Principles for Incorporating Health into Comprehensive Plans:

Delaware Plan4Health

Sara Ivey¹ & David L. Edgell, ACIP²

- 1. Urban Planner & Public Health Professional; Associate, Planning4Health Solutions; Institute for People, Place, and Possibility
- 2. Principal Planner, Delaware Office of State Planning Coordination

Comprehensive Plans as Tools for Public Health Promotion

Comprehensive plans convey a local government's strategic vision for its future. Through a concert of policies, statements, and goals, comprehensive plans guide the direction of future development.

Comprehensive plans serve several purposes. They are used to craft a jurisdiction's land development codes, and they provide a framework for development and annexation. Comprehensive plans are also unified advisory documents for municipal councils and planning commissions on land use and growth issues, and they are resources for community members and organizations, businesses, and government officials.

The process of creating a comprehensive plan brings the public together with elected and appointed leaders to craft a vision for the future of the community. Municipal planning staff or planning consultants usually guide a community through the planning process. It is common practice to start with an extensive public outreach effort that may include surveys, public workshops, listening sessions, and other strategies to involve community members. Information gathered through this process is used by planners, and other technical staff or consultants to develop a written plan that reflects a community's aspirations for the future, and charts a path forward. The draft plan is presented to the public for review and comment at workshops and hearings before being adopted. An actively engaged public is crucial to the planning process. Their ideas, concerns and issues can and should guide the planning process.

In Delaware, comprehensive plans are required of all incorporated municipalities, and have the force of law: development must be consistent with their plans. As defined by the Delaware Code, comprehensive plans must address many components of community design, infrastructure and growth that impact livability and health of a community- including land use, transportation, economic development, housing, open space, parks and recreation, environmental protection, water and wastewater infrastructure, and community facilities. 1

Because comprehensive plans touch so many aspects of a community they offer a unique opportunity to holistically promote health. Specifically, comprehensive plans can offer a vision for a healthy community, and propose modifications to built and social environments in support of that vision. They should be viewed as tools to address local health challenges and achieve community health goals.

Despite their potential to benefit public health, comprehensive plans often lack a health focus, and the strategic components to promote health. A 2010 survey conducted by the American Planning Association (APA) found that only about 27% of comprehensive plans addressed health.² The survey identified funding for comprehensive planning at local and state government

levels as barriers to incorporate health-related content.² Additional barriers suggested by survey findings include little involvement by local health departments and lack of public health expertise among planning officials.² Delaware Plan4Health emerged to improve coordination between planning and public health sectors, and mainstream health-promoting content in comprehensive planning efforts.

Delaware Plan4Health

In 2016 the Delaware Chapter of the APA was awarded a Plan4Health grant to combat two determinants of chronic disease—lack of physical activity and access to nutritious foods. Implemented in partnership between the APA and the American Public Health Association with support from the Centers for Disease Control and Prevention, Plan4Health sought to convene stakeholders in cross-sector coalitions focused on improving health equity. Delaware Plan4Health brought together the Delaware Chapter of the APA, the Delaware Public Health Association, and the Delaware Coalition for Healthy Eating and Active Living to leverage the City of Dover and Kent County's future planning efforts for health. Using feedback from the community, the Coalition developed land use, design and policy guidance to help improve access to healthy foods and encourage active living.³

Delaware Plan4Health used several tools to understand community health issues and how they may be addressed through planning interventions. The project surveyed residents about physical activity and eating patterns, and used geospatial analysis to map priority areas to improve access to healthy food retailers, park facilities and active transportation networks. Survey data and maps were reviewed by the public during the project's community design charrettes. That information was used to identify priorities and develop recommendations for planning interventions to improve community health. Delaware Plan4Health also relied on an in-depth review of the City of Dover and Kent County's comprehensive plans to measure how well the plans integrate key modern public health concepts, and identify where opportunities to further benefit public health exist. From these analyses, guidance was developed to aid Kent County⁴ and the City of Dover⁵ in incorporating health-promoting content into their comprehensive plan updates, scheduled for 2018 and 2019, respectively. That guidance is summarized by the following principles.

Seven Principles for Incorporating Health into Comprehensive Plans

The following principles were developed as a framework for incorporating health concepts into Dover and Kent County's comprehensive plan updates – intended to guide community conversations, visioning, plan preparation and implementation. These may be useful to other local governments as they prepare comprehensive plans.

Principle 1 – Health Equity: Let health equity guide the planning process

Principle 1 asserts health equity as a goal, and guiding focus of comprehensive plans. Implicit to health equity is the recognition that barriers prevent individuals and communities from accessing what they need to achieve their highest levels of health. These inequities can result in health disparities when health status differs between people based on social or demographic factors like race, ethnicity, geographic location, age, gender or ability. Achieving health equity requires improving the conditions where people live, work and play, and working across sectors on factors that influence health like employment, housing, food access and transportation. Local governments can use demographic, economic and health assessments to target strategies to

communities of greatest need, and emphasize health equity through a plan's vision, goals and policies.

Health equity is useful as a guiding principle for comprehensive plans given they touch on many factors that influence health. Applying a health equity lens to the work of comprehensive planning helps illuminate where inequities and health disparities exist and prioritize actions to address them.

Delaware Plan4Health relied on health equity - and health data - to guide its work. The project used local health and demographic data to map access to healthy foods, parks and open space, sidewalks and safe bike lanes, and to identify the location of priority communities in Kent County. Maps and data from a countywide survey were used to guide Delaware Plan4Health's more detailed planning efforts, including the location and content of its planning charrettes.

Principle 2 – Transportation: Promote all transportation modes and prioritize mobility

Transportation elements of comprehensive plans can promote physical activity by emphasizing active transportation, and they can advance health equity by developing transportation systems that serve everyone regardless of age, ability or income. Principle 2 underscores the need to promote active transportation modes, and plan for a complete transportation systems that serves all.

Active transportation refers to walking, bicycling and transit use - transportation modes that require physical activity. Good access to active transportation facilities enables residents to integrate physical activity into their daily lives. Increased levels of physical activity that result from active transportation can help reduce/prevent overweight/ obesity, Type II diabetes and other chronic diseases, and minimize healthcare costs.

Comprehensive plans can promote active transportation by advocating for: pedestrian and bicycle friendly places - through traffic calming and placemaking; and facilities that encourage walking, biking and transit use - like street furniture and improved crossings. Well planned transportation systems emphasize function and mobility, connecting neighborhoods, schools, neighborhood/ commercial centers, healthcare providers and other services with all transportation modes including transit, sidewalks and bike paths.

Comprehensive plans can also promote active transportation through land use policies that encourage mixed-use, compact development, and focus on complete communities. Such development builds more livable, active communities where walking, biking and transit use are convenient and attractive options. Policies that support compact develop may also help reduce air pollution by limiting vehicle emissions.

Principle 3 – Parks and Recreation: Let community health needs guide parks and recreation planning

Parks and recreation facilities are important resources that confer certain physical and mental health benefits, and enhance wellbeing and quality of life. Parks provide opportunities for a spectrum of structured and unstructured physical activities for people of all ages and abilities, including trails; playground equipment; and sports facilities (e.g. fields, courts, pools). They are also natural gathering places that promote community connectivity and cohesion.

Besides promoting active recreation (physical activities like sports, kayaking and swimming done for recreational purposes) parks are important in terms of providing open space and access to nature. Open space helps mitigate air and water pollution, and reduce heat island effects which can impact public health by exposing populations to hazardous pollutants, and extreme heat events, respectively. Further, accessing nature can improve physical and mental health by: providing opportunities for physical activity (e.g. walking, biking, sports) and community gatherings; reducing stress and depression; and improving cognition in adults and behavioral issues in children.

Comprehensive plans can maximize the potential public health benefit of parks, open space and recreational facilities by ensuring local access, and through targeted programming to promote use. Principle 3 establishes community health needs as a compass for parks and recreation planning. Using information generated through assessment of community health needs and existing park resources, local governments can identify the communities or neighborhoods of greatest need. Need should be assessed both in terms of access to park facilities, and programming of recreational activities.

Besides parks, comprehensive plans can encourage developing and improving trails and access to natural features, including wetlands, floodplains and steep- slopes as practicable – and ensuring these features are preserved.

Principle 4 – Community Facilities: Provide facilities that help keep people healthy

Community facilities are public and private sector facilities that provide services to residents. Such facilities include libraries, schools, emergency services, health care facilities, social service agencies, parks and recreational facilities, and commercial services such as pharmacies. Recognizing the myriad health benefits such facilities can provide, Principle 4 encourages using community facilities as opportunities to address local health challenges.

Comprehensive plans often contain an inventory and map of community facilities, and evaluate how well these facilities serve neighborhoods and population centers. Most plans focus on the facilities and services that are provided by the local government authoring the plan; however, local governments should look at facilities and services provided by community based organizations, faith-based organizations, private entities and other community actors. With health equity as a guiding principle, comprehensive plans can assess how well residents of all ages and abilities are served by the available public and private facilities and services, and where opportunities exist to leverage these facilities for health. Such opportunities to promote health through comprehensive planning may include: developing shared use agreements to broaden community access to existing facilities; and leveraging capital projects for health.

As an example, imagine a comprehensive planning process identified a shortage of healthcare providers. In support of the plan's vision for a healthy community where residents have access to the healthcare they need, the plan set forth a goal to attract more providers.

Implementation of that goal may involve evaluating the availability of land use, and zoning regulations conducive to constructing healthcare facilities. Local elected leaders could also work with realtor's, healthcare providers, and chambers of commerce to enhance market conditions to attract providers to the community.

Principle 5 – Food Systems: Promote the production, distribution and consumption of local, healthy foods

Poor access to healthy foods and nutrition are associated with nutritional deficiencies, food insecurity, overweight and obesity, chronic diseases and other adverse health impacts. Access to healthy, nutritious foods differs across communities- by geography, income, race and age, resulting in health disparities. Comprehensive plans can help address food access issues through interventions in the food system which may be defined as the network of activities in the production, distribution and consumption of food. Food system interventions may include: promoting rural and urban agriculture; expanding food retail opportunities; and supporting a local food distribution hub. Principle 5 promotes food systems work.

Comprehensive plans often consider agricultural zoning as part of a comprehensive plan use strategy. Municipal plans may designate land for agricultural use temporarily until development pressures precipitate a change to urban or suburban use. In contrast, counties with large rural areas may consider agriculture a long-term, viable land use and take steps to protect agricultural uses from urban sprawl or encroachment.

Despite their promise to improve healthy food access, comprehensive plans rarely consider food systems in their entirety. Plans can better promote health by articulating a strategic vision for an integrated food system which emphasizes local food production, distribution and consumption. They can promote local food production through strategies that protect agricultural land uses like agricultural zoning and transfer of development rights programs, and by supporting urban agriculture and community gardening projects.

Local food hubs can facilitate the distribution of locally- produced foods, and programs like corner store and produce cart programs can expand access to healthy food where most needed. Food systems interventions can also help spur economic development.

Principle 6 – Economic Development: Emphasize strategies to alleviate poverty and improve employment opportunities for all

Principle 6 recognizes income and employment as important determinants of health, and emphasizes equity as a priority of economic development efforts. Income is a factor in access to healthy foods, medical services, educational opportunities and other resources for health. Quality, stable employment helps facilitate income and financial security, and the health benefits they provide. In support of advancing health equity, comprehensive plans should focus on creating and enhancing job opportunities for those that face economic injustices and barriers to employment, including people with low incomes, communities of color, young adults, people with disabilities, and ex-offenders.

Economic development components figure prominently in most comprehensive plans, typically articulating a host of strategies to encourage local economic growth. Economic development is defined in Dover's current comprehensive as "the planning, design and implementation of community efforts which influence where wealth is created in order to strengthen an area's economy by creating and retaining jobs and expanding the tax base." Economic development components traditionally address: major industries and employers; land use and zoning to accommodate employment generating businesses; and strategies and policies to promote retention of existing businesses and attract new ones. Principle 6 aims to help comprehensive

plans leverage their economic development efforts for poverty alleviation and inclusive workforce development.

Economic development provides a compelling frame through which to advance health equity by targeting specific sectors that influence health. Such sectors include food production, distribution and retail; tourism and active recreation; health and dental care services; and housing and real estate development. There is untapped potential in each of these sectors to develop and align strategies that respond to community health needs, advance equity, and leverage a community's assets and opportunities. Examples of such strategies may include: assisting local businesses with healthy food procurement and marketing; partnering with community based organizations to create new opportunities for people who experience barriers to employment (like a produce cart program); contracting with women and minority-owned firms to provide services to the local government; and offering incentives to develop low income and workforce housing.

Principle 7 – Land Use: Create compact, walkable, mixed- use, vibrant communities

Land use is at the heart of every comprehensive plan. A local government's land use strategy prescribes allowable types of uses and buildings, and where they will be located. In Delaware, local government zoning ordinances and land use regulations must be based on future land use plans and other elements of the adopted comprehensive plan. Comprehensive plans' land use elements differ in their specificity. They range from quite general – designating uses for large swaths of land - to rather specific in terms of urban design standards.

Land use strategies determine patterns of development, urban form, and urban design which have major implications for the health of our communities. For the past half century, suburban subdivision development dominated the comprehensive planning landscape. Such development can contribute to health inequities. New subdivisions are often sited away from existing schools, healthcare facilities and commercial centers, so residents may lack good access to these facilities and services.

Typical suburban subdivision design emphasizes cul-de-sacs that restrict connectivity. Subdivision development often occurs at the edges of urban areas which makes car ownership a necessity, and can undermine efforts to improve transit networks and increase ridership. These trends increase vehicle miles traveled and contributes to more air pollution, a public health hazard. Moreover, suburban development can be a symptom of "white flight"/flight of the middle class which has implications for school funding, urban disinvestment and other social ills. Compact, mixed-use development promotes complete communities, and access to important resources for health, like grocery stores, healthcare facilities and schools; and walkable, well-connected neighborhoods. Principle 7 encourages such development that supports community health and cohesion.

Comprehensive plans can promote complete, healthy community design through land use in several key ways:

- 1. Encouraging a mix of uses;
- 2. Designing a mobility- centered transportation system;
- 3. Supporting a housing strategy that emphasizes affordability, accessibility and a mix of housing types;

- 4. Promoting urban agriculture and community gardens in neighborhoods; and
- 5. Focusing on "placemaking," that is designing and building distinct places that reflect local character where people want to live, work and play.

Integrating Health into Dover and Kent County's Comprehensive Plan Updates

The following are specific recommendations developed through Delaware Plan4Health that illustrate how the Principles for Incorporating Health into Comprehensive Plans informed our work.

Felton East

Kent County's current comprehensive plan identifies a "growth zone" wherein new development occurs. Sewer infrastructure and zoning regulations inside the growth zone encourage housing and other land uses. New single use residential subdivisions of single family detached homes are the by-right, or de- facto, use within the zone. Housing types other than single family detached, and the mixing of land uses are either prohibited or subject to extensive special approval processes. As discussed in Principle 7, typical suburban subdivision development patterns do not build complete, healthy communities.

Delaware Plan4Health envisions a future in which complete, healthy communities are standard in Kent County. As part of Kent County's design charrette, participants designed a model suburban community, called "Felton East" (see Figure 1). The targeted parcel is currently active farmland inside of the growth zone that is slated for future development by Kent County's current comprehensive plan. In lieu of the standard single family subdivision, our Felton East Conceptual Plan includes a number of health-promoting features (see the graphic above). We recommended that Kent County specifically include Felton East in their comprehensive plan update, and generally adopt design standards that mainstream health-promoting features.

Figure 1. Felton East



FELTON EAST- Bird's Eye Perspective
Kent County, DE December 31, 2016







Saulsbury Park

The City of Dover's design charrette focused on Dover's downtown. Downtown Dover follows an urban development pattern with a traditional street grid, older buildings, a diverse mixture of uses, and sidewalks on almost every street. Downtown residents are predominantly from communities of color, and lower income. Despite being urban and mixed use, we found that few stores in downtown Dover sell healthy foods, and there is only one park within easy walking distance of downtown neighborhoods.

Charrette participants identified a creative opportunity to help improve access to healthy foods, and parks and recreation in downtown Dover with their conceptual plan for Saulsbury Park (see Figure 2). Downtown's sole full-service supermarket is separated from adjacent residential neighborhoods by a vacant field and fence. While sidewalks connect to the supermarket, most able residents cut through a hole in the fence and walk across the field – which is actually an under-developed city park. The charrette re-imagined the park as a fully developed facility with a multi-modal trail connecting residential with commercial areas.

Figure 2. Saulsbury Park



SAULSBURY PARK- Bird's Eye Perspective Dover, DE December 31, 2016

Delaware PLAN4Health

Planning 4 Health Solutions

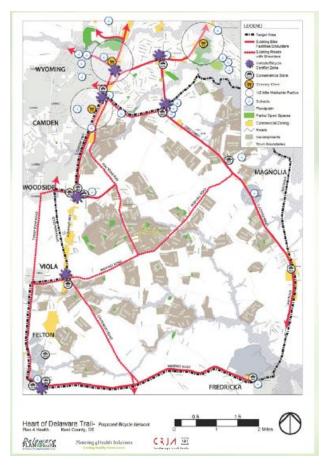


Heart of Delaware Trail

Our assessments of demographic, health and survey data indicate that some residents of Kent County's growth zone have poorer indicators of health than elsewhere in the county. About 18,000 people reside in the area between the small towns of Magnolia, Frederica, Felton and Camden; yet, the area has no services or amenities – no parks, schools, supermarkets, shopping or healthcare services. While nearby towns offer such services and amenities, most residents require an automobile to access them.

The Delaware Plan4Health team discussed transportation options and opportunities for the growth zone with community members. The growth zone encompasses a beautiful, pastoral part of Kent County containing homes interspersed with broad open spaces and natural areas. We noticed during a windshield tour of the area that most main roads have wide shoulders that could be retrofitted to include bicycle lanes at minimal expense. A plan for an interconnected network of bike lanes along major roads emerged from the charrette that became known as the "Heart of Delaware Trail" (see Figure 3).

Figure 3. The Heart of Delaware Trail



The Heart of Delaware Trail aims to improve transportation connectivity, and enhance active transportation and recreation options for area residents and visitors. The trail is envisioned as a link between residential subdivisions and nearby schools, commercial areas and other destinations, and a resource that increases physical activity among residents. It is also envisioned as an economic development tool that attracts bicycle tourists to countryside attractions.

Shared Use Policy

Our analysis of park access revealed that many neighborhoods in Dover and Kent County lack park and recreation facilities. We explored options to address park access as part of our public and stakeholder-engaged processes. We identified opportunity to broaden community access to open space and recreational facilities by collaborating with local schools to put in place shared use policies, and developed a toolkit develop and implement shared use policies.

Shared use policies (also called "joint use" or "community use" policies) refer to formalized processes that enable governmental entities, or private or nonprofit organizations, to open or broaden access to their facilities for community use. While shared use may apply to a variety of resources or facilities, policy guidance developed through Delaware Plan4Health emphasized the shared use of recreational facilities for physical activity such as open space, playgrounds, fields, courts, tracks and gymnasiums. Such recreational facilities, including those at schools, are often inaccessible to the public due to maintenance, security, and liability concerns. In many low-income, low-resourced communities, recreational facilities at schools may be the only safe and affordable facilities of their kind - making their access an important resource for health.

By improving access to existing facilities for physical activity shared use policies can help to improve health equity, and neighborhood livability. Opening or expanding use to recreational facilities introduces a new public health resource that may increase physical activity levels, thereby helping reduce or prevent overweight/obesity and chronic disease, particularly in low-income and low-resourced communities. New shared use policies often include public or private investment in facility improvements and maintenance. When channeled to local businesses and nonprofit organizations, those investments can stimulate local economic activity. Further, well-maintained and well- used facilities are associated with decreased crime, vandalism and violence on or near their premises. Such facilities are neighborhood assets and may catalyze other improvements that build vibrant neighborhoods.

Call to Action

Developing and implementing remedies to the public health challenges that face our communities requires working together, cooperative learning, tearing down silos, and leveraging our collective knowledge and assets for change. The Joint Call to Action to Promote Healthy Communities calls upon planners, architects, landscape architects, developers, engineers, and professionals from public health, parks and green building. Adopted in 2017, the Joint Call to Action recognizes that addressing our growing health challenges and inequities requires new partnerships and collaborations. The Joint Call to Action encourages members of signatory organizations to partner to make health a primary consideration in land use, design and development practice.

Many in Delaware are already engaged in work that promotes healthy communities, including local and statewide multi-sector collaboratives, planning initiatives, data projects and assessment of health impacts. And you can join them. Beyond existing forums, public health and healthcare sectors can collaborate with planning by setting up formal and informal communication channels to learn about each other's work, participate in each other's events and processes to advance their practices, and develop supportive relationships.

True engagement requires going beyond traditional public involvement strategies, like public hearings and comment periods, to collaborate with partners from the conception of a project, program or plan, through its implementation and beyond. While often complex and messy, partnerships are key to promoting healthy communities - because we all hold a piece of the puzzle.

References:

- 1. Code, D. (1953). Title 22: Municpalities; Chapter 7: Planning Commission. Retrieved from: https://delcode.delaware.gov/title22/c007/
- 2. American Planning Association. (2011). Comprehensive Planning for Public Health. Retrieved from: https://planning-org-uploaded-media.s3.amazonaws.com/legacy_resources/research/publichealth/pdf/surveyreport.pdf
- 3. Delaware Plan4Health. (2015). Retrieved from: http://deplan4health.org/wordpress/
- 4. Planning4Health Solutions. (2017, Oct). Guidance for incorporating health into Kent County's Comprehensive Plan, October 2017. Retrieved from:

DOI: 10.32481/djph.2018.03.009

http://deplan4health.org/wordpress/wp-content/uploads/2017/11/FINAL-Kent-County-Guidance-Document-w-App.pdf

- 5. Planning4Health Solutions. (2017, Nov). Guidance for incorporating health into the City of Dover's Comprehensive Plan. Retrieved from: http://deplan4health.org/wordpress/wp-content/uploads/2018/03/Final DoverGuidanceDocument wApp.pdf
- 6. American Public Health Association. (2017). Health equity. Retrieved from: https://www.apha.org/topics-and-issues/health-equity
- 7. City of Dover Department of Planning. (2008). Comprehensive Plan. Pg. 113. Retrieved from: https://evogov.s3.amazonaws.com/media/27/media/13261.pdf

Copyright (c) 2018 Delaware Academy of Medicine / Delaware Public Health Association.

This is an Open Access article distributed under the terms of the Creative Commons Attribution Non-Commercial License (https://creativecommons.org/licenses/by-nc-nd/4.0/) which permits unrestricted non-commercial use, distribution, and reproduction in any medium, provided the original work is properly cited.