HEALTHY PLANNING

An evaluation of comprehensive and sustainability plans addressing public health

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INTRODUCTION

Planning and Public Health

The birth of planning in the United States originated from a public health purpose. It was rooted in the need to reduce congestion, improve public health, and support social reform in housing and sanitation. Rapid urbanization of cities resulted in overcrowded housing, noxious industrial uses, human and animal waste, and outbreaks of infectious diseases. The planning and public health professions were joined by a shared focus on urban reform and a common goal to prevent outbreaks of infectious disease through infrastructure improvements, a highly successful way to improve population health. To assist in addressing the issues that resulted from rapid urbanization, local governments created a series of policies related to sanitation, zoning, housing, and transportation. These policies have had lasting impacts on the ways in which we develop the built environment.

Over time, however, the professions began to diverge. Rather than overtly addressing issues related to health and safety, planners' attention focused more on land use and transportation. In contrast, public health professionals took the lead on addressing health and safety concerns (ARHF 2006).

After the turn of the 20th century, American cities began to see the need for local development and growth plans. The first comprehensive plan, the Plan of Chicago, was completed in 1909. Since this time, the comprehensive plan has commonly served as the guiding document for decision making about the built and natural environments. It has the legal authority to act as the vehicle for guiding community development, the scope to cover the necessary functions and facilities, and the history of practice to inspire public acceptance of its policies. It has the advantage of being able to integrate long- and short-range perspectives and to coordinate other policies, plans, and programs into a single accessible document (Godschalk and Anderson 2012).

The issues facing communities continue to change and evolve, becoming more and more complex. In addition to the traditional issues related to housing, transportation, land use, and economic development, a series of new concerns have emerged. These include, but are not limited to, energy production and consumption, climate change, lifecycle costs of public investments, and community health. As planners try to address these emerging issues, they are discovering that traditional plans are ill-equipped to respond. As a result, there has been a shift in the profession toward the creation of sustaining places. Communities are beginning to incorporate principles of sustainability in their comprehensive plans or to augment their comprehensive plans with sustainability plans. Although it is a relatively new movement, planners are not taking this task lightly (Godschalk and Anderson 2012).

Today, as community health concerns increasingly center on chronic disease and safety, public health specialists and city planners realize they cannot afford to operate in isolation any longer. Decisions leaders have made regarding land use, community design, and transportation have affected local air quality, water quality and supply, traffic safety, physical activity, mental health, social interactions, and exposure to contaminated industrial sites (i.e., brownfields). These decisions are linked to some of the most intractable public health problems, including adult and childhood obesity, cancer, respiratory problems, inactivity, and environmental justice.

Role of the American Planning Association

As the premier nonprofit education and research education organization devoted to urban, suburban, regional, and rural planning, the American Planning Association (APA) reaches frontline professionals and key decision makers through serial publications, research monographs, online resources, and distance and face-to-face training. With more than 44,000 members and established productive relationships with numerous academic, nonprofit, and public institutions, APA is connected to the innovative thinking and practical realities of the planning profession. Within APA, the Planning and Community Health Research Center (PCH) is dedicated to helping planners, health professionals, and citizens create healthier communities and shape better places for future generations.

Working with an extensive network of practitioners, researchers, and partner institutions in the planning and health fields, the mission of PCH is to advance a program of research, outreach, education, and policy for integrating community health issues into local and regional planning practices. Improving the built environment in ways that promote active living, healthy eating, social and mental health, and safe environmental conditions, among others, benefits the health of an entire community. Planning is the first step toward reaching such benefits.

Given such a leading role in the field of planning, APA has taken responsibility to further the reunification of planning with public health. In addition to PCH, APA created a Sustaining Places Task Force in 2010. This task force identified eight best-practice principles for sustaining places, three of which directly relate to health: a Livable Built Environment, Interwoven Equity, and a Healthy Community. The Best Practice Principles for Sustaining Places outlines the ways in which these tenets can be upheld through the comprehensive planning process (Godschalk and Anderson 2012). It is APA's hope that such guidelines inform the making of plans moving forward, and that health and planning professionals continue to build collaborative relationships. As planners have a stronger understanding of their role in shaping public health outcomes—along with health officials, political leaders, nongovernmental organizations, as well as individuals—they can contribute to creating built environments that support healthy living throughout the life cycle.

PROJECT PURPOSE AND BACKGROUND

Purpose

Considering the impact of comprehensive planning, including the new generation of sustainability plans, on social, economic, and environmental conditions, there is a need to explore the ways in which jurisdictions include public health goals and objectives as part of the comprehensive planning process. The purpose of this study is to set a framework and identify tools and strategies for integrating public health-related goals and policies into the plan-making process. To date, some research has been done that evaluates the extent to which public health has been addressed in comprehensive plans (see Appendix 2; ChangeLab 2009), but there has been little work to assess if such policies were supported by implementation mechanisms, indicators or other benchmarks for success, time lines, or funding. In 2010, APA initiated a multiphase research study to identify local planning responses to important health issues and examine how comprehensive and sustainability plans can promote long-term community health. The specific purpose of the study is to set a framework to identify tools and strategies for integrating public health-related goals and policies into the plan-making process. This report will detail the results and analysis of an evaluation of 18 comprehensive and four sustainability plans from communities across the United States to assess the extent to which they included health goals, policies, and implementation mechanisms. It will also present examples of robust policies that promote public health.

Project Background

PCH is conducting a multiphase research study to identify, evaluate, and analyze the plan-making processes and health goals, objectives, and policies of local comprehensive and sustainability plans developed and adopted by communities across the United States.

In the first phase of the project, APA developed a national, web-based survey targeting planning directors and other planning department staff engaged in long-range planning at the local government level. Specific aims of the survey were to:

- Identify draft and adopted comprehensive and sustainability plans that explicitly include public health-related goals, objectives, and policies;
- Inventory the public health topics included in the plans;
- Identify the opportunities and barriers faced by each community in the development and adoption of each of these goals, objectives, or policies; and
- Assess the current state of planning for public health in local governments across the country.

In 2011, PCH published a report with results and analysis from the survey, entitled Comprehensive Planning for Public Health: Results of the Planning and Community Health Research Center Survey (Hodgson 2011). This report can be accessed and downloaded from APA's website: www.planning.org/research/publichealth.

Below is a brief summary of findings from a total of nearly 900 complete surveys received from local governments, large and small, across the United States:

- Approximately 27 percent of all respondents reported that their jurisdictions' officially adopted comprehensive plans explicitly address public health, while only three percent of all respondents reported that their jurisdictions' officially adopted sustainability plans explicitly address public health.
- The top 10 most-cited public health topics in the identified comprehensive plans were recreation, public safety, clean water, active transportation, clean air, emergency preparedness, active living, physical activity, environmental exposures, and aging.
- The top 10 most-cited public health topics in the identified sustainability plans were active transportation, clean air, clean water, climate change, active living, physical activity, recreation, environmental exposures, food access, and public safety.

- The plans that did address health varied in their incorporation of this topic: Some local governments created a stand-alone, voluntary health element in the comprehensive plan, while others incorporated health-related goals and policies into existing mandatory elements.

The survey results presented a broad picture of the current state of planning practice for integrating public health into comprehensive and sustainability plans, and laid the groundwork for further research on healthy plan making. The survey also helped to identify a pool of specific plans that feature health goals and policies for deeper analysis.

In the second and current phase, PCH evaluated a subset of plans identified through the survey process, in order to assess the extent to which they do, in fact, address public health. This report is the product of that work. Finally, in the third phase, PCH will undertake case study reviews of a handful of evaluated plans to learn more about the process and players involved in developing comprehensive plans that include public health components. More details on Phase 3 can be found in the Next Steps section at the end of this report.

METHODS

At the start of the project, PCH convened an academic advisory committee to guide the evaluation process. A representative group of experts in the fields of urban planning, land use, and public health policy were consulted and involved during each step of the evaluation. Please see Acknowledgments for names and affiliations.

Plan Selection

Results from the 2010 survey identified 890 plans as including the term "public health" somewhere within the plan. In addition to these plans, the Centers for Disease Control and Prevention offered a supplementary list of 45 jurisdictions that had produced plans that included goals related to public health. From this combined pool, PCH selected samples of both comprehensive and sustainability plans for evaluation.

Plans were automatically selected for evaluation if they contained a stand-alone health element and were officially adopted by the local government. Criteria used to select the remaining plans included:

1. Explicit reference to public health
2. Official adoption by city or county ordinance (not in "Draft" form)
3. Inclusion of 10 or more health related goals and policies as outlined in the survey (see Appendix 1)

From the set of plans that met the above criteria, the pool was further pared down based upon the following qualitative principles to ensure an equitable representation of:

- Geographic spread
- Urban, suburban, and rural contexts
- County as well as city plans

The final pool included 18 comprehensive plans and four sustainability plans chosen to represent different areas of the country; urban, suburban, and rural contexts; and counties as well as cities. Table 1 identifies the list of plans included in the evaluation.

Table 1. Plans evaluated by PCH for the Healthy Plan Evaluation project

	Jurisdiction	State	Year Adopted
Comprehensive Plans			
1	Alachua County*	FL	2011
2	Baltimore County*	MD	2010
3	Chino^*	CA	2010
4	District of Columbia	DC	2006
5	Dona Ana County	NM	2011
6	Dubuque^*	IA	2008
7	Easton	PA	1997
8	Fort Worth*	TX	2011
9	Kings County*	CA	2010
10	Niagara County^*	NY	2009

* contains a health element
^ among plans identified by CDC

Table 1. Plans evaluated by PCH for the Healthy Plan Evaluation project

	Jurisdiction	State	Year Adopted
Comprehensive Plans			
11	North Miami	FL	2007
12	Omaha	NE	1997
13	Oneida Nation*	WI	2008
14	Palm Beach County*	FL	2011
15	Raleigh	NC	2011
16	San Diego City	CA	2008
17	South Gate*	CA	2009
18	Trenton	NJ	2010
Sustainability			
19	San Francisco*	CA	1996
20	Grand Rapids	MI	2011
21	Philadelphia	PA	2009
22	Mansfield	CT	2006

* contains a health element
^ among plans identified by CDC

Construction of Evaluation Tool

To create a comprehensive evaluation tool for this project, PCH first consulted existing model checklists or standards of health to identify common elements and create an initial list of questions relating public health to planning. Additional questions were derived from current literature and the expert opinion of PCH staff and the Advisory Committee.

The final evaluation tool included 79 questions in the following seven categories—six related to public health, and one regarding the overall quality and structure of the plans themselves. The seven groups of topics and their subcategories are listed below:

ACTIVE LIVING	EMERGENCY PREPAREDNESS
General	Climate change
Active transport	Natural and human-caused disasters
Recreation	Infectious disease
Injury	
ENVIRONMENTAL EXPOSURES	**FOOD & NUTRITION**
General	Access to food and healthy food options
Air quality	Water
Water quality	Land use
Brownfields	

HEALTH & HUMAN SERVICES	SOCIAL COHESION & MENTAL HEALTH
General	General
Accessibility to health and human services	Housing quality
Aging	Green & open space
	Noise
	Public safety / security
BROAD ISSUES	
Substantive issues: vision statement, guiding principles, and background data	
Procedural issues	

All of the content questions in the evaluation tool are listed in the tables in the Results section of this report. The evaluation tool also included questions about implementation for each of the public health subcategories. These questions were:

- Are benchmarks/targets established to indicate success?
- Are there implementation mechanisms identified for this policy?
- Do the implementation mechanisms specifically address health?
- Are roles and responsibilities assigned to achieve this policy?
- Is there funding attached?
- Is there a time line identified for achieving this policy?
- Does the plan identify a monitoring system for tracking success?

Evaluation Procedure

Plans were evaluated based on the Edwards and Haines plan evaluation framework (Edwards and Haines 2007). Each plan was evaluated for:

- The presence or absence of a specified goal or policy;
- The specificity and action-orientation of policies; and
- The geographic and social comprehensiveness of each health-related goal.

Each question response was rated a 0, 1, or 2 based upon the presence of the information and its comprehensiveness or specificity/action orientation (0 if it was absent from the plan; 1 if it was present but limited in scope; 2 if it was present, comprehensive, and specific). A rating of 0 or 1 (absent or present) was also assigned to each response regarding implementation factors for each goal and policy.

Data Analysis

To ensure reliability of the content analysis and consistency in the interpretation of plan language and health concepts, each plan was assessed by two reviewers and then reviewed a third time by APA staff. To discover which goals and policies—and thus which topics and subtopics—received the greatest coverage and attention in this pool of plans, the data were compiled into one document for comparison.

RESULTS

The following figures reveal the extent to which the 22 plans listed above addressed the public health goals and policies listed in the survey questions. In each table, the questions which received the highest scores (i.e., the goals and policies addressed most often and with the greatest specificity and action-orientation in the plans) are listed first, down to those questions that received the lowest scores. For example, Table 1A shows that 15 plans included public health topics in their Guiding Principles comprehensively, two plans included them, though narrowly, and five plans did not discuss health in their Guiding Principles. By contrast, only four plans (three comprehensively, one narrowly) addressed chronic disease or health disparities in their Guiding Principles. Similarly, Table 1B shows that 16 plans met the standards for presenting information in a clear and accessible writing style, but only six plans (two comprehensively, four narrowly) mapped or identified locations of vulnerable populations.

Broad Public Health and Planning Issues

Figure 1A. Substantive topics: Vision Statement, Guiding Principle, and Background data

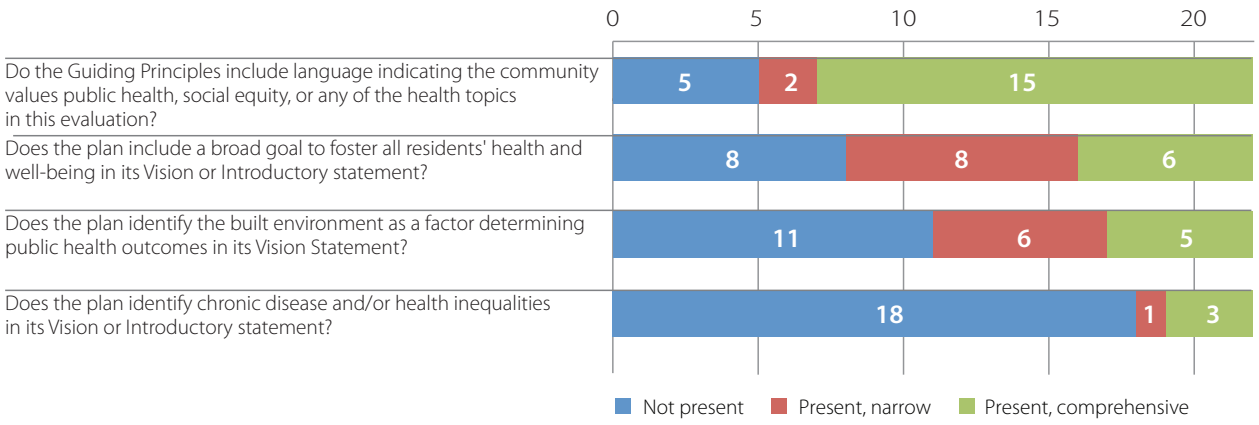
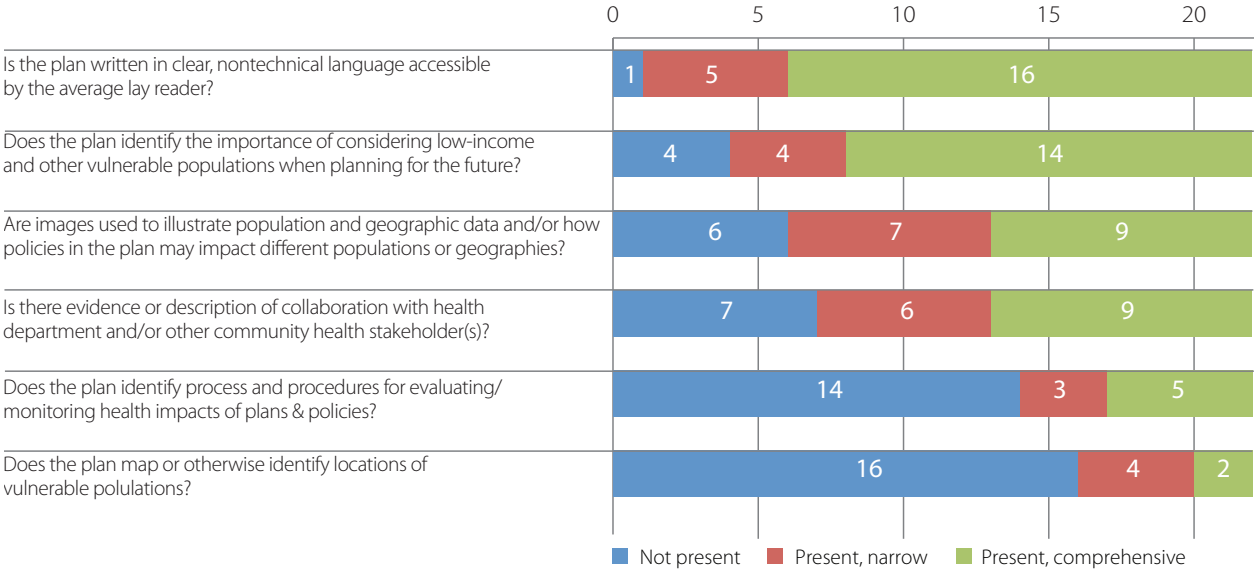


Figure 1B. Procedural Issues



Goals

Figure 2. Active Living Goals

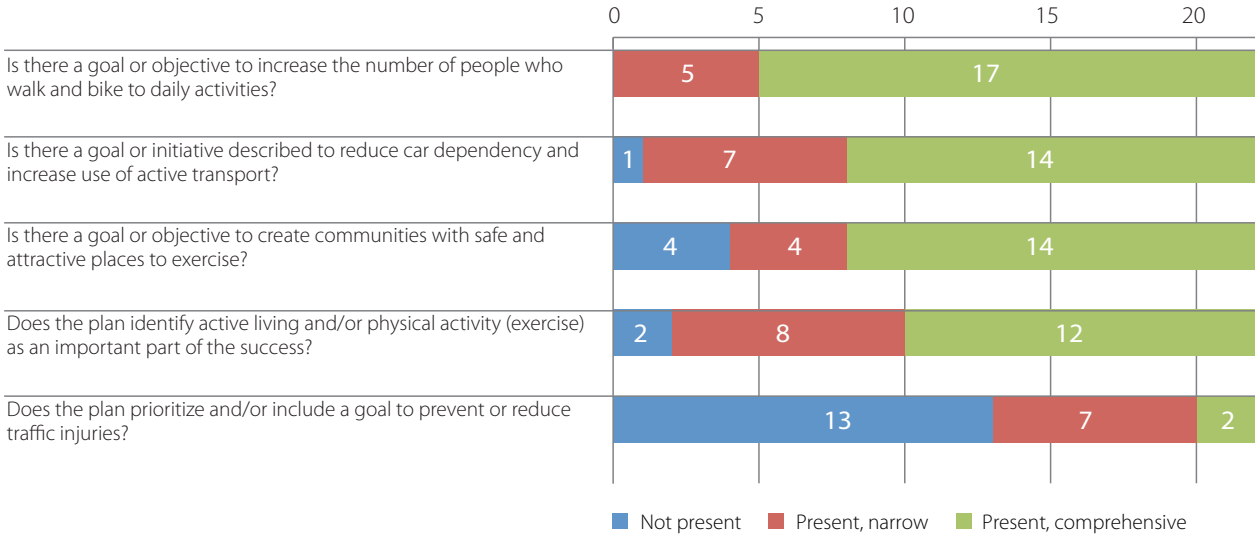


Figure 3. Emergency Preparedness Goals

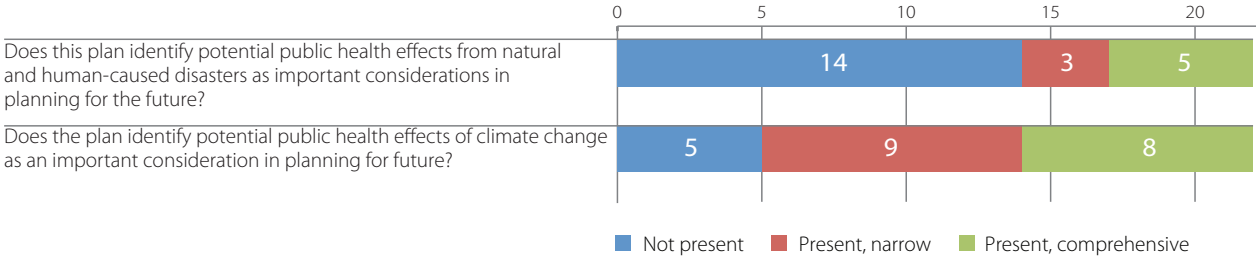


Figure 4. Environmental Exposures Goals

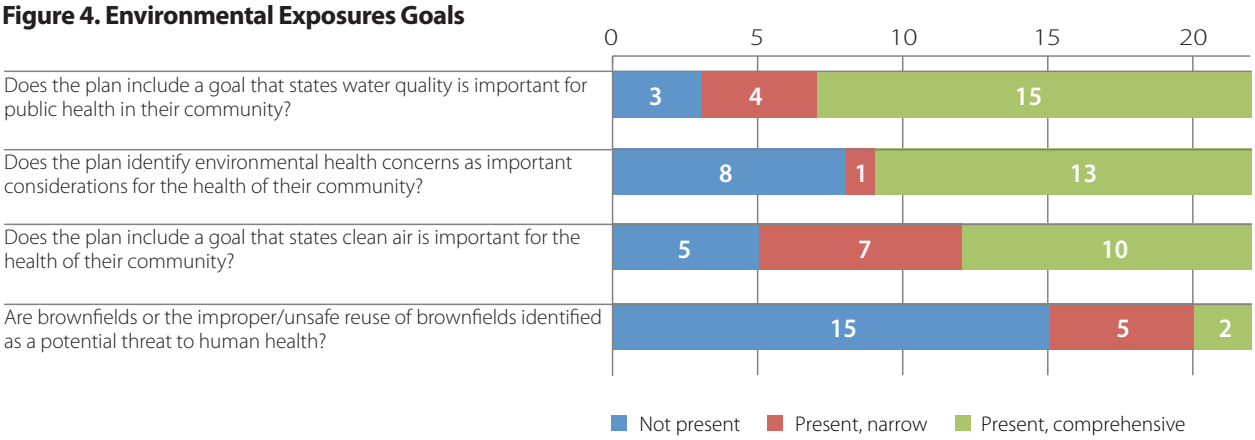


Figure 5. Food and Nutrition goals

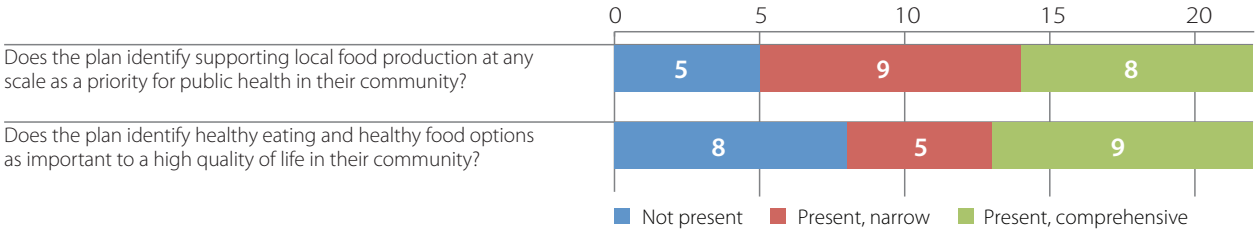


Figure 6. Health and Human Services Goals

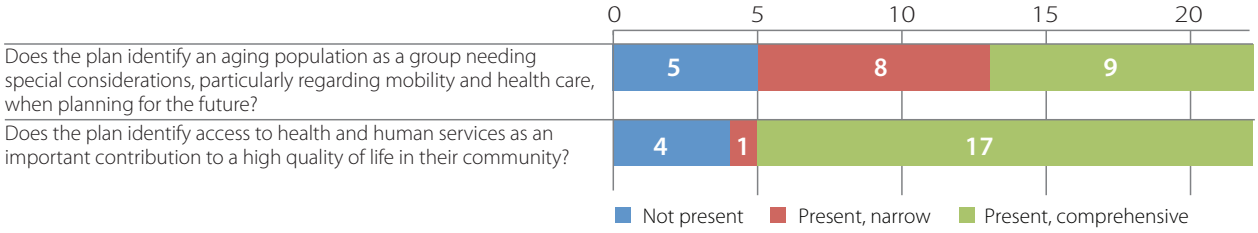
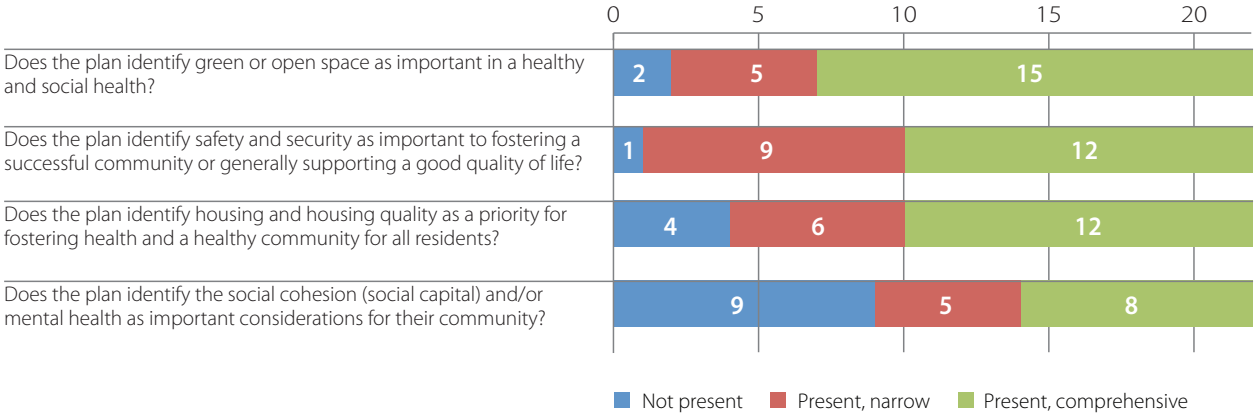


Figure 7. Social Cohesion and Mental Health Goals



Policies

Figure 8. Active Living Policies

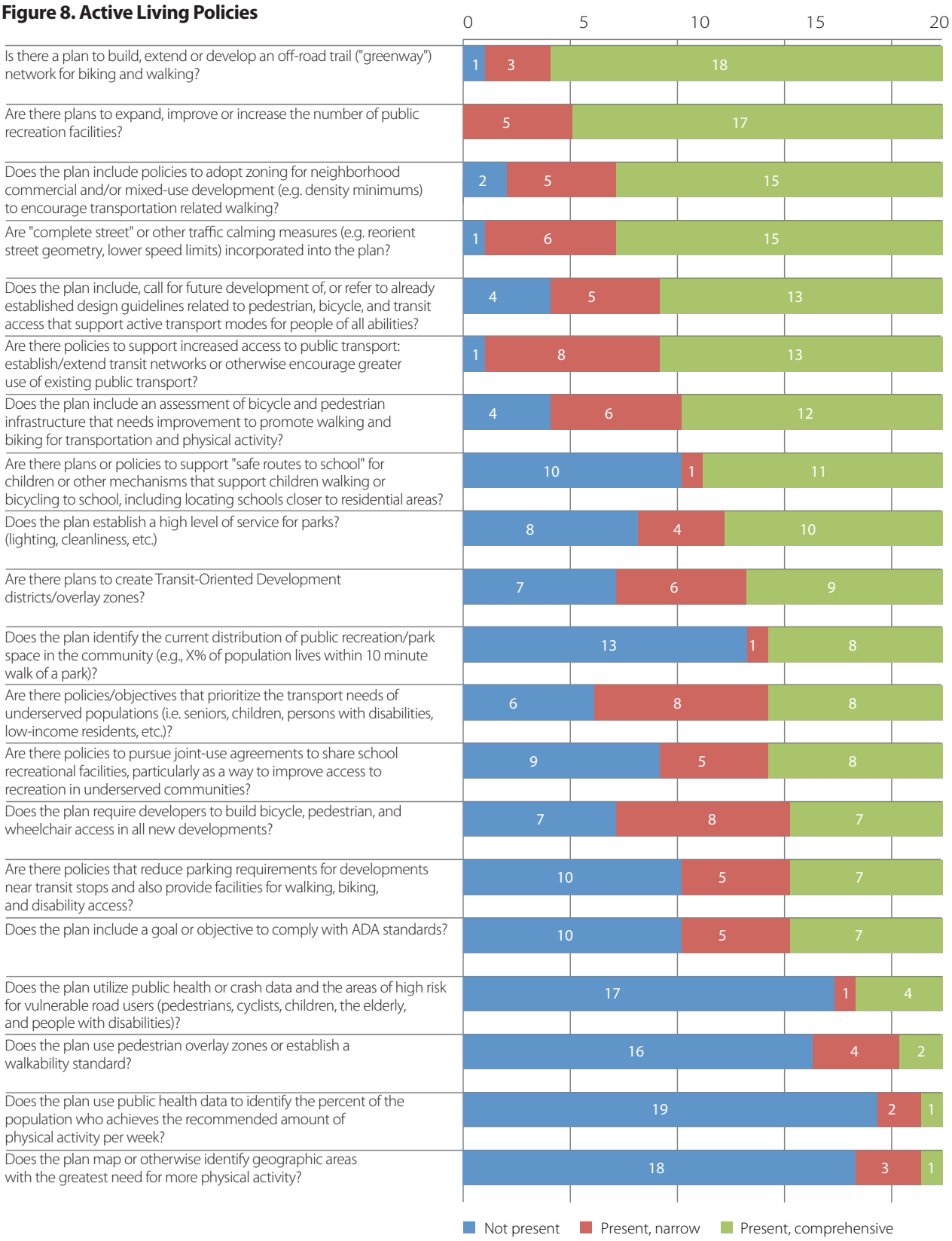


Figure 9. Emergency Preparedness Policies

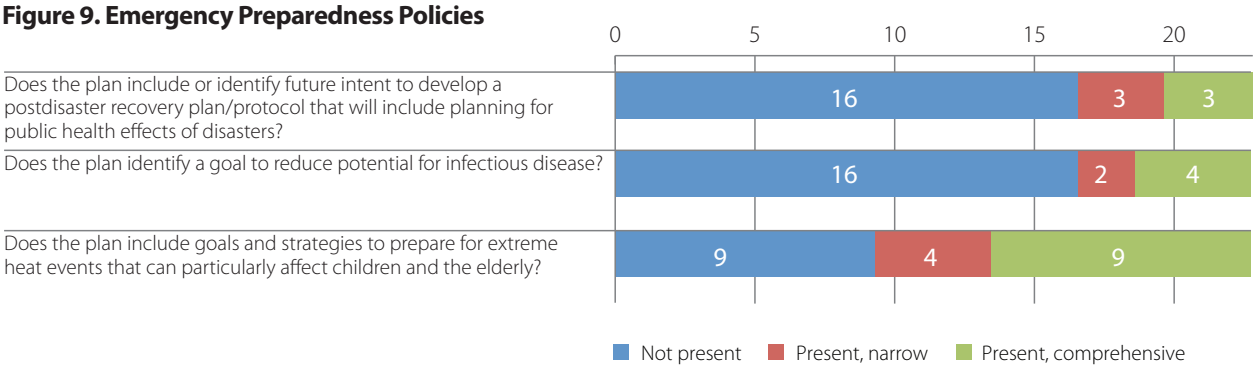


Figure 10. Environmental Exposures Policies

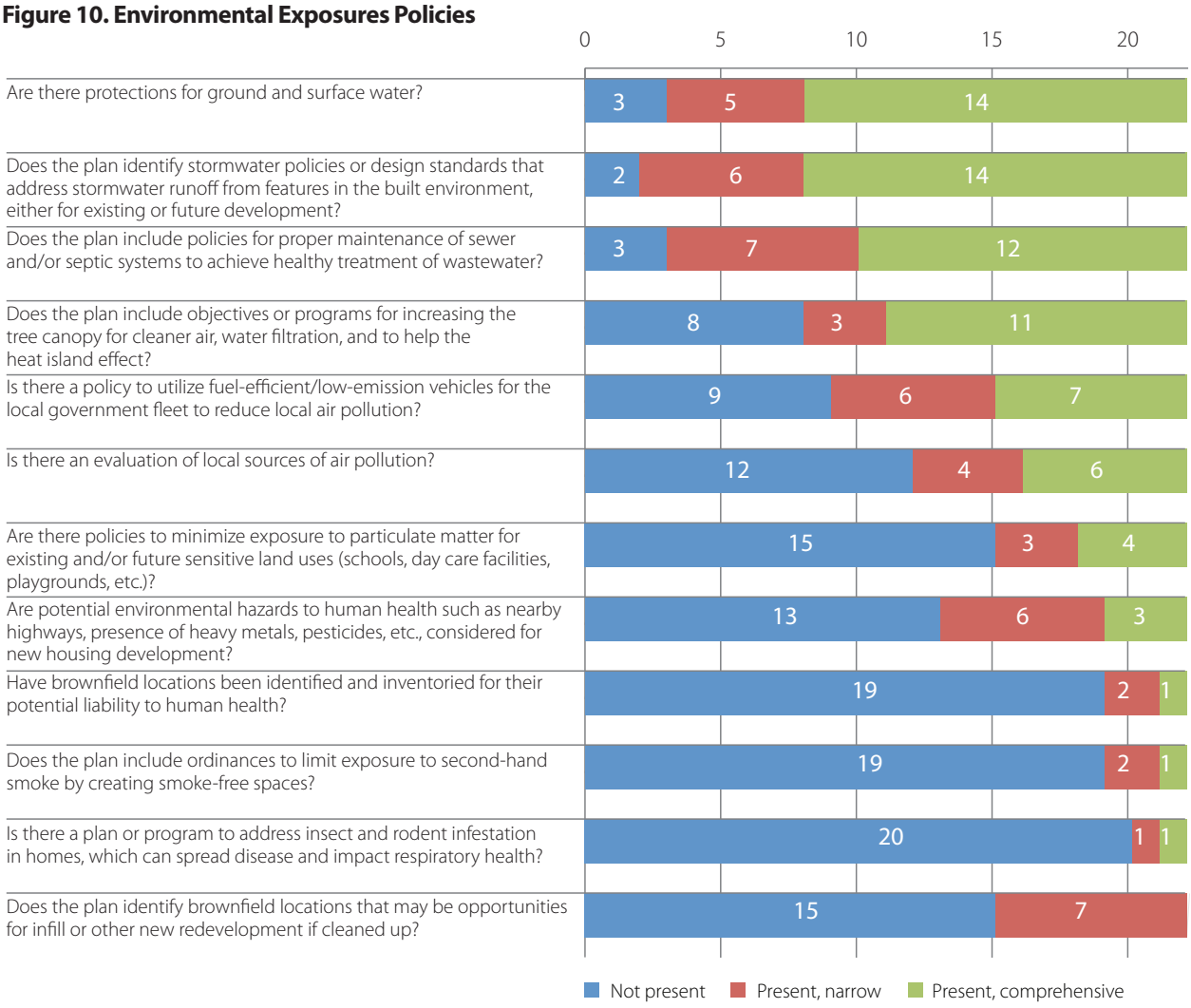


Figure 11. Food and Nutrition Policies

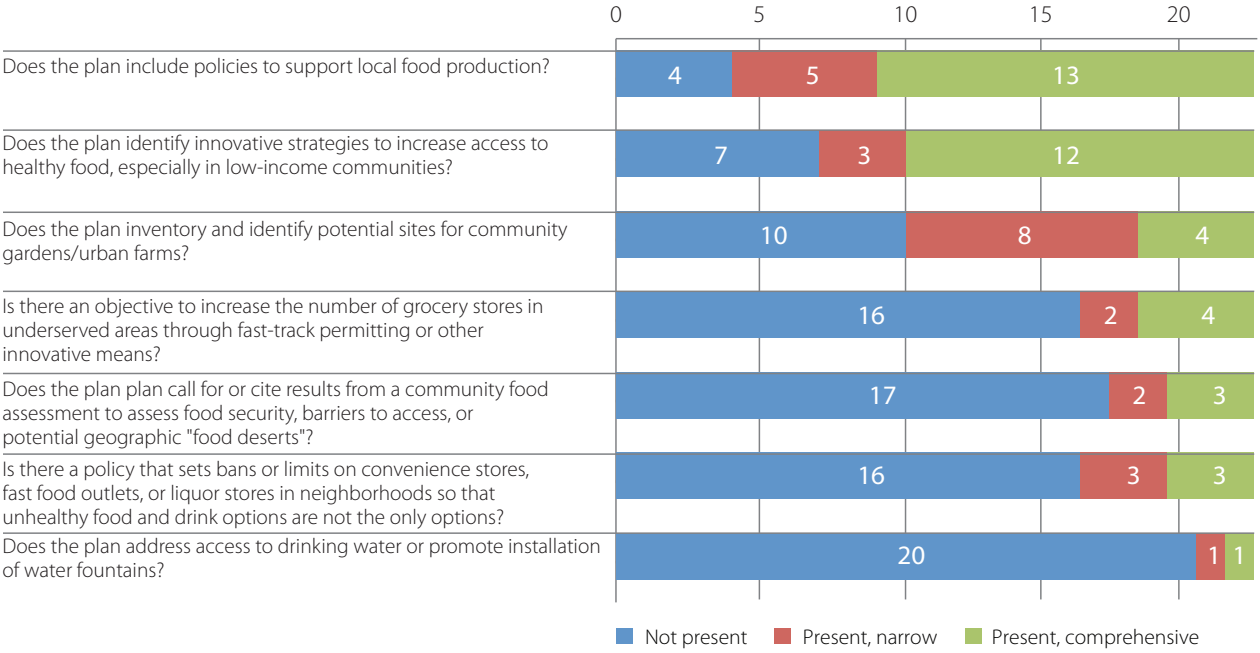


Figure 12. Health, Human, and Public Services Policies

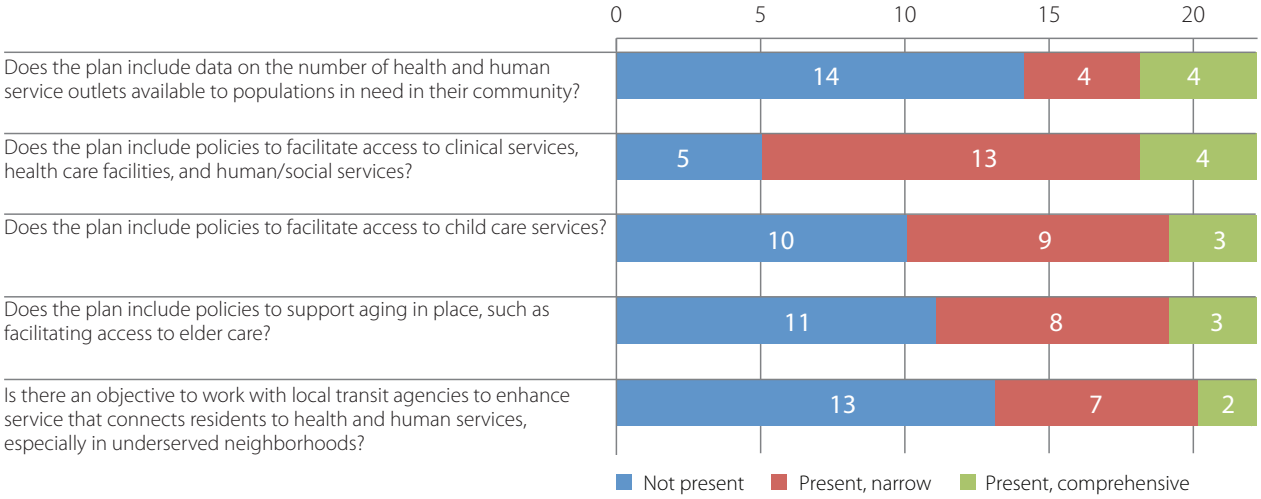
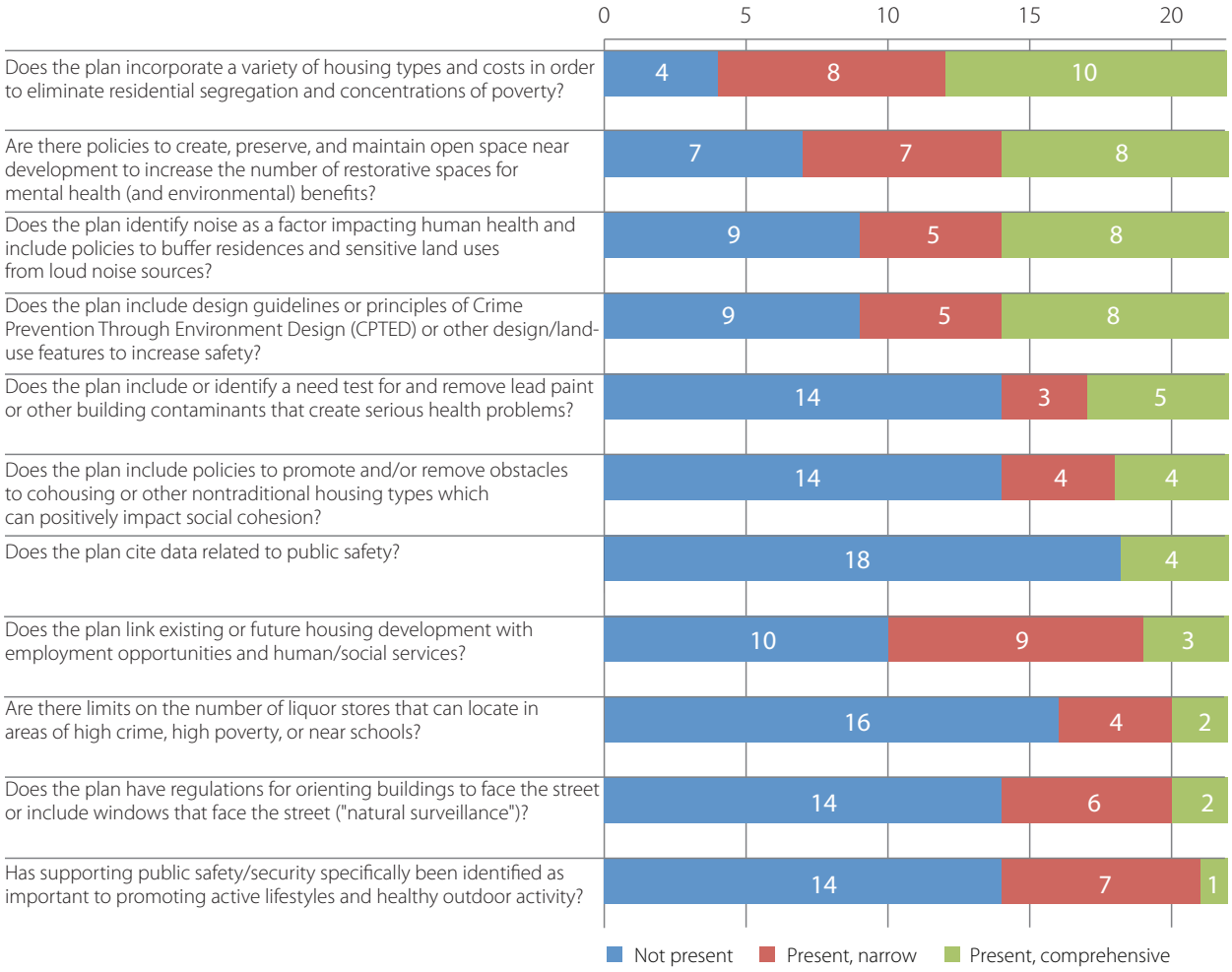


Figure 13. Social Cohesion and Mental Health Policies



Plan Strengths

Based upon selection criteria, every plan addressed public health to some extent, but the the inclusion of health goals and health language—and the specificity and strength of those goals—varied a great deal. Overall, the selected plans portrayed an increased awareness of the connections among planning, built environment, and public health impacts. Across the group, plans were strongest on goals and policies in the Active Living category, although the explicit link to public health benefits was often missing (see last question in Table 13: Has supporting public safety/security specifically been identified as important to promoting active lifestyles and healthy outdoor activity?).

Additional conclusions of the analysis indicate the following plan strengths:

1. Active Living was most strongly represented across all the plans and was addressed in Parks & Open Space, Transportation/Circulation, Urban Design, and Health/Healthy Communities plan elements.
2. Environmental Exposures was second most represented, particularly in response to questions about water and tree planting.
3. Emergency Preparedness policies, when included, tended to be strong and specific with associated implementation mechanisms.
4. When plans addressed food issues, they did so relatively comprehensively and with attention to equity and access for vulnerable populations.

5. The plans that had a standalone Public Health Element emphasized health to a greater extent throughout the plan than those that did not.
6. Most plans were written in an accessible, easy-to-follow format.

Plan Weaknesses

Overall, there was a lack of explicit discussion about how the built environment can affect a range of public health factors, even among plans that had a significant number of policies that promote health. Additionally, great variation within the plans meant that documents using strong language (e.g. "will" or "shall") for some public health-related topics might use weak implementation language (e.g., "consider" or "encourage") for others. Some plans used such weak language throughout.

Across the pool, plans were relatively weak in their coverage of Food and Nutrition and Emergency Preparedness, and were very weak in coverage of Health and Human Services and Social Cohesion and Mental Health. In fact, the majority of plans did not mention the term "mental health" anywhere in the plan. In addition, policies regarding noise as it affects public health were left out of nearly half of the plans and covered minimally in the rest (except in California plans, where noise is a required element). Finally, several plans were quite limited in what health topics they addressed; for example, including no objectives regarding healthcare services.

Other plan weaknesses include the following:

1. Most plans did not use imagery, particularly maps, to convey information about the distribution of resources, other community assets, socio-economic conditions, or health status of populations across the jurisdiction.
2. Even plans with strong public health-oriented policies did not utilize public health data (e.g., crash or injury rates, chronic disease rates, crime) or include information on the current distribution and accessibility of services (e.g., clinical, grocery, parks or transit).
3. Similarly, even plans with strong public health-oriented policies did not identify metrics by which to measure or track success for goals and policies.
4. Most plans lacked implementation strategies, including benchmarks, responsible parties, time lines, etc.

Top Plans in Each Topic Area

For each area of assessment, PCH identified the top plans based on combined scores for both goals and policies. Depending on how many had tied scores, the lists identify five to eight plans in each category. The citations for these plans can be found on page 29–30.

Broad Issues	Active Living
San Francisco	Baltimore County
South Gate	Washington, D.C.
Alachua	Fort Worth
Baltimore County	Raleigh
Fort Worth	Chino
Philadelphia	Alachua

Emergency Preparedness	**Environmental Exposures**
Baltimore County	Washington, D.C.
Kings County	Baltimore County
San Francisco	San Francisco
Chino	Alachua
Fort Worth	Fort Worth
Philadelphia	Chino
Food and Nutrition	**Health and Human Services**
Alachua	Kings County
Oneida Nation	Alachua
Baltimore County	Washington, D.C.
Chino	Baltimore County
Washington, D.C.	Fort Worth
South Gate	
Grand Rapids	
Philadelphia	

While these lists identify the best overall plans for each category, many other plans had strong characteristics as well. An example is the comprehensive plan for Niagara County, New York, which included public health as a topic area in a survey to assess community needs, and which listed implementation mechanisms, including primary actions, potentially involved entities, and the identification of funding opportunities, for all topics within each plan element.

Discussion: State of the Practice

The 22 evaluated plans varied a great deal in overall characteristics (length, number of elements, specificity of goals and policies, inclusion of implementation mechanisms, and identification of metrics for success), making it somewhat difficult to compare plans across the pool. Much of this variation is likely due to significant differences in state planning requirements, the monetary and staff resources available to write the plan, and the political climate at the time the plan was crafted. By extension, such variability also applies to the inclusion of public health goals and policies.

The prevalence (both qualitative and quantitative) of goals and policies related to Active Living in the plans is likely due to the many co-benefits of instituting active transportation policies. Policies and infrastructure that promote bicycling, walking, connections to public transit, and mixed use developments not only allow for the creation of more options for physical activity, they have been seen to have economic benefits to cities and towns. Similarly, increasing or improving green space, another common planning goal, offers multiple benefits of providing more area for recreation, protecting sensitive lands from inappropriate development, and providing pervious surfaces for stormwater drainage, as well as potentially increasing property values. Conversely, building health clinics may not be seen as offering multiple advantages to the community as a whole, and planners still may not see health services as a community asset within their sphere of influence, despite the fact that land-use policies have the potential to strongly impact the location and access to such services..

This pool of plans covers a wide time span: from San Francisco's sustainability plan adopted in 1996—more than 20 years ago—to several plans adopted in 2011. During that time, the public health world's awareness of the importance of the built environment and planning for public health has significantly evolved. By comparison, the planning profession has taken somewhat longer to turn their attention to public health concerns and is doing so in some areas more quickly than in others. The use of data to inform and prioritize planning policies, as well as to assist in the setting of benchmarks for success, is one major area in which public health could provide significant input to the comprehensive planning process. While this evaluation shows that much work still needs to be done to bring the two fields of planning and public health back together, many of the plans evaluated here show promise for the future and signify the current and future creation of more livable, sustainable communities for everyone.

EXAMPLES OF ROBUST PUBLIC HEALTH POLICY

A selection of strong goals and policies addressing each topic area from the evaluation is listed below. The selection focuses on policies and action items, which provide the most specific guidance for implementation and realization of the larger goals. Where possible, examples from multiple plans are provided that illustrate at least one strong policy example from each subcategory of the topic areas. This list is not exhaustive; additional strong examples can be found in other plans that were reviewed.

Active Living

Active Transport

Dona Ana County, New Mexico

- Goal 6-6-3: Increase access to non-motorized transportation options to promote healthy living and provide mobility alternatives. (p126)

  Strategies:
  - Incorporate bicycle lanes, sidewalks, multi-use paths, and trails with roadways
  - Use alternative options for non-motorized transportation routes where necessary, including, but not limited to, areas adjacent to irrigation ditches or arroyo channels, connections between cul-de-sacs, and utility corridors.
  - Coordinate non-motorized improvements to minimize or avoid discontinuous connections.
  - Design safe, efficient non-motorized transportation systems and use educational programs to reduce or eliminate conflicts with motorized transportation systems.
  - Develop non-motorized routes that maximize direct travel trips.
  - Ensure non-motorized systems meet or exceed standards for use by persons with disabilities.

South Gate, California

- Public Facilities: Objective PF 3.2: Assist educational providers in the location and design of school sites to prevent negative impacts on the health, safety and welfare of students and nearby residents. (p137)

  P.2. The City will create and enhance safe walking and cycling routes to schools through its transportation, land use, and design decisions. This will improve safety, increase physical activity among youth, and reduce traffic congestion around schools.

North Miami, Florida

- Future Land Use Element: Transit-Oriented Development Objective 1.2) – The City shall aim to implement the recommendations of the 2005 Transit Oriented Development Study to create a pedestrian environment to reduce automobile dependence and encourage utilization of alternatives modes of transportation. (p1-4)

Recreation

Philadelphia

- Target 9—Provide Park and Recreation resources within 10 minutes of 75 percent of Residents (p7)

Fort Worth, Texas

- Parks and Community Services Element—Increase neighborhood and community park acreage from 5.11 acres per 1,000 persons to 6.25 acres per 1,000 by 2025, concentrating on under-served areas throughout the city. (p58)

Baltimore County, Maryland

- Community Services Element—Actions (3) Work with Baltimore County Public Schools to maximize the effectiveness of the joint-use agreement for school recreation centers. (p132)

Emergency Preparedness

Climate Change

San Francisco

- Conservation Element—A. Climate Change & Sustainable Development.

  Goal:
  2) To be prepared for, and able to adapt to adverse climate change impacts.
  Policies:
  Policy CE-A.2: Reduce the City's carbon footprint. Develop and adopt new or amended regulations, programs, and incentives as appropriate to implement the goals and policies set forth in the General Plan to:
  - Create sustainable and efficient land use patterns to reduce vehicular trips and preserve open space;
  - Reduce fuel emission levels by encouraging alternative modes of transportation and increasing fuel efficiency;
  - Improve energy efficiency, especially in the transportation sector and buildings and appliances;
  - Reduce the Urban Heat Island effect through sustainable design and building practices, as well as planting trees (consistent with habitat and water conservation policies) for their many environmental benefits, including natural carbon sequestration;
  - Reduce waste by improving management and recycling programs;
  - Plan for water supply and emergency reserves.

Natural and Human-Caused Disasters

Palm Beach County, Florida

- Coastal Management Element Policy 2.4-d: Palm Beach County shall maintain a Local Mitigation Strategy program (LMS) with the purpose of developing and implementing a unified approach among County and municipal governments for dealing with identified hazards and hazard management problems. The program's primary objectives shall (p241):

  - Improve the community's resistance to damage from identified natural, technological, and social hazards;
  - Increase Palm Beach County's eligibility for receiving local, state, federal, and other mitigation funds;
  - Reduce the cost of disasters; and
  - Expedite post-disaster community recovery.

North Miami, Florida

- Goal: Hurricane Evaluation and Disaster Preparedness (p1-11)

  Objective 1.8: The City shall coordinate with Miami-Dade County, the South Florida Regional Planning Council and the State of Florida in addressing the evacuation, structural integrity and disaster-preparedness needs of North Miami.
  - Policy 1.8.4 By January 2009, the City should develop a City Emergency Plan addressing disaster-preparedness, hurricane evacuation, and post-disaster redevelopment plans, procedures, and personnel duties.

San Francisco

- Public Facilities, Services & Safety Element – Disaster Preparedness.

  Goals:
  - 1) A city and region that, through diligent planning, organizing, and training is able to prevent, respond to, and recover from man-made and natural disasters.
  - 3) Prompt and efficient restoration of normal City functions and activities following a disaster.

Policies:

- PF-P.3 Develop and maintain current, integrated, and comprehensive Emergency Operations and Disaster Plans on an annual basis.
    - Prepare and maintain a comprehensive multi-modal evacuation plan.
- Policy PF-P.6 Coordinate citywide emergency management and disaster planning and response through the integration of key City departments into the preparedness and decision-making process.

Environmental Exposures

Air Quality

Raleigh, North Carolina

- Policy EP 5.1 Urban Forestry: Expand and strengthen urban forestry and tree preservation programs to protect the existing tree cover and add to it. (p129)
- Policy EP 5.2 Tree Canopy Standards: Maintain an appropriate tree canopy coverage along 50 percent or more of all available sidewalk planting/landscape strips between the sidewalk and the curb. (p129)
- Policy EP 5.3 Canopy Restoration: Promote the reforestation of tree coverage that is typically lost during urban and suburban development through tree conservation, targeted tree plantings, urban forestry, and street tree plantings. (p130)

Washington, D.C.

- Environmental Protection Chapter Policy E-4.1.5: Improving Air Quality Through Transportation Efficiency: Promote strategies that reduce motor vehicle emissions in the District and surrounding region. As outlined in the Land Use and Transportation Elements of this Comprehensive Plan, this includes the development of a fully integrated regional system of buses, streetcars, rail transit, bicycles, taxis, and pedestrian facilities to make it easier and more convenient to travel without an automobile. It also includes the promotion of trip reduction measures such as videoconference facilities, telecommuting, flextime, and carpooling. Strategies to reduce congestion and idling time, such as improved signal timing and reversible commute lanes also should contribute to air quality improvement.

Philadelphia

- Goal—Philadelphia Reduces Its Environmental Footprint—Benchmarks:
    - Reduce Greenhouse Gas Emissions by 20 percent.
        - Improve Air Quality toward Attainment of Federal Standards.

Water Quality

Raleigh, North Carolina

- C.3 Water Quality and Conservation Policies and actions (p122-125)
  Policy EP 3.1 Water Quality BMP's—Use non-structural Best Management Practices (BMPs) in an effort to improve water quality, such as public education programs, monitoring and control of illicit discharges, expansion of the greenway concept to include "receiving lands" that can absorb storm surge overflows, and update of the City's sediment control program with an orientation toward performance measures

Omaha, Nebraska

- Land Use Element: The City should study the effect of stormwater from new development and adopt policies which will prevent future flooding problems. The City should study methods of financing improvements related to stormwater detention and management. (p61-64)
    - Policies 1. The City will develop and adopt a comprehensive stormwater management plan that identifies acceptable levels of impact from development and identifies measures to mitigate adverse impacts. This stormwater management plan should place priority on regional stormwater management.
    - Implementation (a) The City, in conjunction with the NRD, will establish a Stormwater Management Task Force to develop stormwater management standards, including standards related to flood peaks, flood stage, flood velocity, erosion and sedimentation and to identify major regional stormwater management facilities.

Brownfields

Niagara County, New WYork

- Chapter II: Develop a regional inventory and marketing strategies for vacant, underutilized and Brownfield properties. (p12)
- Chapter V: Encourage infill forms of mixed-use and multiple use development and the redevelopment of vacant, underutilized and brownfield and/or grayfield sites thereby discouraging development of undeveloped greenfield locations especially where extensions of public infrastructure and services might be required. (p29)
- Chapter VI: Encourage commercial and industrial development on vacant and underutilized lands including reuse of brownfield/greyfield sites as a countywide priority over "greenfield" development to protect open spaces and prime agricultural areas. (p22)

Food and Nutrition

Access to Food and Healthy Food Options; Land Use

Philadelphia

- Target 10: Bring local food within 10 minutes of 75 percent of residents. (p44)

Oneida Nation, Wisconsin

- Goal 6: Establish a "Food Security Program" that reduces hunger, food insecurity and enables the tribe to provide foods for all persons in the Oneida Community at all times.
  - Objective–6.7 Undertake community "Capacity Building" to strengthen the community's ability to be self-sufficient and provide local food security.
- Goal 8: Provide technical assistance and training to tribal citizens so they can be self-sufficient in food growing, processing and storage.
  - Objectives–8.1 Emphasize building individuals capacity/capabilities to provide their own food needs rather than encouraging dependence on outside sources
- Goal 9: Produce food that is healthy for the people.
  - Objective–9.1 Plant, grow, and harvest healthy food crops for the Oneida People. (p2-30 – 2-32)

San Francisco

- Food and Agriculture Element (p2-3)
  - Actions 1-A-1-a – Create an internship program for volunteers to build a public database of neighborhood-based sustainable agricultural resources.
  - Actions 1-C-1-b – Create San Francisco school district policy that implements a food, agriculture and nutrition curricula teaching about regional, seasonal foods in all schools at every grade level.
  - Actions 2-A-1—Establish a community education program on food access issues.

Alachua County, Florida

- Community Health Element (p422-424)
  Policy 1.2.4 – Increase access to health-promoting foods and beverages in the community. Form partnerships with organizations or worksites, such as health care facilities and schools, to encourage healthy foods and beverages.
  - Objective 1.3 – Promote a healthy community by providing for obesity prevention and prevention of other chronic illnesses.
    - Policy 1.3.1 Alachua County shall promote access to healthful, affordable, and nutritious food.
    - Policy 1.3.1.1 Promote food security and public health by encouraging locally-based food production, distribution, and choice in accordance with the Future Land Use Element.
    - Policy 1.3.1.2 Alachua County shall consider programs to encourage property owners to make use of vacant properties as community gardens.

- Policy 1.3.1.3 Continue to offer support for home and community gardening through programs offered by USDA Farm to School Programs and the Alachua County Extension Office and target low-income and populations for health disparity for programs promoting gardening, healthy food access and nutrition improvement.
- Policy 1.3.1.4 Alachua County shall discourage the sale of less healthy foods and beverages as defined by Institute of Medicine within local government facilities including recreational areas.
- Policy 1.3.2 Alachua County shall partner with local organizations and develop standards to promote community food systems.

Access to Drinking Water

Chino, California

- Land Use Element, Goal LU-8 Ensure convenient access to healthy foods for all residents (pLU-40)
    - Policy 9—The City shall require new public facilities, schools, parks and recreational facilities, and commercial, office, and medical buildings to provide drinking fountains.

Health and Human Services Policies

Access to Health and Human Services

Dubuque, Iowa

- Human Services Goals; Goal 1: To Promote optimum health care services for community residents.
    - Objective 1.1 Support increasing the number of Dubuque area citizens with health care access and health insurance. (p21)

Washington, D.C.

- Services & Facilities Policy CSF 2.1.1: Primary and Emergency Care: Ensure that high quality, affordable primary health centers are available and accessible to all District residents. Emergency medical facilities should be geographically distributed so that all residents have safe, convenient access to such services. New or rehabilitated health care facilities should be developed in medically underserved and/or high poverty neighborhoods, and in areas with high populations of senior citizens, the physically disabled, the homeless, and others with unmet health care needs. (p11-10)

- Services & Facilities Policy CSF 2.2.1: Adequate Child Care Facilities: Allow new and expanded child care facilities in all residential, commercial, and mixed use areas and in community facilities in an effort to provide adequate affordable childcare facilities throughout the District. Locations should be accessible to public transit. (p11-12)

Chino, California

- Public Facilities and Services Objective PFS-4.1 Facilitate access to health care for all Chino residents. (PFS-15)
    - P2. The City shall work with healthcare providers to locate health services in places that are accessible to Chino residents.
    - P6. The City shall work with healthcare providers to ensure residents are able to access health care services, including developing transportation services, such as shuttles, taxi vouchers or modified transit routes.

Aging

Alachua County, Florida

- Community Health Element – Policy 1.2.5 – Promote a healthy community by providing for Aging in Place in residential development designs by allowing a mix of housing types and housing units that take into account visitability criteria and encourage Universal Design. (p411)

Omaha, Nebraska

- Transportation Element. Metro Area Transit 3. Civic uses and day care facilities are strongly encouraged at MAT's future park and ride lot locations. (p44)

Social Cohesion and Mental Health

Housing Quality

Fort Worth, Texas

- Housing Element
  - Promote the development of high-quality market-rate and affordable housing using appropriate design standards to ensure lasting value. (p49)
  - Encourage and provide support for higher density, mixed-use, mixed-income developments in Transit-Oriented Developments, mixed-use growth centers, and urban villages. (p49)

Dona Ana County, New Mexico

- Housing Element
  - Goal 6-9-1: Create livable mixed-use neighborhoods with increased mobility options and a strong sense of community (p131)
    - Strategy: Accommodate housing options for a range of socioeconomic levels within neighborhoods.
  - Goal 6-9-2: Provide a range of housing alternatives that provides safe, clean, comfortable and affordable living environments. (p131)

Noise

San Diego, California

- Noise Element
  - NE-A.1: Separate excessive noise-generating uses from residential and other noise-sensitive land uses with a sufficient spatial buffer of less sensitive uses. (pNE-6)
  - NE-A.3: Limit future residential and other noise-sensitive land uses in areas exposed to high levels of noise. Note: All California plans are required to have an element on noise. (pNE-6)

Public Safety and Security

Baltimore County, Maryland

- Community Services Element. Action 11 – Review all development and design plans of county facilities to ensure use of Crime Prevention Through Environmental Design (CPTED), as adopted in the Comprehensive Manual of Development Policies (CMDP). (p110)

North Miami, Florida

- Future Land Use Element; Community Redevelopment Policy 1.5.9: The City should encourage the use of Crime Prevention Through Environmental Design (CPTED) standards in the redevelopment of the City, enhancing the safety of the City and limiting design factors which abet crime. (p1-8)

NEXT STEPS

This work, along with future work to advance the place of public health in planning, reinforces APA's commitment to promoting plans and policies that improve the public's health. PCH has funding to continue its healthy planning research by building upon the work completed in in the first two phases of this project (survey and evaluation) and developing a guidebook to help planning staff and practitioners better understand the role of health as a driver of planning choices. Such a report will help planning staff and health practitioners identify tools and strategies for integrating public health–related goals and policies into the plan-making process. The report will include a selection of case studies from the communities whose plans were identified and selected for review in this evaluation. It is APA's hope that the findings will spur additional research to fill in critical research gaps as well as influence policy decisions that strengthen the integration of public health objectives in plan making and implementation.

PCH is committed to growing its healthy planning research to include the following activities: evaluating how planning activities and development regulations support public access to potable water; preparing a public health in planning toolkit and checklist to ensure that local and regional planning departments explicitly address public health issues in the community engagement process; and continuing to offer a free online course on the use of Health Impact Assessment in planning.

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APPENDICES

Appendix 1.

From Survey Report: Table 3. Public health topics explicitly addressed in adopted comprehensive or sustainability plans, by group (Hodgson 2011)

Group	Comprehensive Plans % of Respondents	Sustainability Plans % of Respondents
A. Active Living (active living, active transportation, physical activity, recreation)	57.1%	65.7%
B. Chronic Disease (chronic disease prevention, health disparities, obesity prevention)	6.7%	4.9%
C. Environmental Health (brownfields, clean air, clean water, environmental health, environmental justice, toxic exposure)	36.7%	46.3%
D. Climate (climate change, emergency preparedness)	34.4%	42.6%
E. Food & Nutrition (food access, food safety, food security, healthy eating, nutrition)	8.7%	22.2%
F. Health Care (aging, clinical services, healthy homes, health services, human services, mental health)	18.9%	14.8%
G. Social Health (social capital, social equity)	12.6%	35.2%
H. Safety (injury prevention, public safety)	35.8%	20.4%

Appendix 2. Brief Summary of Selected Works Evaluating Healthy Planning

APA's Healthy Planning Research study builds upon the research efforts of several other organizations, programs, and centers interested in either the connection between public health and planning or the overall evaluation of the quality of comprehensive plans. This section summarizes APA's review of this work and highlights issues, policies, or directives that influenced the methodology and conclusions developed for this study.

Exploring a Public Health Perspective on Pedestrian Planning

Evenson, Kelly, et al. 2012. *Health Promotion Practice*, Volume 13 (2): 204–13.

This study investigated whether involvement by public health professionals in the development of pedestrian plans in the state of North Carolina was associated with certain characteristics of the plan (vision, goals, identified programs, and evaluation). The study reported that among 46 pedestrian plans, 39 percent reported involvement by public health professionals in their development. Slightly more than half (52 percent) of the plans included goals to improve public health. Plans that involved public health professionals more often included the type of physical activity, safety, or education program than those that did not involve representatives from public health. The study concludes that more public health professionals should become involved in the pedestrian planning process, particularly in the areas of health program

development, implementation, and evaluation, and encourages them to do so. Such evaluation is analogous to the aims of this study.

Healthy Planning Policies—A Compendium from California General Plans

ChangeLab Solutions. 2009. *Planning for Healthy Places*.

This study focuses on a review of California general plans that include advanced strategies for promoting public health. The project drew attention to the diverse strategies that exist for integrating health into planning. Study goals, in line with APA study goals, are to spur innovation and emerging best practices in the integration of health into land-use policy by sharing the best existing examples. The topics, both traditional and innovative, included in the review heavily influenced the topics incorporated into the evaluation tool used in this study.

Evaluating Smart Growth: Implications for Small Communities

Edwards, M. M.,and A. Haines. 2007. *Journal of Planning Education and Research* 27: 49–64.

In order to assess the use of smart growth principles in local comprehensive plans in the state of Wisconsin, the authors developed a method and protocol for evaluation. Using the framework, a sample of 30 local comprehensive plans was evaluated to determine how well their goals and policies promoted state smart-growth principles. Plans are evaluated for attention to six commonly accepted smart-growth principles as developed and promoted by a number of national organizations and coalitions. The content analysis revealed that communities are not fully embracing the smart-growth agenda. Furthermore, there is a clear distinction between the use of smart-growth principles among cities and villages versus town or rural governments. The methodology developed for this study was applied during APA's evaluation.

A Framework for Physical Activity Policy Research

Schmid, T. L., M. Pratt, et al. 2006. *Journal of Physical Activity and Health* 3(Supp 1): S20-S29.

To better illustrate how public health policy can impact physical activity, the Centers for Disease Control and Prevention developed a model that describes relationships among policy, the environment, behavior, and health. They also describe a framework for organizing and conceptualizing policy interventions and proposed priorities for public health efforts to promote physical activity. An expanded focus on physical activity policy interventions is warranted, and such efforts can complement physical activity promotion efforts at other levels. The framework also recommends the addition of researchers with expertise in the policy sciences to enhance the work of existing multidisciplinary teams. APA's study is one effort to develop policy intended to increase physical activity through interventions in the built environment.

Are We Planning for Sustainable Development? An Evaluation of 30 Comprehensive Plans

Berke, P., and M. M. Conroy. 2000 *Journal of the American Planning Association* 66(1): 21–33.

The purpose of this study was to determine whether planners are making progress advancing sustainable development in their communities. The study evaluated a sample of 30 comprehensive plans, including those that explicitly used sustainable development as an organizing concept for plan preparation and those which did not use the concept but have been noted as high-quality plans. Findings revealed that the explicit inclusion of the concept of sustainability had no effect on how well the plans actually promote sustainability principles. Additionally, researchers concluded that the plans did not take a consistent approach to guiding development and moving toward sustainability. Recommendations included incorporating community sustainability as a fundamental aspect of planning education, state adoption of planning mandates that require community plans to support principles of sustainability, and examining the linkage between plans, implementation efforts, and the sustainability of outcomes. Many similar recommendations for strengthening promotion of

sustainability can also be used to strengthen public health in comprehensive plans.

Searching for the Good Plan: A Meta-Analysis of Plan Quality Studies

Berke, P., and D. Godschalk. 2009. *Journal of Planning Literature* 23(3): 227–40.

This study addresses the gap in knowledge that exists about plan quality due to the fact that most plans are not routinely evaluated against best-practice standards. The study discusses plan quality evaluation, an emerging methodology for assessing the quality of plans. It discusses the importance of plan quality evaluation in identifying the strengths and weaknesses of a plan, judging the overall quality of the plan, and providing a basis for ensuring that plans reach a desirable standard. The study included a meta-analysis of 16 published plan-quality evaluations, and found that in terms of internal plan dimensions, consistency scored the highest, while fact base scored lowest. Evaluation of plan goals and policies also showed weaknesses. External dimensions of plan quality tended to fare better, with compliance characteristics receiving the highest overall mean score and coordination, organization, and presentation receiving moderate overall scores. The authors believe plan quality evaluation will increase in prominence in both research and practice and believe it is a powerful tool that should be used in both reviewing the effectiveness of past planning processes and guiding future processes. In addition to evaluating the extent to which comprehensive and sustainability plans address public health aims, APA's research evaluates overall plan quality and implementation mechanisms, and thus adds to the body of work on plan quality studies.

Evaluating Housing Elements in Growth Management Comprehensive Plans

Connerly, C. E., and N. A. Muller.1993. Pp. 185–99 in *Growth Management: The Planning Challenge of the 1990s,* J. Stein. Newbury Park, Calif.: Sage.

This study evaluates the effectiveness of housing elements in local comprehensive plans. The authors begin by presenting their vision of what housing plans should be, including technical criteria that should be included in the element. They use the criteria to measure how well housing elements of comprehensive plans in 10 Florida communities (adopted under the state's Growth Management Act) address numerous standards. The authors also aimed to determine whether the minimum requirements of Florida's Growth Management act stimulate good housing plans. Policy recommendations included mandating uniform definitions of important terms (such as affordable housing), requiring comprehensive solutions to housing problems, requiring a quantitative analysis of current capacity to meet current and anticipated needs, describing resources to used and their timing, obtaining the necessary resources, supporting local community efforts, and developing a comprehensive affordable housing strategy. As in this study, the evaluation tool for APA's Health Plan-Making study included extensive criteria and focused on the extent to which each of the selected plans met this established criteria.

Integrating Planning and Public Health: Tools and Strategies to Create Healthy Places

Morris, Marya. 2006. American Planning Association. PAS Report #539/540.

This report was developed in response to new and ongoing research that points to an increasing correlation between a person's health and his or her built environment. Although public and environmental health are directly affected by land-use policies and land development, public health agencies seldom participate in the planning process. The report identifies shared interests between the planner and the public health professional and recommends strategies and areas in which the two professions can collaborate. It includes tools to enhance interagency communication and illustrates case studies that have brought public health issues into the land-use planning process. Finally, this document lays a foundation for the kind of evaluation and recommendations found in the current report.