processes to set up communities for success.

## LEADERSHIP COMMITMENT

As a community leader I understand that success relies on top leadership support in all of the county and communities' key sectors, which are local government, large employers, Chamber of Commerce, schools, hospitals/health systems, restaurants, grocery stores, organizations — civic, neighborhood, non-profit and faith-based.

I understand that Blue Zones Projects' success relies on all leaders to create a "perfect storm" of influence in the community around the Blue Zones Project effort. While the Blue Zones Project will not replace local health and well-being efforts, it does seek to provide a temporary umbrella to get all feet walking in the same direction and to measure our collective success.

I am committed to helping my community reach Blue Zones Community Certification by engaging citizens and implementing Blue Zones Project tools across all sectors.

Signature(s):			

By signing below, I understand and support the Blue Zones Project as described above.



## **Appendix G:** Assessment Resource List

The Blue Zones Project team has compiled a list of comprehensive resources provided by the community that may help inform this work in the future. These resources are separate from this document and are available upon request.

- 2012 NCH Healthcare System Community Needs Assessment
- City of Naples Pedestrian and Bicycle Master Plan 2013 Update
- CMPO Pedestrian and Bicycle Safety Study, 2014
- Collier Community Foundation Annual Report
- Safe and Healthy Children's Coalition 2014 Data and Coalition Initiatives



## **Citations**

Pedestrian and Bicycle Master Plan. (2013). Retrieved from City of Naples:

http://naples.granicus.com/MetaViewer.php?view\_id=&clip\_id=2109&meta\_id=96298

*IPC Naples*. (2014, October). Retrieved December 2014, from http://www.ipcnaples.com/wp-content/uploads/2014/10/Restaurant-Statistics-2014.pdf

Layden, L. (2012, December 20). *Healthier eating trending up at Southwest Florida restaurants, numbers show*. Retrieved December 2014, from Naples Daily News:

http://www.naplesnews.com/entertainment/dining-and-restaurants/healthier-eating-trending-up-at-southwest-show