Cobb County Comprehensive Transportation Plan Update 2040

HEALTH IMPACT ASSESSMENT: SCREENING AND SCOPING

ARCADIS

May 2014

Screening and Scoping

Introduction

What is the CTP?

The Cobb County Comprehensive Transportation Plan (CTP) Update 2040 is being developed cooperatively with Cobb County and the six cities under the Comprehensive Transportation Planning Program initiated by the Atlanta Regional Commission to encourage counties and their municipalities to work together to develop a long-range transportation plan that serves as input into the regional planning process and plans. The CTP will provide a funding framework and a prioritized project list as the foundation for transportation programming and policy decisions. Finally, it will be responsive to citizen needs and concerns while also contributing to the advancement of the region's vision for transportation improvement.

The Cobb County CTP Update 2040 identified guiding principles within the study area which includes unincorporated Cobb County and the six municipalities: Austell, Acworth, Kennesaw, Marietta, Smyrna, and Powder Springs. The guiding principles are the shared values of the citizens, businesses, and elected officials that the CTP will be centered on; they include:

- Maximize Performance of the Transportation System
- Improve Access and Manage Traffic Congestion
- Achieve Traveler Safety and Security
- Drive Economic Competitiveness
- Lead with Cost-Effective Solutions

Furthermore, the CTP strives to improve quality of life for all citizens through mobility improvements including increasing capacity in growing urban and rural areas, mitigating traffic congestion, and encouraging alternative modes of transportation.

What is an HIA?

A Health Impact Assessment (HIA) is defined as "a combination of procedures, methods, and tools by which a policy or project may be judged as to its potential effects on health of a population, and the distribution of those effects within the population."[1]

The health of a population can be strongly affected by the environment surrounding it. An HIA is used to consider the adverse health effects a policy, program, or project may have before it is implemented. When considering new transportation projects, an HIA can lead to healthier alternatives for the public.

An HIA is based on four core values: democracy, equity, sustainable development, and ethical use of evidence. Because health and the overall well-being of people is determined by a range of economic, social, and environmental factors, an HIA takes a participatory approach, bringing together individuals from multiple sectors to provide an integrated approach to policy making.[2]

The outcome of an HIA is a list of recommendations that provide the best available evidence to decision makers for considering a program's or project's impact to health.

How is an HIA created?

Different methodologies have emerged for carrying out an HIA; however, overlaps can be seen between various methods. General guidance breaks an HIA into several critical steps:

- Screening: Identify a project or policy for which an HIA would be useful
- Scoping: Identify key health issues that should be included
- Assessment: Rapidly or comprehensively identify who may be affected and how their health may be affected
- Reporting: Develop conclusions and recommendations to mitigate or remove negative impacts and to enhance positive impacts on health
- Monitoring and Evaluation: Review the effectiveness of the process and evaluate health outcomes as a result of the project or policy.[3]

Based on time and effort, there are distinctions between assessments that may be performed. A rapid assessment is typically carried out quickly and can be used early in the development stage or when limited time and resources are available. Although a rapid assessment provides a broad overview of possible health impacts, collecting and analyzing existing data and research is still part of the process.

An intermediate assessment is the most frequently used HIA approach and allows for more thorough investigation of health impacts, a review of available evidence and research, and possibly community input.

A comprehensive assessment involves an extensive appraisal stage, significant literature review, and comprehensive stakeholder involvement.

Cobb County has chosen an intermediate HIA approach that will use the available research of Cobb and Douglas Public Health and rely on input from the HIA Committee. The work product will consist of four memorandums produced at specific times during the CTP process that can later be combined into one document. This approach will allow health impact recommendations to be considered within the CTP schedule and development of transportation recommendations for the short, mid, and long term. This document, Screening and Scoping, is the first of the four memorandums. The memorandums will include:

1. Screening and Scoping
2. Assessment: Short-Term Project Recommendations
3. Assessment: Mid and Long Term Project Recommendations
4. Monitoring and Evaluation

How should an HIA be used?

An HIA should be used as a tool to objectively evaluate a project or policy before it is implemented so that evidence-based findings and recommendations can influence decision-making. An HIA should be used to focus the attention of decision-makers on the health consequences of the projects and policies they are considering. An HIA should lead to better informed decisions with respect to health.

This HIA will continue to support and supplement the efforts of the Cobb2020 Initiative and will broaden the reach of discussion for health impacts on transportation projects and policies.

What is the definition of health?

Some may define "health" very simply as the absence of disease. However, the World Health Organization (WHO) defines health as "a state of complete physical, mental, and social well-being and not merely the absence of disease or infirmity."[4] The first International Conference on Health Promotion in November 1986 expanded upon the definition of health to define it as "resources for everyday life, not the objective of living. Health is a positive concept emphasizing social and personal resources, as well as physical capabilities."[5]

Health promotion then becomes the process of enabling the individual to increase, take control over, or improve their health. It goes beyond the sole responsibility of the health sector and beyond healthy lifestyles and well-being. Good health is not only an important resource for social, economic, and personal development, but it's also one of the most important resources of quality of life. Economic, social, environmental, political, behavioral, and biological factors can all factor into health in a positive or negative manner.[5]

A health impact can be defined as both positive and negative. A positive health impact has an effect that leads to good health or improving health, whether it is physical or mental health. A negative health impact has the opposite effect and contributes to poor or ill health.[4]

When asked to define health, the Cobb CTP HIA Committee's discussion included a broader definition of health, much like the WHO, that considers mental, physical, and social realms. Definitions included "managing your illness through a wellness lifestyle;" "living in the least restrictive environment possible;" "balance between life and environment and finding a homeostasis of that."

Screening

Why conduct an HIA for the CTP?

An HIA is a tool that can be used to objectively evaluate potential health impacts of a project or policy before it is built or implemented. Transportation and land use projects and policies traditionally do not consider health impacts. Therefore, an HIA can bring those potential health impacts to the attention of policy and decision makers early in the decision-making process to increase positive health outcomes and minimize adverse health impacts. Ultimately, the purpose of an HIA is to lead to more comprehensive and better informed decisions with respect to health.

The transportation projects and policies recommended in the CTP will affect public health when they are implemented.

What are the best available resources?

National resources include the Centers for Disease Control (CDC), WHO, and

other public health research and policy reports that contain quality information about how the built environment impacts health and wellness.

The CTP Update 2040 Existing Conditions and Needs Assessment Report provides extensive local data on transportation conditions and needs in Cobb County and the six cities. Some of the relevant data from this source includes truck and vehicle crash rates, location of sidewalks, trails, and bicycle facilities, transit availability, highly congested locations, location of elderly, poor, and households without a car, and more.

The Cobb2020 Initiative is a community partnership to promote healthy lifestyles and delivery of essential health services in Cobb. Cobb2020 assessed the current health status of Cobb and developed a health improvement plan to build a healthier community. The HIA will rely on the data and findings from the Cobb2020 Initiative.

As part of the Cobb2020 Initiative, partners utilized the Mobilizing for Action Through Planning and Partnerships (MAPP), a Community Health Improvement Plan. The overall goal for MAPP is to implement strategic changes throughout Cobb that build a foundation for reducing and preventing chronic diseases such as diabetes, stroke, heart disease, and cancer by promoting healthy lifestyles and better access to health and prevention services for the community.

The MAPP process was broken into different assessments that provide key insights into health challenges and opportunities throughout the community that specifically evaluate: prevalent health issues, health issues important to the community members, availability of health services, and forces that impact community health. There were four assessments used to determine issues and form goals and strategies for each issue. These MAPP Assessments are valuable data sources for Cobb County health statistics and information.

MAPP Assessment 1: Community Themes and Strengths identified issues that interest the community, perceptions of quality of life, and community assets. It includes the Burruss MAPP Community Survey Report, Cobb County Focus Group Report, and a Key Informant Interview Report.

MAPP Assessment 2: Local Public Health System is a comprehensive assessment that measured the capacity and performance of the local public health system. It includes the National Public Health Performance Standards Program (NPHPSP) Local Public Health Systems Assessment Report.

MAPP Assessment 3: Community Health Status evaluated data about health status, quality of life, and risk factors. The results provide an understanding of the community's health status and ensure that the community's priorities consider specific health status and issues. It includes Cobb County 2010: How Healthy Are We?

MAPP Assessment 4: Forces of Change identified forces such as legislation, technology, and others that affect the context in which the community and its public health system operates.

In the Burruss MAPP Community Survey Report, a report that summarized findings from a telephone survey conducted for Cobb and Douglas Public

Health, key issues stood out pertaining to Cobb County transportation and health:

- 39.4 percent of participants rated access to public transportation as either poor or very poor
- For "Areas in Need of the Most Improvement", respondents included public transportation, traffic, roads, transportation, and more sidewalks/ better sidewalk access in their answers.
- For "Biggest Health Issue", respondents included obesity, pollution, traffic, and air quality.
- "Quality of Life Indicators", transportation was identified as one of the most important issues to residents.

Who are the decision-makers?

The decision-makers for the CTP include Cobb DOT, Cobb Board of Commissioners, and the City Councils of the six cities. These entities ultimately will decide which transportation projects , programs, and policies will be implemented.

Scoping

Who will do the HIA and who will be in charge?

The CTP consultant team will lead the HIA with significant help and input from the HIA Stakeholder Committee, Cobb County DOT, and Cobb and Douglas Public Health. The Cobb County DOT with the help of the six cities is the project manager for the CTP Update 2040 and this HIA.

Who will be involved?

The main partners involved include the Cobb County DOT, Cobb and Douglas Public Health, and the HIA Stakeholder Committee. The HIA Stakeholder Committee is comprised of professional and community leaders identified through the County DOT and Cobb and Douglas Public Health. Organizations represented on the Committee include Cobb Community Services Board, Austell Community Task Force, Renovacion Conyugal, Inc., Cobb County School District, Marietta City Schools, Kennesaw State University, Cobb County Public Safety, and Georgia Department of Public Health. The HIA Committee is intended to be a working group, providing input and direction into the HIA. The committee will meet and be asked to review and provide comments on the reports and provide subject area expertise where appropriate.

When does the HIA have to be completed by?

An HIA should be conducted as early as practical in the decision making process. However, sufficient details about the recommended CTP transportation projects and policies must be defined in order to complete the HIA.

CTP Schedule

The CTP kicked off in the summer of 2013 and began with an extensive public outreach effort to gain input and feedback from citizens, businesses, and community leaders on their daily transportation needs and issues. The project team is finalized the inventory of existing conditions and the transporta-

tion needs assessment and is currently developing a short term project list that will include transportation improvements across all modes of travel, including vehicular (roadway), bicycle, pedestrian, and transit improvements. Mid and long term project recommendations will be developed in summer 2014.

As one component of the CTP effort, this HIA will be developed to evaluate the potential health effects of the plan's recommendations. The HIA will help Cobb make informed choices about improving public health through transportation design and will provide recommendations to increase positive health outcomes and minimize adverse health impacts. It will bring potential health impacts and considerations into the decision-making process for plans, projects, and policies that fall outside the traditional public health arenas.

The CTP is being updated to provide plans to 2040 and will include project recommendations for roadway, safety, bicycle, pedestrian, and transit improvements. CTP's do not traditionally consider health although there are likely to be health impacts from the recommendations. This HIA will help the CTP with meeting the overall goal of the Cobb2020 Initiative which is to implement strategic changes throughout the county to reduce chronic diseases, promote healthier lifestyles, and provide better access to health and prevention services.

HIA Schedule

Completed drafts of each report will be distributed to the HIA Committee for their review and comment. The second report, Assessment: Short-Term Project Recommendations, is expected to be completed in spring 2014. The third and fourth reports, Assessment: Mid and Long Term Project Recommendations and Monitoring and Evaluation, will be completed in late spring and summer 2014.

What are the main objectives of the HIA?

- To highlight the key health issues impacted by transportation in Cobb.
- To inform decision-makers of recommendations that provide the best health outcomes.
- To strategically help Cobb reduce negative health impacts and improve health and wellness.
- To promote sustainable development, considering short and long term impacts.
- To encourage an appreciation of public health in the decision-making process.
- To raise awareness of how the built environment affects health.

What are the identified health indicators?

The HIA Committee met in February 2013 and identified the following public health concerns within Cobb County:

- Access to grocery stores, transit, healthcare, schools, and parks
- Safety and accidents
- Vulnerable populations

- Chronic disease
- Obesity and physical activity

These key health indicators will be reviewed in this HIA in the analysis of existing health conditions and the assessments of transportation project recommendations.

Existing Health Conditions

General Health

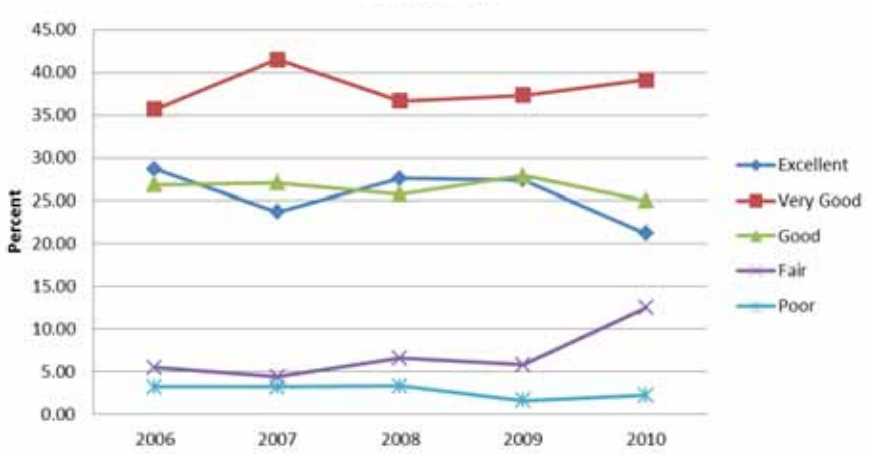
In 2010, the majority of Cobb residents reported their health as very good or good. However, those reporting their health as fair notably increased from 5.8 percent in 2009 to 12.5 percent in 2010 and those reporting their health as excellent decreased during that same time period. Figure 1: General Health of Cobb County Residents 2006-2010 displays the reported health status of adult residents in Cobb County when asked, "How is your general health?"

Vulnerable Populations

Everyone is exposed to some health risks from transportation, however the adverse impacts fall disproportionately on vulnerable populations such as the disabled, the elderly, children, and the poor. Demographic factors including age, race, sex, ethnicity, education and income are directly and indirectly related to health status.

- Cobb County's population increased by 4.1 percent from 2008 to 2012.[6]

Figure 1: General Health of Cobb County Residents 2006-2010

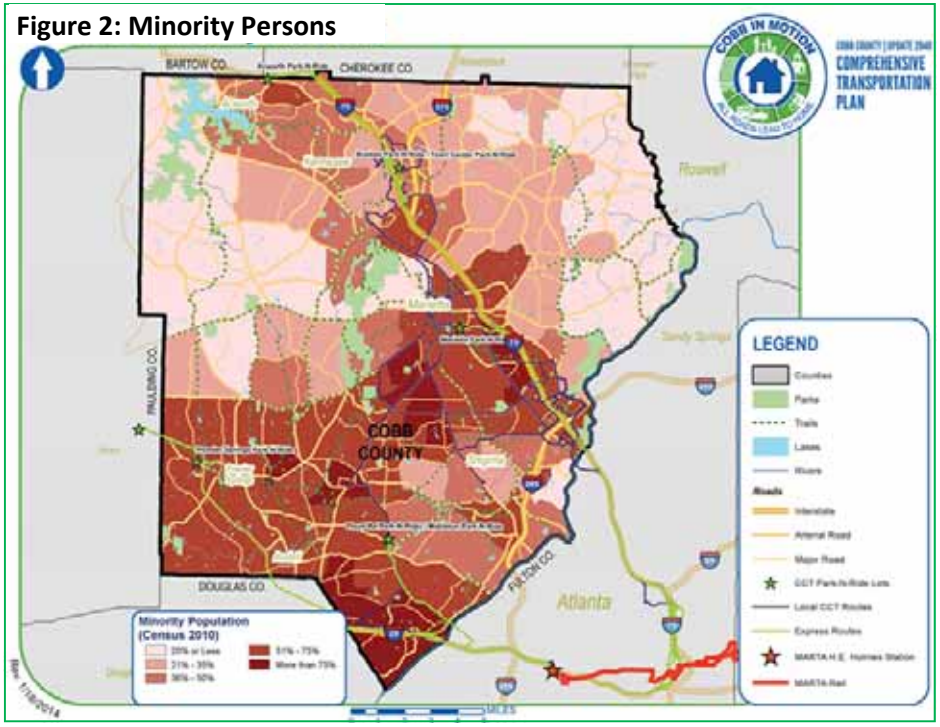


Source: BRFSS, Cobb County Health Status Report

- Cobb ranks 3rd highest in population out of the 159 counties in Georgia.[6]
- The minority (non-white) population in Cobb has grown by 11.7 percent from 2008-2012.[6]
- In 2012, blacks comprised 26.1 percent and Hispanics comprised 12.6 percent of Cobb's population.[6]
- The Hispanic population in Cobb grew 11.7 percent from 2008 to 2012.
- Foreign born residents make up 14.7 percent of the County's population.[6]

The deeper shades of red in Figure 2: Minority Persons represent areas with a greater percentage of minority population in Cobb County.

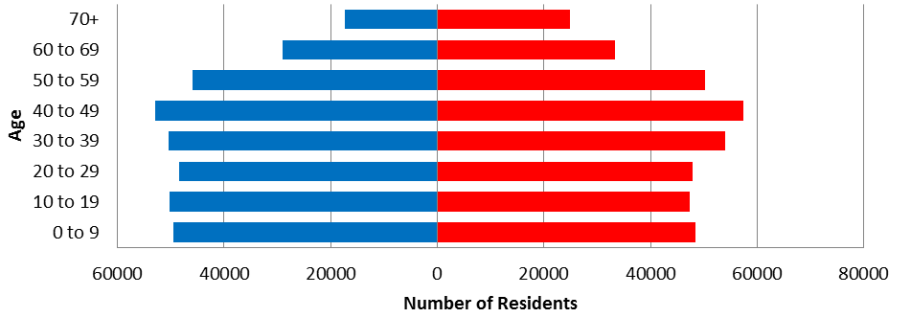
Figure 2: Minority Persons



Source: Cobb CTP Report

Figure 3: Language spoken at Home in Cobb County	Percent
English	80.1
Spanish or Spanish Creole	10.9
Other Indo-European languages	4.9
Asian and Pacific Island languages	2.7
Other languages	1.4
Source: 2008-2012 American Community Survey 5 year estimates	

Figure 4: Age Distribution Cobb County, 2012



Source: Georgia Dept. of Public Health (OASIS)

The non-English speaking population is another vulnerable population. Language barriers and miscommunication between patients and healthcare workers can result in tragic medical outcomes. Patients who meet such obstacles are less likely to have a regular source of medical care and receive preventative services. They are less likely to understand and follow medication instructions as well.[7] As shown in Figure 3: Language spoken at Home in Cobb County, it is estimated that 19.9 percent of the population over the age of five speak another language at home.

Figure 4: Age Distribution in Cobb County, 2012 shows the age distribution by sex in Cobb County.

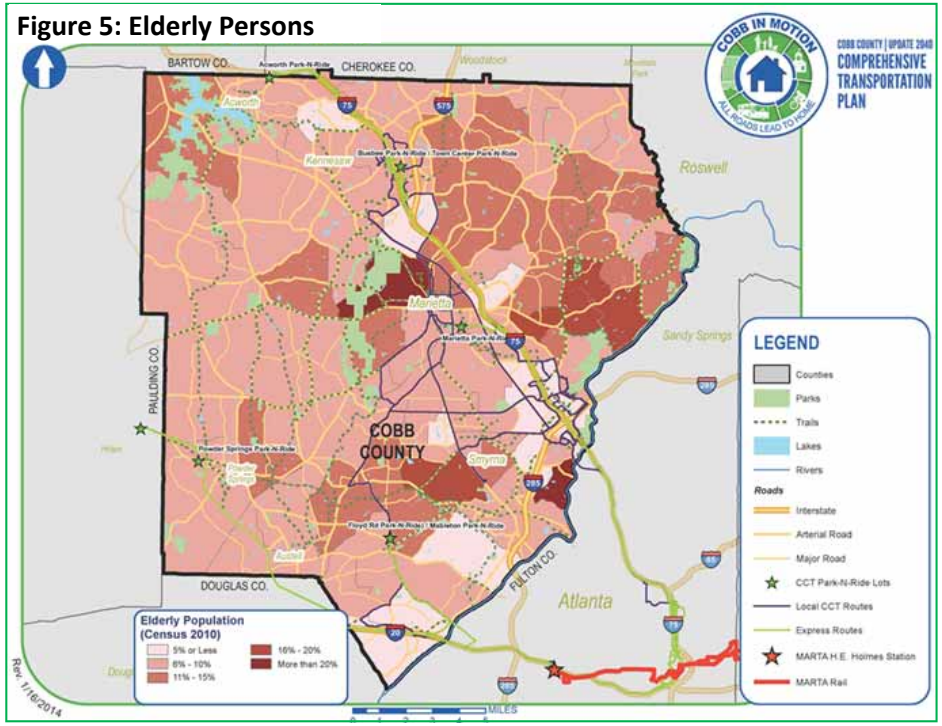
- There were slightly more females (51.4 percent) than males (48.6 per-

cent) in Cobb County in 2012.[6]

- The 40-49 age group makes up the largest percentage of all groups in Cobb County, representing 15.6 percent of the population.[6]
- 27.6 percent of the Cobb population is under the age of 19.[6]

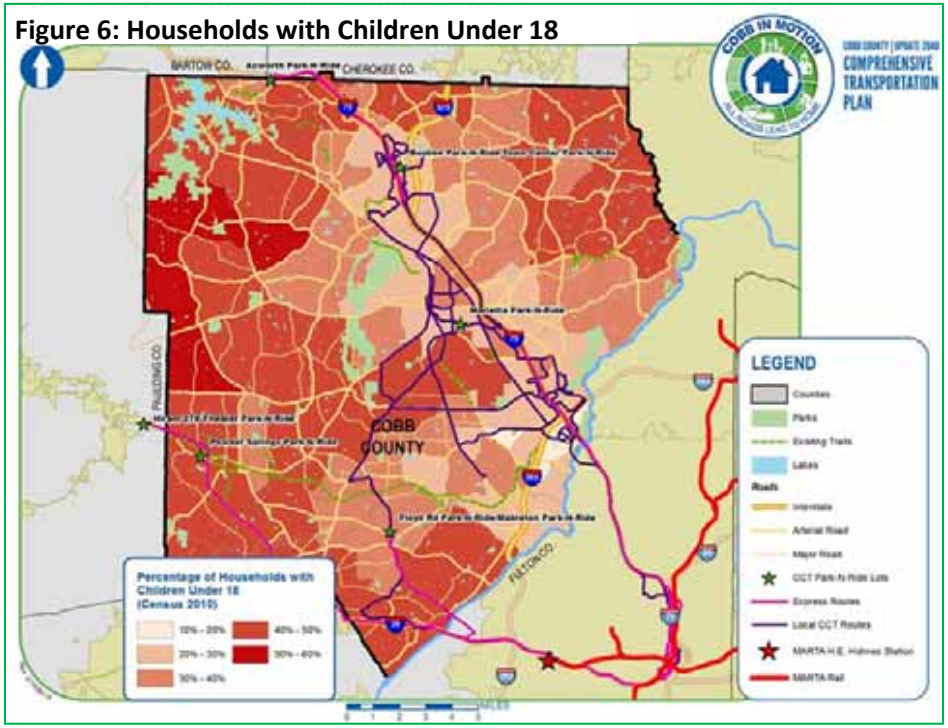
Rapid growth of the elderly population in the United States in the coming decades is expected to lead to an increased need for improved mobility options. While elderly persons are not always mobility constrained, as they age, mobility options other than automobiles become increasingly important to their independence and self-reliance. Research shows that more than one in five Americans age 65 and older do not drive because of declining health, eyesight, physical or mental abilities, concern over safety, no car, or personal preference.[7] People age 65 and over make up 8.7 percent of Cobb. Figure 5: Elderly Persons shows deeper shaded areas in Cobb to denote areas with a

Figure 5: Elderly Persons



Source: Cobb CTP Report

Figure 6: Households with Children Under 18



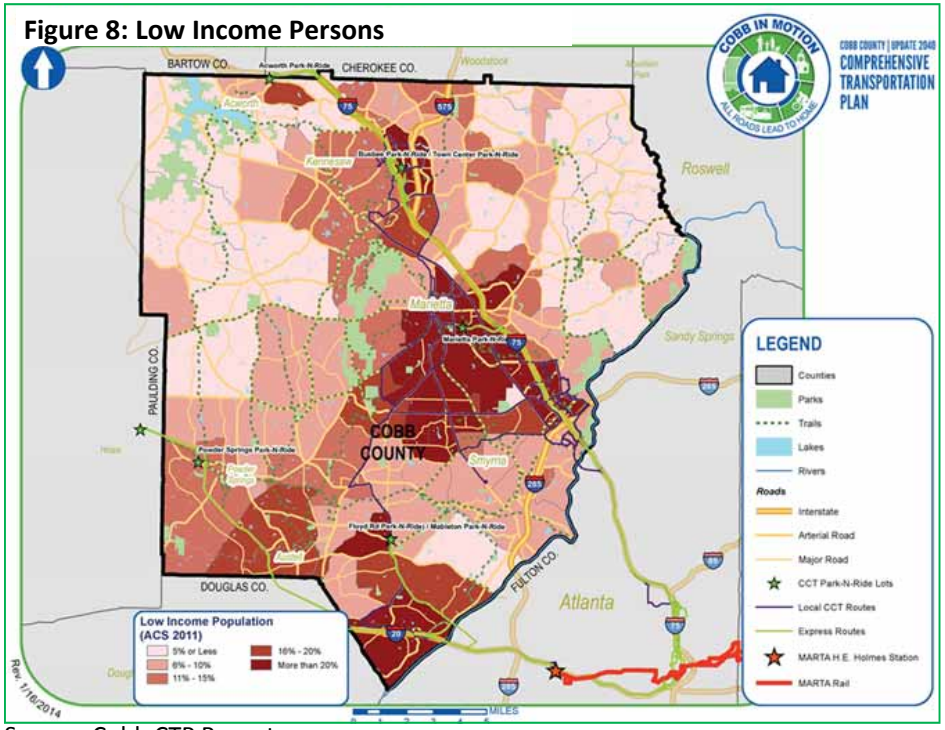
Source: Cobb CTP Report

greater percentage of elderly persons.

The population of persons under 18 is important to consider as well as a vulnerable population. This population is heavily affected by walkability factors including sidewalks, bicycles, and public transportation because the majority cannot legally operate a car. Children are at higher risk for preventable injuries when they do not have safe areas to walk, ride, and play due to inadequate separation from vehicular traffic. Figure 6: Households with Children Under 18 depicts which areas in the County have a higher percentage of households with children under 18 with darker shades.

Households that do not own or have access to a car are generally considered transit-dependent populations. In Cobb, four percent of total households are car-less, which is lower than the 6.1 percent of households across the Atlanta

Figure 8: Low Income Persons



Source: Cobb CTP Report

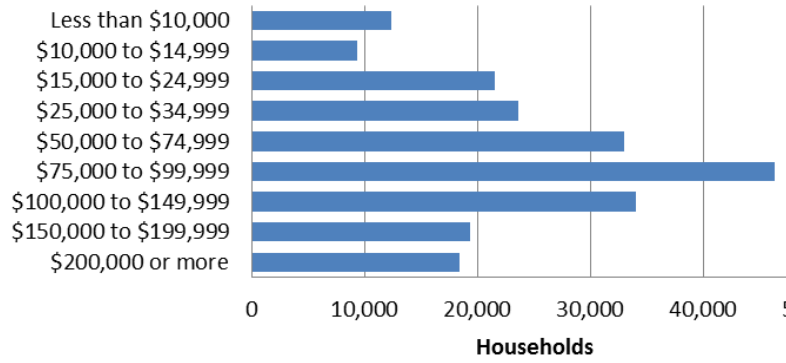
MSA. Figure 7: Zero Car Households shows the concentrations of such households with darker shades. Zero car households can be positively affected by alternative transportation facilities including sidewalks, bike lanes, and public transportation.

Low income persons are those whose income is below the poverty threshold.[9] Figure 8: Low Income Persons shows the concentrations of low incomes in Cobb with deeper shades of red. Low income persons are also considered to be in a vulnerable population group because they may lack regular transportation options as well as have reduced access to health care and wellness opportunities. Of the people within one-half mile of a bus stop or park-and-ride lot for whom income levels have been determined, 31,808, or 19.7 percent, are considered low income. This is significantly higher than the countywide rate of 11.3 percent, and indicates that existing transit service routes serve many areas in which the low-income population resides. Some areas of higher density low-income populations in southwest Cobb County, are unserved by local bus service.

Numerous studies show a link between income and health. In general, the higher the income the healthier a person is likely to be.[7] Figure 9: Household Income Cobb County 2008-2012 shows the household incomes by ranges.

- The median household income in Cobb is estimated to be $65,180 which is down from $67,877 in 2008.
- The poverty level is 11.9 percent. An estimated 81,418 people live below the poverty level in Cobb. Of these, 29,371 are under the age of 18.

Figure 9: Household Income Cobb County 2008-2012



Source: 2008-2012 American Community Survey 5 year Estimates

Transportation Access

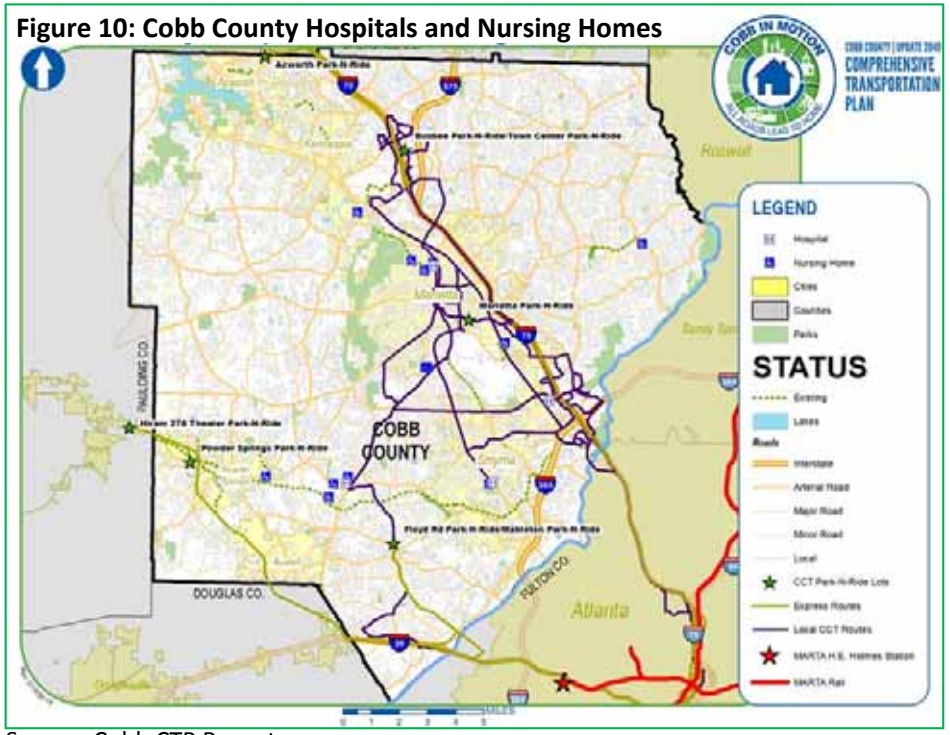
"Post-war America embraced the car as the preferred mode of travel and we planned and built our communities on the assumption that everyone would drive everywhere. Today, we are suffering from the aftermath: our communities have become obese (i.e.: suburban sprawl) and our arteries are clogged (i.e.: highway congestion)."[11] Transportation decisions of the past have led to major health consequences. Some of these consequences include death and injuries from crashes, air pollution, noise, fewer opportunities for physical activity or other modes, increased stress, and less social interaction. Despite the unintended negative health consequences of the transportation

network, this network provides positive health consequences when it provides access to grocery stores, transit, healthcare, schools, and parks. Increased street connectivity improves access while also providing more route choices and shorter trip lengths.

Access to healthcare facilities is very important for the health of Cobb residents. Access to care is affected by a number of different factors including the number of healthcare facilities and providers in an area and the availability and affordability of healthcare.[7] Figure 10: Cobb County Hospitals and Nursing Homes shows the locations of hospitals and nursing homes with respect to transit lines. Other health facilities not shown on the map include Good Samaritan, The Community Health Center of Austell, and six Cobb and Douglas Public Health sites. Access to hospitals and health centers is not the full solution to overall wellness and prevention of disease. In Cobb and nationally, emergency room visits are very high for health conditions which could be treated in a doctor's office at a much lower cost. Access to mental health services, prescription medications, and dental services are also important for health.

Cobb has an extensive roadway system that connects with the regional transportation network of major freeways and interstates. The roadway network in the county is comprised of freeways, arterials, and collectors. Freeways include four major interstates I-75, I-285, I-575, and I-20, and highways such as Cobb Parkway (US 41). Cobb Community Transit provides local and express bus service within the county and connecting to rail services in Fulton County. The number of sidewalks is increasing every year, and in 2013

Figure 10: Cobb County Hospitals and Nursing Homes



Source: Cobb CTP Report

there were 733 miles of sidewalks in the county. There are multi-use trails, but the number of on-road bike facilities in Cobb is very small.

Driving alone is very common in Cobb; 80 percent of Cobb workers drive alone to work. Compared to other counties in Georgia, Cobb ranks poorly on long commutes driving alone which correlates with negative health impacts such as less social interaction. Among workers who commute in their car

alone, 48 percent commute more than 30 minutes. This is significantly higher than the state average of 38 percent.[14] Interestingly, daily commutes are often the longest trips people make and people spend nearly as much time in their cars on weekends as on weekdays.[17] In addition to health risks from less social interaction and vehicle crashes, the farther people commute by vehicle, the higher their blood pressure and body mass index. Also, the farther they commute, the less physical activity the individual participated in.[15]

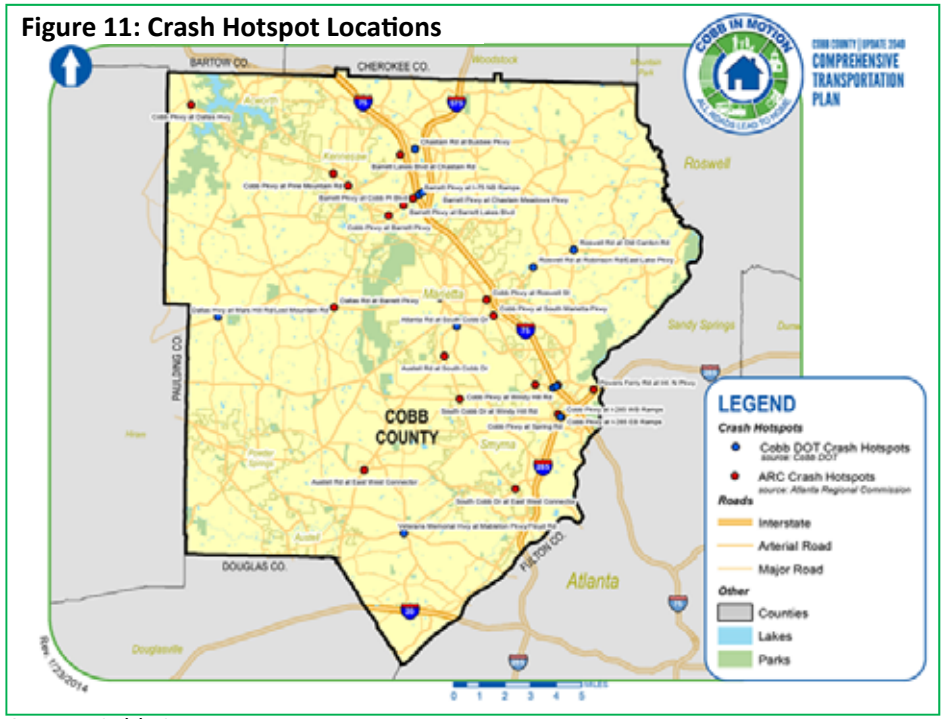
Transit service is not available in all areas and does not operate on Sundays which provides another challenge to mobility and access. Improved travel times, better access to job centers, and more opportunities for alternative mode use could help improve these existing health conditions.

Safety and Injuries

Transportation crashes are a major cause of death and injury; in the U.S., one in 88 will die in a car crash.[11] The most dangerous stretches of road are those built with multiple lanes, high speeds, no sidewalks, long distances between intersections or crosswalks, and roadways lined with large commercial establishments and apartment blocks.[13] The incidence of deaths and injuries from traffic accidents is linked to vehicle miles traveled (VMT), vehicle speed, and traffic volumes. When VMT, vehicle speed, and traffic volumes increase, accident rates increase.[8] In the Atlanta region, 45 percent of all motor vehicle crashes occur at intersections.[7]

User safety on a transportation facility should be monitored and improved if crash statistics suggest that there is a recurring trend. Law enforcement and emergency responders in Cobb County report all vehicular crashes to a database where information such as crash location, severity, and weather conditions are stored. Since 2005, crash rates (crashes per 100 million vehicle miles traveled) in Cobb have been 7-10 percent higher than the average in the 10-county metro Atlanta region. Cobb rates have also steadily declined since 2005 resulting in a 34 percent reduction in crash frequency over the 5 year analysis period. Figure 11: Crash Hotspot Locations shows the locations

Figure 11: Crash Hotspot Locations



Source: Cobb CTP Report

with the highest number of vehicular crashes.

Safety and injury of children is a specific concern because they are a vulnerable population and because of the substantial number of children injured and killed by vehicle and bike accidents every year. In 2008, motor vehicle crashes were the leading cause of injury-related death to children. Youth bicycling is so common that each month three out of four children in the U.S. ride a bicycle. Consequently, more children are seen in emergency rooms for injuries related to biking than any other sport. Apart from the car, bicycles are linked to more childhood injuries than any other consumer product. Universal bike helmet use among children would prevent an estimated 212 to 294 deaths and 382,000 to 529,000 injuries each year. In the U.S.; every $12 spent on a bicycle helmet generates $580 in cost saving benefits to society.[16]

Chronic Disease

Many of the diseases of the 21st century are chronic diseases that steal human vitality and productivity. They also cost lots of money to manage. Chronic diseases, such as heart disease, cancer, diabetes, obesity, asthma, and long-term mental health conditions can be mitigated by community and transportation design choices. Evidence links car commuting to back pain, cardiovascular disease, and stress.[13] Providing for shorter and more active commutes will help improve these health impacts. Cardiovascular diseases, lung cancer and stroke are the top three leading causes of death in Cobb County. Figure 12: Leading causes of Hospitalization and Figure 13: Leading Causes of Mortality (Death) show the top five causes for hospitalization and death in Cobb County.

Figure 12: Leading Causes of Hospitalization

	Cobb County Rank	Georgia Rank
Pregnancy and Childbirth	1	1
Heart Disease	2	2
Unintentional Injuries	3	3
Cancer	4	6
Influenza and Pneumonia	5	4

Source: Hospital Discharge Rate 2007-2011 CHNA Dashboard - OASIS

Figure 13: Leading Causes of Mortality (Death)

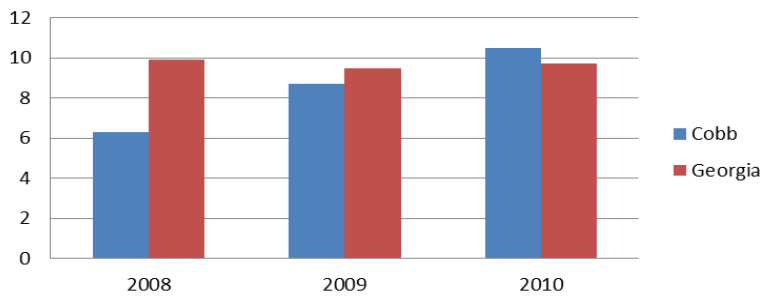
	Cobb County Rank	Georgia Rank
Cancer	1	2
Heart Disease	2	1
Unintentional Injuries	3	4
Stroke	4	3
Chronic Lower Respiratory Disease (CLRD)	5	5

Source: Age-Adjusted Death Rate 2007 - 2011 CHNA Dashboard - OASIS

Type 2 diabetes research shows that weight loss and physical activity can more effectively control the disease than medication. Physical activity has also shown as effective for treatment of mild anxiety and depression as prescribed medications.[10] Providing alternate modes to allow physical activity while commuting or shortening trip times to allow more free time for activity can lessen the stress and chronic diseases experienced by Cobb residents.

Figure 14: Percent of Adults Who Have Been Told by a Doctor That They Have Diabetes, 2008-2010 shows 10.5 percent have been told that they have diabetes in 2010[7] and that Cobb adults with diabetes is rising.

Figure 14: Percent of Adults Who Have Been Told by a Doctor That They Have Diabetes, 2008-2010



Source: Cobb and Douglas Public Health, 2010

Motor vehicles are a leading contributor of air pollution. The health hazards of air pollution are well known. Ozone is an airways irritant and high levels are associated with respiratory problems, worse lung function, more emergency room visits and hospitalizations, more medication use, and more absenteeism from school and work. Particulate matter is associated with many of the same respiratory problems as well as elevated mortality.[7] Those who live within 300 feet of a major roadway are at an even higher risk of respiratory illness.[11] Neighborhood walkability is linked to fewer per capita air pollutants and green house gases.[17] In 2010, 9.2 percent of Cobb adults had been told they currently have asthma[7]. The national annual health costs of transportation-related air-pollution are between $50 and $80 billion.[12] Many people are also exposed to large amounts of traffic noise that not only causes sleep loss, but communication problems. Increasing volumes of traffic on roads leads to increasing amounts of ambient noise. Children are especially impacted as it degrades their mental health and classroom behavior.[11]

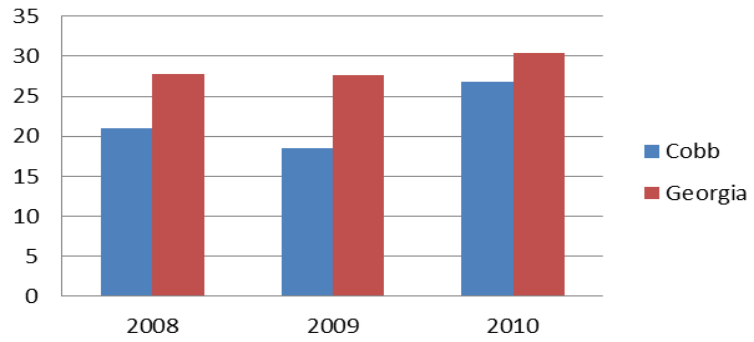
Providing alternative modes, improving neighborhood walkability, decreasing congestion, and other methods to lower VMT will help decrease the negative transportation health impacts of air and noise pollution.

Obesity and Physical Activity

The costs of obesity account for approximately nine percent of total U.S. health care spending.[12] A portion of these costs are attributable to transportation and land use design that limit opportunities for physical activity and access to healthy food.[12] Forms of transportation that include physical activity like walking and biking, in conjunction with transit or on their own, offer positive health impacts. National data shows that more than a quarter of trips are easily walkable (27 percent within a mile, and 14 percent within a half-mile of home). The data also shows that 63 percent of trips are easily bikable (within five miles of home). Despite this, more than 90 percent of all trips are made in the car.[8] One component to increasing the number of trips on bike and on foot is by providing pedestrian and bike facilities to destinations. Figure 15: Percent of Adults who are Obese by BMI, 2008-2010 shows obesity rising in Cobb adults in 2010. Figure 16: Percent of Adults Who Have

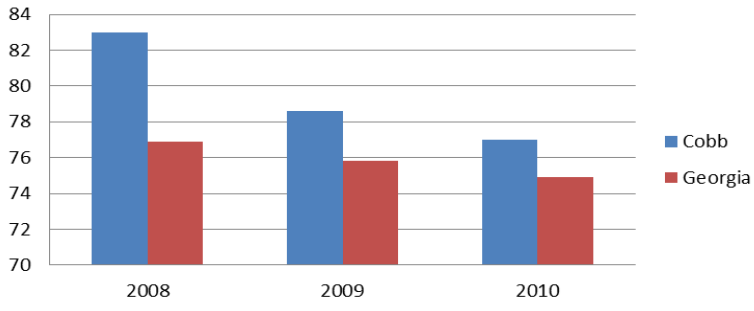
Participated in Any Physical Activity with the Past Month, 2008-2010 shows the declining number of Cobb adults engaging in exercise in 2009 and 2010.

Figure 15: Percent of Adults who are Obese by BMI, 2008-2010



Source: Cobb and Douglas Public Health, 2010

Figure 16: Percent of Adults Who Have Participated in Any Physical Activity within the Past Month, 2008-2010



Source: Cobb and Douglas Public Health, 2010

- 37.4 percent of adult residents in Cobb County are overweight[7]
- 26.8 percent of adult residents in Cobb were considered obese in 2010 based on BMI[7]
- 77 percent of the residents reported that they participated in physical activities during the last month[7]

Neighborhood walkability is linked to more moderate physical activity and lower obesity levels in the Atlanta region. Residents in the most walkable neighborhoods are 2.4 times more likely to get the physical activity needed to maintain health. 37 percent of people in high walkability areas met the recommended 30 minutes of daily activity, compared to only 18 percent of residents in the least walkable areas. People who live in walking distance to a mix of shops and businesses are less likely to be obese than those living in areas with a mixed-use level equal to or lower than average.[17] Therefore, transportation projects that increase neighborhood walkability, such as sidewalks, multi-use trails, and intersection and crossing safety improvements, will improve residents' health.

Summary of Health Indicators

A list of all of the possible health indicators and transportation health impacts would be incredibly lengthy. To narrow the focus on the highest priority health concerns within Cobb County, the HIA Committee identified the five main public health issues in Cobb: Transportation Access, Safety and Injuries, Vulnerable Populations, Chronic Disease, and Obesity and Physical Activity. These health indicators are important to transportation decision-

making. It is imperative that vulnerable populations have safe access to medical facilities, schools, healthy foods, etc. through sidewalks, bike lanes, and transit. Transportation access needs to be safe, and to provide connections via multiple paths and modes to shorten trip lengths and times and improve health. Time spent in a car is time that could be more healthily spent walking, biking, or any other activity to promote health. These five health indicators will be used to assess the CTP transportation project recommendation list.

Next Steps

Assessment: Short-Term Project Recommendations

The CTP project team is currently formulating short-term transportation project recommendations. The HIA will give specific recommendations to manage the health impacts identified.

Assessment: Mid and Long Term Project Recommendations

Once the CTP formulates mid and long term transportation project and policy recommendations, the HIA will give specific recommendations to manage the health impacts identified.

Monitoring and Evaluation Memorandum

The final memorandum in this series of four HIA memorandums will include a follow-up monitoring plan to trace the decision outcomes.

Evaluating whether the HIA has influenced the decision making process (and the proposed CTP) is an important component of HIA. As with any intervention, evaluation is required to see if it has worked. Evaluation of the HIA process is also useful to answer why the HIA worked (or not).

Monitoring the implementation of the proposal is critical to ensure that any recommendations that decision-makers agreed to, actually occur. Longer term monitoring of the health of Cobb County will be completed by Cobb and Douglas Public Health or other proposals. This long term monitoring can be used to verify the predictions made during the appraisal were accurate, and to determine if the health or health planning behaviors of the community have improved.

References:

1. *1999 Gothenburg consensus statement, 2011. <http://www.euro.who.int/en/what-we-do/health-topics/environmental-health/health-impact-assessment>*
2. *World Health Organization, 2010. Why Use HIA. <http:www.who.int/hia/about/why/en/print.html>.*
3. *Health Impact Assessment for Healthy Places: A Guide for Planning and Public Health. Atlanta Workshop September 25-27, 2007. Center for Disease Control (CDC).*
4. *World Health Organization, 1998. Health Promotion Glossary. <http:www.int/hpr/NPH/docs/hp_glossary_en.pdf>.*
5. *World Health Organization, 1986. Ottawa Charter for Health Promotion. Geneva.*
6. *Georgia Department of Public Health's Data Warehouse Online Analytical Statistical Information System (OASIS). Georgia Department of Public Health.*
7. *Cobb County 2010: How Healthy Are We? Cobb County Health Status Report. Cobb County and Douglas County Board of Public Health.*
8. *Understanding the Relationship between Public Health and the Built Environment. A Report Prepared for the LEED-ND Core Committee. Dr. Reid Ewing and Dr. Richard Kreutzer. May 2006.*
9. *U.S. Census Bureau. 2008-2012 American Community Survey 5 year Estimates.*
10. *Public Health Impacts of Community Design Choices. Christopher Kochtitsky, MSP. National Association of County & City Health Officials (NACCHO).*
11. *Transportation: What's Health Got to Do With It? John Balbus, MD, MPH and Bill Wilkinson, AICP. National Association of County & City Health Officials (NACCHO).*
12. *The Hidden Health Costs of Transportation. American Public Health Association by Urban Design 4 Health Inc. February 10, 2010.*
13. *Urban Sprawl and Public Health. Howard Frumkin, MD, DrPH. Public Health Reports, May–June 2002. Volume 117.*
14. *County Health Rankings & Roadmaps. A Robert Wood Johnson Foundation. <http://www.countyhealthrankings.org/app/georgia/2014/rankings/cobb/county/outcomes/overall/snapshot>.*
15. *Hoehner, Christine M., et al. "Commuting distance, cardiorespiratory fitness, and metabolic risk." American journal of preventive medicine 42.6 (2012): 571-578.*
16. *Safe Kids Cobb County. Safety information, fact sheets and safety tips. <http://www.safekidscobbcounty.org>.*
17. *New Data for a New Era: A Summary of the SMARTRAQ Findings. 2007. <http://www.smartgrowthamerica.org/documents/SMARTRAQSummary_000.pdf>.*