

North Carolina Guide to Incorporating Health Considerations into Comprehensive Plans



The *North Carolina Guide to Incorporating Health Considerations into Comprehensive Plans* highlights the ways that health can be incorporated into comprehensive plans. It is a compilation of strategies that were researched and developed by practitioners across the state and is not intended to serve any regulatory function. It can be used by anyone who is involved in developing comprehensive plans including city planners, health officials and community residents. This Guide is not intended to contain an exhaustive list of all the ways health can be incorporated into comprehensive plans; it is intended to serve as a guide to start the conversation about how health can be incorporated into the planning process. Please note that some goals/strategies may be more relevant in a particular community than others, depending on certain factors (i.e., rural or urban community).

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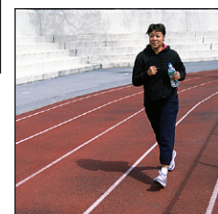
METHODS

The *North Carolina Guide to Incorporating Health Considerations into Comprehensive Plans* (Guide) is based on the American Planning Association: Planning and Community Health Research Center's (PCH) Evaluation Tool. PCH consulted existing model checklists or standards of health to create an initial list of questions relating public health to planning for the PCH Evaluation Tool. Additional questions were derived from current literature as well as the expert opinion of PCH staff and their selected academic advisory committee. The PCH Evaluation Tool included 79 questions in seven categories: active living, emergency preparedness, environmental exposures, food and nutrition, health and human services, social cohesion and mental health and broad issues (including procedural issues, vision statement, guiding principles and background data).¹ The PCH Evaluation Tool was used as the starting point; the goals and strategies were tailored to North Carolina based on expert feedback. The Guide was reviewed by local, state and national experts in July 2013. The edits from the expert review were incorporated, then the document was reviewed by professionals from across North Carolina in August 2013.

Introduction

North Carolina is participating in an increasingly competitive global economy. The state's performance is linked to its ability to produce a highly educated, highly skilled, and healthy workforce as well as to create and maintain healthy, thriving communities. Healthy communities are places where business and industry want to locate, entrepreneurs want to start their business ventures and people want to live and visit. A healthy community environment encompasses aspects of human health, disease and injury that are influenced by factors in the overall environment.² For example, health issues related to community design and land use include mental health, injury, physical activity, respiratory health, air pollution, social capital, water quality and accessibility.³ A healthy community begins with community design. Community design is the form and character of the built environment including the groupings of buildings, public spaces, neighborhoods, streetscapes and public improvements within a defined area.⁴

Plans guide how a community is designed. Communities may create different types of plans including land use plans, bicycle and pedestrian plans, park and recreation plans and transportation plans. Comprehensive plans are the most encompassing types of plans. A comprehensive plan creates a long-term vision for the growth of a community. It is an official document adopted by a local government (and can also address larger geographical areas, such as a city's extraterritorial jurisdiction) that serves as a guide for making land-use changes, preparing capital improvement programs, and determining the rate, timing and location of future growth.⁵



Health is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity.⁶

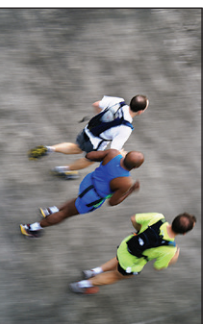
HEALTH IN ALL POLICIES

Health in All Policies is a collaborative approach that integrates and articulates health considerations into policy making and programming across sectors, and at all levels, to improve the health of all communities and people. Health in All Policies requires public health practitioners to collaborate with other sectors to define and achieve mutually beneficial goals.⁷ For example, the North Carolina Department of Transportation expanded its mission to integrate public health considerations into its initiatives, plans and policies, as well as to explore the use of health impact assessments. This expanded emphasis on health comes from an observance of the connection between the built environment and public health outcomes, such as chronic disease and obesity.⁸

HEALTH IMPACT ASSESSMENTS (HIA)

An HIA is a decision-making process used to identify how a project, policy, plan or program might influence health. It includes procedures, methods and tools to systematically judge the potential, and sometimes unintended, effects of a proposed project, policy, plan or program on the health of a population and the distribution of those effects within the population. The HIA also includes recommendations to enhance the health benefits of the project, policy, plan or program and to mitigate potential harms.⁹

COVER PHOTO CREDITS: Grocery store, town center, women walking with stroller, men on walk path: www.pedbikeimages.org/Dan_Burden; pedestrians on overpass: www.pedbikeimages.org/Julia_Diana; family in community park: www.pedbikeimages.org/Laura_Sandt; cyclist in park: www.pedbikeimages.org/Tiffany_Robinson



The comprehensive plan typically guides public policy regarding transportation, economic development, utilities, land use, recreation, housing and other elements as necessary. Comprehensive plans provide a 20-30 year blueprint that influences the social, economic and environmental conditions of a community, all of which can have long-term effects on health outcomes.

Health considerations can be incorporated into comprehensive plans through active living, healthy foods, emergency preparedness, environmental exposures, health, human, and public services and social cohesion. Creating a North Carolina with healthy people, environments and economics starts with healthy community design. The *North Carolina Guide to Incorporating Health Considerations into Comprehensive Plans* outlines different health elements that can be incorporated throughout comprehensive plans.

COMMUNITY ENGAGEMENT

Community input can guide the development of comprehensive plans, as well as provide broad support of the plan and commitment to its implementation. Community input can be outlined through a community engagement plan. The community engagement plan describes who to involve in the plan development and how they can be involved.¹⁰ Community engagement can include organized input from select people/representatives (e.g., steering committees, stakeholder interviews, focus groups, briefings); community-wide meetings (e.g., kick-off public information meetings, community forums, roundtable discussions, facilitated town meetings, public hearings); communication media for educating and engaging the public (e.g., news releases and/or newsletters, email blasts, television, radio, social media) and formal data collection (e.g., surveys, photographic journals).¹⁸ Engaging the community in the planning process establishes networks to mobilize around collective actions for various issues/projects within their community, which fosters social capital within a community.¹¹



Incorporating Health Considerations into Comprehensive Plans

General Features

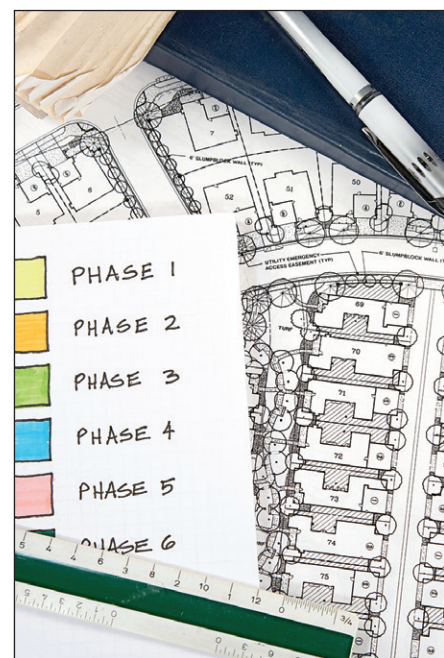
There are general features that can be addressed throughout the plan. These features include:

- Images to illustrate population and geographic data and/or how strategies in the plan may impact different populations or geographies;
- Evidence of collaboration with the health department and/or other community health stakeholder(s);
- Evidence of public involvement/public participation in the development of the plan;
- Identification of processes and procedures for evaluating/monitoring health impacts of strategies in the plan;
- Consideration of older adults, children, minorities, low-income residents, persons with limited English proficiency, people with physical and cognitive disabilities, and other potentially vulnerable and underserved populations when planning for the future; and
- Maps to increase awareness of the location of potentially vulnerable and underserved populations.

Vision Statement and Guiding Principles

The vision statement defines how a community envisions itself in the future. The guiding principles are used to make decisions that ensure the plan is implemented to meet the community's vision. The health of the people, the environment and the economy can be incorporated into the vision statement and the guiding principles. For example:

- Incorporate a broad goal to foster all residents' health and well-being in the vision statement;
- Identify the built environment as a factor determining public health outcomes in the vision statement; and
- Indicate that the community values public health, social and health equity, or other health topics in the guiding principles.



“People of all abilities”

refers to design and construction of facilities in compliance with, or exceeding, the Americans with Disabilities Act (ADA), resulting in facilities which are readily accessible to and usable by individuals with disabilities.

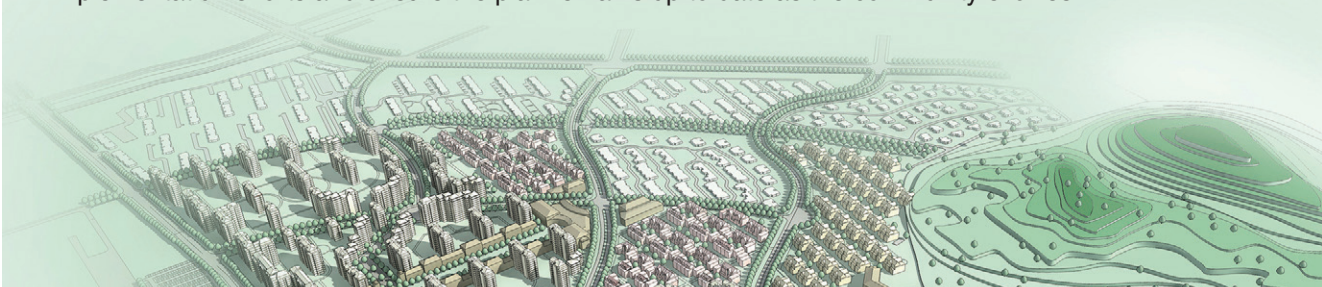
Background Data

Background data provides information about the community’s needs. The data is collected prior to the onset of the planning process and can be included in the plan or in a separate technical document. Assessments can provide useful background information for planning. The data gathered from these assessments of the community can aid in the development of specific strategies. For example:

- A community health assessment;
- An assessment of bicycle and pedestrian infrastructure that needs improvement to promote walking and biking by people of all abilities;
- An assessment of public health or motor vehicle crash data and the areas of high risk for potentially vulnerable road users (e.g., pedestrians, cyclists, children, older adults, persons with disabilities);
- An assessment of the current locations of public recreation/park space in the community (e.g., X% of population lives within a 10 minute walk of a park);
- A community food assessment of the growing, processing, distribution and sale of foods as well as cultivating a healthy, green and affordable food system;
- An assessment of the number of health and human service outlets available for populations in need; and
- An assessment of public safety/security measures which have been identified as important to promoting active lifestyles and healthy outdoor activities.

Plan Implementation

Plan implementation can be addressed during the development process. Entire chapters or specific implementation tasks within each chapter of the plan can address how the plan will be implemented. Considering implementation during the planning phase will help to identify achievable strategies that represent the needs of the community. Plan strategies vary, including infrastructure projects, development regulations, studies, programs, agreements and committees. Local government is responsible for plan implementation. However, groups, organizations and residents (all stakeholders from the plan development phase) can play a critical role. Local government and community residents can work together to create the timeline for conducting the specific action steps, identify the responsible party for handling the various tasks and develop the implementation tools necessary to carry out the tasks (e.g., building codes, public facilities, infrastructure tools). Regular review of the plan will help to evaluate the success of its implementation efforts and ensure the plan remains up to date as the community evolves.¹²



Goals and Strategies

Health considerations can be incorporated into various chapters of a comprehensive plan, including active living; healthy foods; emergency preparedness; environmental exposures; health, human, and public services and social cohesion. This part of the Guide includes different sections that may be included in a comprehensive plan to address health—making the safest and healthiest choices the easiest choices. Each section provides a brief overview of how health can be included and examples of goals and strategies to address health considerations.

Active Living

Active living is a way of life that integrates physical activity into daily activities. It gives residents the opportunity to be physically active by carrying out activities of daily living—such as walking to the grocery store, school or work, as well as playing in their neighborhood or at the local park. Active living requires places people can be active, which are safe and convenient, and provide connectivity between destinations (e.g., home and work).

GOALS

- Increase the number of people of all ages and abilities who walk and bike to daily activities or leisure-time physical activity;
- Create safe, accessible, usable and attractive places for leisure-time physical activity;
- Reduce car dependency and increase use of active transportation; and
- Prevent or reduce traffic injuries.

STRATEGIES

Transportation and Land Use

- Consider the transportation needs of potentially vulnerable and underserved populations (e.g., older adults, children, persons with disabilities, low-income residents, rural populations);
- Call for future development of, or refer to already established design standards and guidelines related to pedestrian, bicycle and transit access that support active transport modes for people of all abilities;
- Establish a standard that promotes pedestrian activity (e.g., walkability) or use pedestrian overlay zones to promote walking in commercial areas as necessary for all users;
- Build, extend or develop an off-road trail (“greenway”) network for walking and biking that can be used by people of all abilities;
- Incorporate complete streets design;
- Improve street connectivity to provide multiple routes and connections within residential areas, and between residential neighborhoods and destinations—such as schools and shops;
- Incorporate traffic calming measures (e.g., reorient street geometry, lower speed limits, raised crosswalks and intersections).





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Greg Griffin, AICP

- Incorporate bike racks onto buses and allow bikes on light rail, commuter and high-speed rails;
- Support increased access to public transportation, for example, establish/extend transit networks, provide more service on existing routes, exceed current ADA Standards or otherwise encourage greater use of existing public transportation;
- Connect existing and proposed resources (e.g., network of trails, greenways, bike paths, bike lanes to parks);
- Support “Safe Routes to School” for children or other mechanisms that support youth of all abilities walking and biking to school (e.g., locating schools closer to residential areas, increasing sidewalks and connectivity)
- Encourage builders to build bicycle, pedestrian and ADA compliant access in all new developments;
- Encourage builders of new homes to include Visitability Features i.e., wheelchair accessibility from the home to the public sidewalks and transportation;
- Encourage urban infill development rather than develop on the periphery, on undeveloped suburban land;
- Revisit local codes, ordinances and zoning to allow for more flexibility to support and encourage transportation-related walking and biking;
- Modify parking design, for example by reducing parking requirements for new developments and developments near transit stops and provide access to facilities for people of all abilities; and
- Encourage businesses to locate in places that are easily accessible by walking and biking—such as downtowns and near residential developments, by using incentives, for example, density bonuses, fast-track permitting, lower fees and short term tax abatements.

Parks and Recreation

- Comply with ADA standards and relevant Guidelines such as the Accessibility Guidelines for Outdoor Developed Areas or Public Rights of Way Accessibility Guidelines and incorporate Universal Design;
- Expand, improve or increase the number of public recreation facilities and access to these facilities, especially for underserved populations (e.g., low-income residents, older adults, persons with disabilities);
- Pursue joint use agreements to share school recreational facilities, particularly as a way to improve access to recreation in underserved communities;
- Provide a high level of service for parks (e.g., lighting, cleanliness, seating, railings, toilets, pathway surfaces, tobacco-free);
- Encourage the incorporation of vegetation or “greening” where appropriate in parks, streets, trails and pedestrian facilities;

- Encourage public-private partnerships, for example, by pursuing joint or shared use agreements; and
- Link to local government programs that support active living (e.g., park and recreation programs, pedestrian-oriented law enforcement strategies, bicycle and pedestrian integration into school curriculum).

Healthy Foods

Healthy foods include fruits, vegetables, whole grains, low-fat dairy and lean meats. A healthy, sustainable food system, which consists of how food is produced, transformed, distributed, marketed, consumed and disposed, is a major contributor to accessing healthy foods. A community with a healthy, sustainable food system provides numerous benefits for its residents, particularly access to affordable, culturally relevant and healthy foods.

GOALS

- Support local and sustainable food systems and
- Provide access to affordable, healthy and culturally relevant foods (e.g., grocery stores, convenience stores, farmers' markets, edible landscapes, community gardens).

STRATEGIES

- Form a local food or nutrition council to address food and nutrition strategies.
- Support local, healthy food systems by:
 - Preserving rural agricultural land;
 - Supporting new opportunities for the agricultural production of produce (i.e., fruit, vegetables);
 - Supporting small farms;
 - Supporting ecologically sustainable food production practices;
 - Supporting infrastructure for local or regional food distribution; and
 - Supporting infrastructure for local or regional food processing and distribution networks.
- Link to other food system plans outside of the jurisdiction (i.e., regional).
- Address access to affordable, healthy food, especially in potentially vulnerable and underserved populations by:
 - Protecting land use for farmland, farmers' markets and other healthy food retail;
 - Expanding, improving or increasing the number of healthy food venues in communities (e.g., farmers' markets, grocery stores, convenience stores, discount stores, drug stores);
 - Increasing healthy food retail in underserved areas through incentives such as fast-track permitting or other innovative means;
 - Supporting healthy food environments in and around businesses, governmental agencies, schools, preschools (e.g., edible landscapes, produce/community gardens);
 - Supporting the acceptance of North Carolina Food and Nutrition Services Program (NC FNS) benefits at farmers' markets;
 - Providing convenient public transportation to access affordable, healthy food; and
 - Expanding, improving or increasing the number of sources of fresh drinking water.





Emergency Preparedness

Emergency preparedness describes the steps taken to make sure a community is resilient and safe before, during and after a natural and/or man-made disaster. Examples of natural disasters are floods, hurricanes, ice storms, tornadoes and earthquakes. Man-made disasters include explosions, fires, chemical and biological attacks. Special considerations should be made for at-risk populations, including people with disabilities, when preparing and/or executing an emergency preparedness plan. A community that is prepared for an emergency has coordinated efforts of plans and resources for families, schools, law enforcement, emergency personnel and other community organizations to respond quickly to the needs of all residents during and after a crisis.

GOALS

- Identify potential public health effects from natural and man-made disasters—including provision of food and food safety, access to clean water and shelter as important considerations in planning for the future.

STRATEGIES

- Prepare for natural disasters especially for high risk areas and areas that have populations who need additional assistance, including, locating evacuation routes and places for shelter.
- Develop a post-disaster recovery plan/protocol that will include planning for public health effects of disasters, for example, building sufficient local and regional food reserves, communications and outreach, logistics, transportation infrastructure, and restoring food and water system integrity and operations after the emergency.
- Develop a continuity of operations plan to identify and provide critical services that need to be maintained during the initial response and recovery phase.



Environmental Exposures

Environmental exposures relate to the overall environmental health of the community and can be linked to different elements. Environmental exposures occur when people, animals and the physical environment (e.g., water, land, air) come into contact with substances that may be hazardous. Hazardous substances are natural and man-made toxins that have the potential to be very harmful to human health. A community that works to reduce these hazardous substances will help to reduce their harmful effects to all residents.

GOALS

- Improve water quality;
- Reduce environmental hazards;
- Increase clean and smoke-free air;
- Identify brownfields for redevelopment and when appropriate remediate to eliminate potential threats to health;

- Encourage the use of green infrastructure (e.g., protected open space, stream buffers) and promote the use of vegetation to “green” the community; and
- Increase healthy soil and sustainable practices.

STRATEGIES

- Utilize stormwater strategies or design standards to address stormwater runoff from features in the built environment for existing or future development;
- Maintain proper sewer and/or septic systems to achieve healthy treatment of wastewater;
- Protect ground, surface and drinking water;
- Ensure safe and sanitary housing by identifying and preventing pests, mold and extreme temperatures;
- Consider potential environmental hazards to health (e.g., nearby highways, presence of heavy metals, pesticides) for new housing and business developments;
- Evaluate local sources of air pollution;
- Minimize exposure to particulate matter (e.g., utilize High Efficiency Particle Arrestor [HEPA] filters or other air filtration devices when building) for existing and/or future sensitive land uses (e.g., schools, day care facilities, playgrounds, senior centers, hospitals);
- Promote tobacco-free environments in indoor and outdoor public places;
- Consider allowing neighborhood commercial and/or mixed-use development to reduce automobile dependency and decrease air pollution;
- Address job-housing imbalances to reduce excessive commuting by motorized means;
- Utilize fuel-efficient, low-emission vehicles where appropriate for local government motor fleet to reduce local air pollution;
- Support increased access to public transportation, to decrease automobile dependency and decrease air pollution, for example, establishing/extending transit networks, providing more service on existing routes and meeting current ADA Standards;
- Identify brownfield locations for infill or other new redevelopment if cleaned up;
- Encourage recycling, reusing and repurposing programs for healthy homes and communities;
- Consider increasing tree canopy and other vegetation (green infrastructure) to purify the air, filter stormwater, mitigate flooding, and reduce heat island effects; and
- Identify areas with noise pollution, light pollution and/or vibration (i.e., areas close to industries in which the ground can vibrate, such as quarries) and consider addressing by using techniques such as train quiet zones, dark skies ordinances, etc.





Health, Human, and Public Services

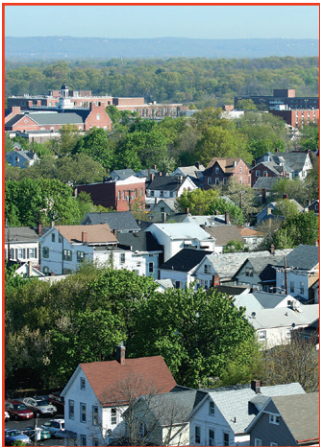
Health, human, and public services refers to a variety of services to meet the basic health and wellbeing needs of community residents. These services are especially important for those who are least able to help themselves, for example the older adult population¹³ and persons with disabilities. A community that provides essential human services, especially for those who are least able to help themselves, addresses the health needs of all its residents.

GOALS

- Include populations needing special considerations, particularly regarding mobility and health care, when planning for the future; and
- Increase access to health and human services.

STRATEGIES

- Support Visitable or Universal Design homes for safe aging-in-place and ensure successful implementation of home-based programs (e.g., Meals on Wheels, home healthcare, hospice-at-home, physical therapy, older adult transportation);
- Facilitate access to clinical services, health care facilities and human/social services;
- Facilitate access to child care services and adult care services; and
- Facilitate or enhance local transit service that connects residents of all abilities to health and human services, especially in underserved neighborhoods.



Social Cohesion

Social cohesion is often defined in terms of “social capital”—the processes between people that establish networks, norms, and social trust and facilitate coordination and cooperation for mutual benefit.⁵ Social cohesion improves health outcomes. A community that creates a built environment that is responsive to the needs of all residents, for example, quality housing, green and open space, public safety/security and noise reduction, can help improve the social ties and mental health of the community.

GOALS

- Improve safety and security;
- Improve housing and housing quality;
- Improve social cohesion and/or mental health; and
- Increase green or open space.

STRATEGIES

- Call for future development of, or refer to already established design guidelines or land use features to increase safety;
- Incorporate Crime Prevention Through Environmental Design (CPTED) principles to create a sense of safety;

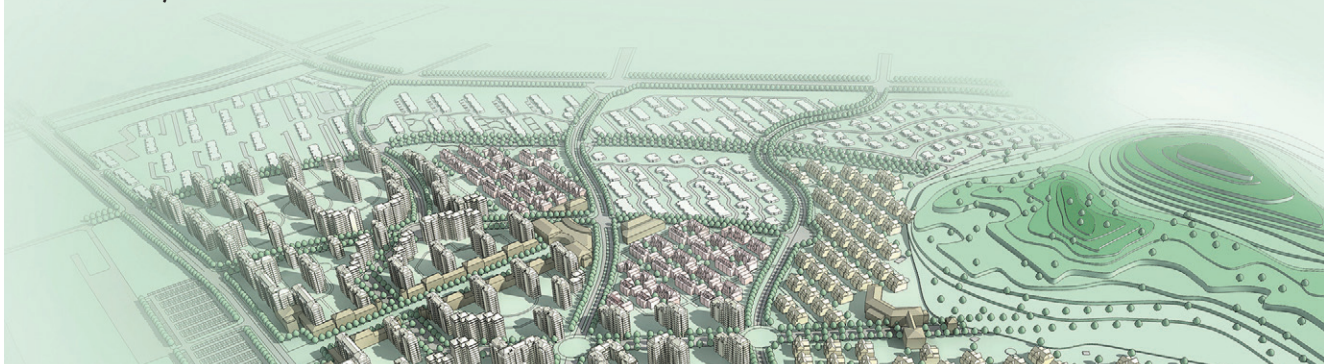
- Orient buildings to face the street or include windows that face the street (“natural surveillance”);
- Develop housing with Universal Design allowing people to age in place, and allow for affordable housing for older adults as they downsize from single family homes to various types of assisted living;
- Identify a need to test for and remove lead paint or other building contaminants that create serious health problems;
- Incorporate a variety of housing types and costs in order to eliminate residential segregation and concentrations of poverty, for example, supporting multi-generational housing options;
- Promote Universal Design and Visitability into housing design;
- Buffer residences and sensitive land uses from loud noise sources;
- Promote and/or remove obstacles to cohousing or other nontraditional housing types, for example, Naturally Occurring Retirement Communities can positively impact social cohesion and mental health for the older adult population;
- Link existing or future housing development with employment opportunities, human/social services and public transportation;
- Address proximity of certain land uses to schools; and
- Create, preserve and maintain open space near development to increase the number of restorative spaces for mental health (and environmental) benefits.



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Conclusion

A comprehensive plan provides a long range blueprint that influences the social, economic and environmental conditions of a community, all of which can have long-term effects on health outcomes. Incorporating health considerations into comprehensive plans through active living, healthy foods, emergency preparedness, environmental exposures, health, human, and public services and social cohesion can guide the development of communities that improve the health of North Carolina’s people, economy and environments.



Glossary

Accessible Design—the design of entities that satisfy specific legal mandates, guidelines or code requirements with the intent of providing accessibility to the entities for individuals with disabilities.¹⁴ Typically extends to the non-residential built environment such as commercial or public buildings, parks, sidewalks and also applies to specific dwellings designed for living by persons primarily with mobility impairments.

Active Living Community—a community designed to provide opportunities for people of all ages and abilities to incorporate physical activity into their daily routines.¹⁵

Active Transportation—physical activity that is done primarily for the purpose of moving from one destination to another, usually walking or bicycling.⁵

Americans with Disabilities Act (ADA)—a federal law that protects the civil rights of and ensures access for people with a wide range of disabilities, including physical and mental conditions affecting mobility, stamina, sight, hearing, speech, emotional status and learning ability.⁵

Brownfield—abandoned, idled or underused industrial site where expansion or redevelopment is complicated by real or perceived environmental contamination.⁵

Built Environment—settings designed, created, modified and maintained by human efforts, such as homes, schools, workplaces, neighborhoods, parks, roadways and transit systems.⁵

Chronic Diseases—diseases of long duration and generally slow progression. Chronic diseases, such as heart disease, stroke, cancer, chronic respiratory diseases and diabetes, are by far the leading cause of mortality in the world.¹⁶

Community Design—the form and character of the built environment that includes groupings of buildings, public spaces, neighborhoods, streetscapes and public improvements within a defined area.⁴

Community Food Assessment—an approach that engages the entire community in discovering who has access to what kind of food and through

what means, resulting in an action plan to develop a local, healthy community-based food system.¹⁷

Complete Streets—streets designed and operated so that all users, including, pedestrians, bicyclists, motorists and transit riders of all ages and abilities, can safely move along and across the streets.⁵

Comprehensive Plan—an official document adopted by a local government that serves as a guide for making land-use changes, preparing capital improvement programs, and determining the rate, timing and location of future growth.⁵

Connectivity—the directness or ease of travel on sidewalks, paths and streets between two points: an essential component of walkability.⁵

Crime Prevention Through Environmental Design (CPTED)—a multidisciplinary approach to preventing crime that focuses on deterring criminal behavior through environmental design, including access control, natural surveillance and territoriality.⁵

Density Bonus—an incentive-based tool that permits developers to increase the maximum allowable development on a property in exchange for helping the community to achieve public policy goals such as affordable housing.⁵

Extraterritorial Jurisdiction—the legal ability of a government to exercise authority beyond its normal boundaries.¹⁸

Food Deserts—a census tract with a substantial share of residents who live in low-income areas that have low levels of access to a grocery store or healthy, affordable food retail outlet. Census tracts qualify as food deserts if they meet low-income and low-access thresholds: (1) they qualify as “low-income communities,” based on having: a poverty rate of 20 percent or greater, or a median family income at or below 80 percent of the area median family income; and (2) they qualify as “low-access communities,” based on the determination that at least 500 persons and/or at least 33 percent of the census tract’s population live more than one mile from a supermarket or large grocery store (10 miles, in the case of non-metropolitan census tracts).¹⁹

Fast-Track Permitting—a process in which certain projects (e.g., projects which incorporate health considerations) can be expedited through the permitting process within an agency of government. The process generally saves time for developers

when compared to conventional permitting as the administrative and technical review procedures for eligible projects are expedited, and is therefore a way for governments to incentivize certain types of development.

Green Infrastructure—the interconnected network of open spaces and natural areas, such as greenways, wetlands, parks, forest preserves and native plant vegetation that naturally manages stormwater, reduces flooding risk and improves water quality.²⁰

Health Equity—the absence of differences in health that are not only unnecessary and avoidable, but are considered unfair or unjust. Health equity does not imply that everyone should have identical health outcomes, but it does imply that all population groups should have equal opportunities for health and therefore that there should not be systematic differences in health status between groups.

Infill Development—building in existing developed areas on vacant lots and underutilized parcels, thereby increasing density.⁵

Joint Use Agreements—formal agreements between two separate government entities—often a school and a city or county—setting forth the terms and conditions for shared use of public property or facilities.²²

Mixed-Use Development—a relatively large-scale real estate project characterized by (1) three or more significant revenue-producing uses, (2) significant functional and physical integration of project components, and (3) development in conformance with a coherent plan.⁵

Naturally Occurring Retirement

Community—a community that was not originally built for seniors, but that now is home to a significant proportion of older residents.²³

North Carolina Food and Nutrition Services Program (also known as Supplemental Nutrition Assistance Program)—a federal food assistance program that helps low-income families.²⁴

Pedestrian Overlay Zones—a zone/district designed to preserve and encourage the pedestrian character of commercial areas and to promote street life and activity by regulating building orientation and design and accessory parking facilities, and by

prohibiting certain high impact and automobile-oriented uses.²⁵

Safe Routes to School—a national and international movement to create safe, convenient and fun opportunities for children to bicycle and walk to and from schools.²⁶

Social Capital—the processes between people that establish networks, norms, and social trust and facilitate coordination and cooperation for mutual benefit.⁵

Underserved Populations—individuals who do not have adequate access to health care services. They share one or more of these characteristics: they may be poor; uninsured; have limited English language proficiency and/or lack familiarity with the health care delivery system; or live in locations where providers are not readily available to meet their needs.²⁷

Universal Design—design of products and environments to be usable by all people without the need for adaptation or specialized design.⁵

Visitability—is a movement to change home construction practices so that virtually all new homes—not merely those custom-built for occupants who currently have disabilities—offer specific features making the home easier for mobility-impaired people to live in and visit. Visitability Features include at least one zero-step entrance approached by an accessible route on a firm surface, proceeding from a driveway or public sidewalk; wide passage doors; and at least a half bath/powder room on the main floor.²⁸

Vulnerable Populations—populations who have systematically experienced greater obstacles to health based on their racial or ethnic group; religion; socioeconomic status; gender; age; mental health; cognitive, sensory, or physical disability; sexual orientation or gender identity; geographic location; or other characteristics historically linked to discrimination or exclusion.²⁹

Walkability—a feature of neighborhoods where it is convenient to walk from homes to common destinations like shops, services and employment; areas with greater walkability have mixed land use, connected streets, sidewalks that are in good condition, features that protect pedestrians from traffic and pleasant scenery.⁵

Resources

This section includes North Carolina specific and national resources for planning for health.

American Planning Association (APA)

Planning and Community Health Research Center
www.planning.org/nationalcenters/health

Center for Inclusive Design and Environmental Access

<http://idea.ap.buffalo.edu>

ChangeLab Solutions

Healthy Planning Program
<http://changelabsolutions.org/healthy-planning>

International City/County Management Association

Putting Smart Growth to Work in Rural Communities
http://icma.org/en/icma/knowledge_network/documents/kn/Document/301483/Putting_Smart_Growth_to_Work_in_Rural_Communities

Leadership for Healthy Communities

Action Strategies for Healthy Communities: Action Strategies Toolkit
www.leadershipforhealthycommunities.org/images/stories/toolkit/lhc_action_strategies_toolkit_0900504final.pdf

National Center for Safe Routes to School

www.saferoutesinfo.org

North Carolina Department of Commerce

Community Development: Division of Community Assistance
<http://www.nccommerce.com/cd>

North Carolina Division of Public Health Community Health Assessment

<http://publichealth.nc.gov/lhd/cha>

County Health Data Book

www.schs.state.nc.us/SCHS/data/databook

Local Government Smoke-Free Implementation Toolkit

<http://tobaccopreventionandcontrol.ncdhhs.gov/lgtoolkit/>

State Center for Health Statistics

www.schs.state.nc.us/SCHS

North Carolina Department of Transportation

WalkBikeNC (North Carolina Statewide Pedestrian and Bicycle Plan)
www.ncdot.gov/bikeped

North Carolina State University: College of Design

The Center for Universal Design
www.ncsu.edu/ncsu/design/cud

United States Centers for Disease Control and Prevention (CDC)

Designing and Building Healthy Places
www.cdc.gov/healthyplaces

Healthy Homes

www.cdc.gov/healthyhomes

United States Department of Justice (USDOJ)

Information and Technical Assistance on the Americans with Disabilities Act
www.ada.gov

United States Environmental Protection Agency (EPA)

Essential Smart Growth Fixes for Rural Planning, Zoning, and Development Codes
www.epa.gov/smartgrowth/pdf/rural_essential_fixes_508_030612.pdf

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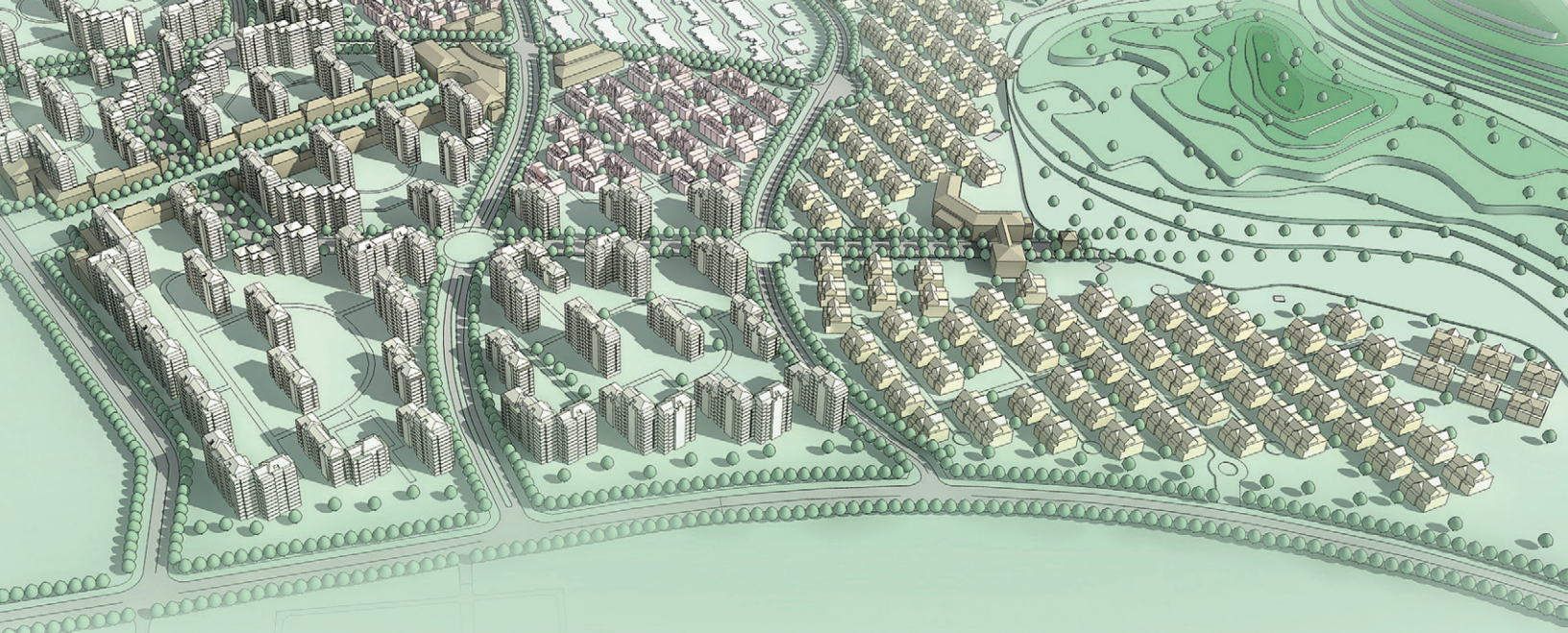


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