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The contents of this report are the views of the authors and do not necessarily represent the views of the APA Foundation or the policy of APA, unless specifically identified as such in a policy guide or other action by its Board of Directors.
is a signature cause of the APA Foundation. Through the FutureShape process, thought leaders in planning and allied professions developed a research agenda for the planning profession. This report presents the FutureShape research agenda, calls on key planning stakeholders to use the agenda in their work, and summarizes the process steps that informed the agenda.
**PREFACE**

This report commemorates the end of FutureShape, a multiyear process to define a research agenda for the planning profession. While the process concluded in a pre-COVID-19 world, the disease does not negate any of the research priorities identified by FutureShape participants. In fact, many, if not most, of the FutureShape agenda items are likely to take on added urgency, as global reactions and responses to COVID-19 accelerate existing technological and economic trends.

Nevertheless, it seems safe to say that funders, planning research institutions, planning scholars, and planning practitioners will all engage with these research themes and issues in ways unimagined by the FutureShape participants. The planning profession will almost assuredly face new challenges, but it will also have greater opportunities to prove its value as planning researchers discover and test new and better ways to help communities navigate change.
INTRODUCTION

In May 2017, the American Planning Association (APA) relaunched the APA Foundation at its National Planning Conference in New York City. During the opening keynote, APA President Cynthia Bowen, FAICP, announced FutureShape as the first signature cause of the APA Foundation.

The goal of FutureShape is to develop and share a research agenda for the planning profession. While there is no consensus definition or format for a research agenda, the basic intent is to identify areas of inquiry that deserve and require additional research.

Through the FutureShape process, thought leaders in planning and allied professions established a set of research priorities to highlight key planning issues that affect both the future health of the planning profession and the well-being of the communities planners serve. This document represents the final report of this process.

The heart of this report presents 18 key planning issues organized under five broad research themes. Subsequent sections provide a brief call to action for funders, research institutions, scholars, and practitioners and summarize key steps of the FutureShape process. Finally, the report concludes with a short glossary of specialized terms.
FutureShape: A Research Agenda for the Planning Profession

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Through the FutureShape process, participants identified five broad themes that represent major areas of research emphasis for the planning profession. While planning researchers have made significant discoveries related to these themes, each theme has multiple significant knowledge gaps.

The following subsections highlight the planning profession’s relationship to each broad theme, identify and describe multiple priority planning research issues under each theme, and provide a suggestive (inexhaustive) list of potential research topics for each issue. Collectively, these topic lists illustrate opportunities for both basic and applied planning research.
DISRUPTORS AND MEGATRENDS

The planning profession exists to help communities navigate future changes, including disruptive changes driven by widespread social, economic, technological or environmental trends. FutureShape participants identified three priority planning issues that relate to this theme.

**Rapid Technological Change**

Information and communication technologies are transforming the way we live. Careful planning is necessary to ensure that artificial intelligence, automation, connected and self-driving vehicles, mobile applications, the Internet of Things, and other technological advances support community well-being. Planners will need to apply new insights, skills, and practices to help communities navigate rapid technological change.

**Research Topics**

- Land-use and development patterns
- Fiscal and economic resilience
- Digital equity
- Privacy and data security
- Planning education and training
- Planning interventions and trans-disciplinary collaboration

**Long-Term Demographic Change**

The global population is aging, and the United States and Europe are becoming more ethnically and racially diverse. These demographic trends will lead to dramatic shifts in land-use and service demands and revenue levels in communities. The planning profession will need to become more diverse to better serve diverse communities and nimble in its efforts to help communities adapt to changing demographics.

**Research Topics**

- Demographic trends
- Land and property markets
- Fiscal and economic resilience
- Planning education and training
- Planning interventions
Future Uncertainty

While planning is inherently future focused, it has limited ability to predict or control the future. External and unpredictable social, economic, and environmental forces affect the long-term well-being of local communities. Planners will need to apply new insights, skills, and practices to help communities embrace uncertainty and focus on distant planning horizons.

### Research Topics

- Forecasts and forecasting methods
- Planning education and training
- Public engagement processes, strategies, and methodologies
- Decision-support tools
CLIMATE CHANGE, RESILIENCE, AND SUSTAINABILITY

Through its emphasis on long-range, systems thinking, the planning profession plays a crucial role in helping communities limit and adapt to climate change as well as establishing and sustaining harmony with the natural world. FutureShape participants identified three priority planning issues that relate to this theme.

Climate Change Mitigation and Adaptation

Human activities continue to contribute to global climate change. Communities face direct threats from rising sea levels or more frequent and intense extreme weather events and indirect threats from social unrest or economic disruption. Planners will need to apply new insights, skills, and practices to help communities reduce greenhouse gas emissions and adapt to a changing climate.

Research Topics
- Climate change effects and vulnerability
- Demographic trends
- Land-use and development patterns
- Planning education and training
- Planning interventions

Environmental Performance

Many land uses and human activities disrupt ecological processes or produce pollution. These ecological disruptions and pollution negatively affect environmental quality in communities and across regions. Planners will need to apply new insights, skills, and practices to help communities improve their environmental performance.

Research Topics
- Positive and negative effects of land-use and development patterns
- Nature-based solutions
- Planning education and training
- Planning interventions and related effects
Behavioral Change

Many solutions to environmental problems require behavioral change. While communities can use new technologies, invest in new infrastructure or services, or change building practices to enhance sustainability or resilience, the success of these interventions ultimately depends on whether community members change their behavior. Planners will need to apply new insights, skills, and practices to help communities inspire or motivate behavioral changes.

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EQUITY, INCLUSION, AND DIVERSITY

The planning profession is committed to addressing a legacy of inequitable practices and conditions in communities through diversification of the profession and new planning interventions that seek to establish and sustain inclusivity and social equity. FutureShape participants identified four priority planning issues that relate to this theme.

### Housing Choice and Affordability

Many households spend more than 30 percent of their income on housing expenses. A lack of quality affordable housing drives urban expansion and displacement of existing residents. Planners will need to apply new insights, skills, and practices to help communities promote housing choice and affordability and neighborhood improvement without displacement.

**Research Topics**
- Housing market dynamics
- Planning education and training
- Root causes and related planning interventions

### Equitable Outcomes

Many communities have a legacy of racial and economic segregation, resulting in disparities in health, education, housing, and economic opportunity. Planning interventions have often reinforced existing inequities in these communities. Planners will need to apply new insights, skills, and practices to help communities achieve equitable outcomes.

**Research Topics**
- Drivers of income and wealth disparities related to planning practices
- Gentrification and displacement
- Planning education and training
- Planning interventions
Inclusive Participation

Planning processes have historically neglected or excluded the perspectives of marginalized groups. Consequently, planning interventions often reinforce existing power structures in communities and disproportionately burden marginalized groups. The planning profession will need to become more diverse to better reflect the communities they serve, and planners will need to apply new insights, skills, and practices to help communities maximize inclusivity in planning processes.

Research Topics
- Demographics and demographic trends
- Public engagement processes, strategies, and methodologies
- Planning education and training
- Planning interventions

Intergenerational Equity

Planning interventions often have long-standing consequences that affect future generations. When planning processes prioritize short-term benefits and ignore long-term costs, future community members suffer the consequences. Planners will need to apply new insights, skills, and practices to help communities promote intergenerational equity.

Research Topics
- Demographic trends
- Land and property markets
- Fiscal and economic resilience
- Public engagement processes, strategies, and methodologies
- Planning education and training
- Planning interventions
The general public often undervalues the contributions of public resources, facilities, and services to healthy and livable communities. As a result, community leaders may routinely underfund or mismanage public goods. Planners will need to apply new insights, skills, and practices to help communities measure the true costs of public goods and promote equitable access to public resources, facilities, and services.

Some land uses and development activities pose serious environmental health risks. Careful planning is necessary to ensure that high-impact land uses and development do not negatively affect public health and quality of life. Planners will need to apply new insights, skills, and practices to help communities assess environmental threats to public health and promote environmental justice.

### Research Topics

**The Value of Public Goods**
- Ecosystem services and their benefits
- Community indicators
- Planning education and training
- Public engagement processes, strategies, and methodologies
- Decision-support tools

**Environmental Health**
- Land-use and development patterns
- Community indicators
- Planning education and training
- Public engagement processes, strategies, and methodologies
- Decision-support tools
- Planning interventions
Performance Management

Transportation infrastructure investments and land-use and development decisions have interrelated effects on public health and quality of life. Because these interrelationships are not well understood by the general public, community leaders often establish conflicting objectives that delay or limit the performance of planning interventions. Planners will need to apply new insights, skills, and practices to help communities develop performance measures that measure progress toward public health and quality of life goals.

Rural Health

Small town and rural residents often face different health challenges than residents of metropolitan areas. Because nonmetropolitan areas have traditionally received less attention from planners than urban areas, planning interventions seldom focus on addressing rural health problems. The planning profession will need to overcome its urban bias, and planners will need to apply new insights, skills, and practices to help small towns and rural communities improve health outcomes.

Research Topics

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**PLAN MAKING AND IMPLEMENTATION**

The planning profession uses various plan-making and implementation processes to help the communities they serve navigate and manage change. FutureShape participants identified four priority planning issues that relate to this theme.

**The Value of Planning**

The general public has a low level of awareness and understanding of the planning profession and the value of planning as a distinct endeavor. This lack of awareness and understanding often delays or prevents communities from taking necessary actions and inhibits planning leadership and innovation. Planners will need to apply new insights, skills, and practices to help defend against attacks on their professional legitimacy and to more effectively facilitate change in communities.

**Research Topics**

- Performance measures
- Benefits of planning processes and outcomes
- Planning education and training
- Public communication and engagement
- Decision-support tools

**The Evolution of Plan Implementation**

Effective plan implementation requires many public and private entities and actors to take consistent actions over a long time frame. While planners often act as the stewards of a broader change vision, many plan implementation actions depend on an evolving set of individuals, agencies, or organizations with much narrower, and potentially contradictory, views. Planners will need to apply new insights, skills, and practices to better inspire and motivate public and private plan implementation actions.

**Research Topics**

- Institutional arrangements
- Public communication and engagement processes, strategies, and methodologies
- Planning education and training
- Planning interventions
The Public Interest

Planning is fundamentally concerned with protecting and pursuing the public interest. However, local public planning authority and influence is eroding in many parts of the world through federal and state preemption and privatization. Planners will need to apply new insights, skills, and practices to uphold the primacy of the public interest in planning processes.

**Research Topics**
- Institutional arrangements
- Privatization and public-private partnerships and their relationship to system conditions
- Planning education and training
- Planning interventions

Interprofessional Collaboration

Planning issues require effective collaboration among planners and allied professionals, who share interests but have different areas of expertise. Without effective collaboration among these professionals, communities may have trouble translating their vision into action or may pursue contradictory strategies to achieve the same goal. Planners will need to apply new insights, skills, and practices to build and sustain effective collaborative relationships with allied professionals.

**Research Topics**
- Interprofessional relationships and their impacts on different planning efforts
- Multidisciplinary collaborations and the role of planners
- Planning education and training
The APA Foundation challenges funders, planning research institutions, planning scholars, and planning practitioners to engage with the Research Agenda above.

We encourage funders to review the issues in this agenda, both to identify areas of alignment with their existing programs and priorities and to inform future research offerings. By focusing attention on these issues, we also hope to inspire cooperation or collaboration among funders to sponsor efforts to fill complementary knowledge gaps.

We encourage public and private institutions that conduct applied planning research to establish or expand programs that seek to fill knowledge gaps associated with the issues in this agenda. These issues deserve and require teamwork and sustained institutional focus.

We encourage planning scholars to align their research activities with the issues in this agenda. Each issue will require both basic and applied research activities to close knowledge gaps, and individual researchers, both inside academia and working independently, are necessary to cover the breadth of these gaps.

We encourage planning practitioners to explore the issues in this agenda with the communities they serve. By documenting their planning-process–based experiences with these issues, practitioners can contribute to the collective knowledge base of the profession.
The Research Agenda above represents the culmination of a multiyear process, commissioned and led by the APA Foundation (see Figure 1). Throughout this process, APA staff provided administrative support, and representatives from McKinley Advisors served as process facilitators. However, the substance of the agenda relied on the efforts of four workgroups, with oversight and guidance from a steering committee composed of six proven leaders in the planning profession (see Acknowledgments).

Each workgroup comprised a diverse set of subject matter experts charged with developing research priorities for a broad, but distinct, domain of planning research. Additionally, all workgroups considered how their respective domains intersected with five crosscutting themes: equity, sustainability, technology, health, and resilience.

During the first stage of the FutureShape process, workgroup members generated, discussed, and revised potential problem statements for their respective domains. Next, APA invited its most distinguished members—Fellows of the American Institute of Certified Planners—to suggest additional problem statements for consideration through an online form. Then, APA encouraged all APA members and the wider planning community to participate in an online survey designed to rank the full set of potential problem statements and identify potential gaps.

Finally, workgroup and steering committee members gathered in Chicago on August 5–6, 2019, to address gaps, refine problem statements, and finalize research themes. After the convening, participants had a chance to review and comment on revised problem statement drafts before APA staff translated their work into the agenda presented above.
FutureShape: A Research Agenda for the Planning Profession

Figure 1. FutureShape Process Timeline

- **Facilitator and Volunteer Selections**
  - Spring/Summer 2018

- **Assignment #1**
  - Identify Knowledge Gaps
  - November 2018

- **Workgroup Call #1**
  - Discuss Knowledge Gaps
  - November/December 2018

- **Assignment #2**
  - Identify Research Themes
  - December 2018/January 2019

- **Workgroup Call #2**
  - Refine Research Themes
  - January 2019

- **Assignment #3**
  - Develop Problem Statements
  - March 2019

- **FAICP Members Draft Additional Problem Statements**
  - March 2019

- **External Feedback on Problem Statements**
  - April/May 2019

- **Workgroup Call #3**
  - Prioritize Statements and Refine Themes
  - May/June 2019

- **Final Volunteer Call: Review Draft Agenda**
  - June 2019

- **Convening in Chicago**
  - August 2019

- **Final Agenda**
  - January 2020
Applied research: A systematic process of inquiry designed to help solve a previously identified problem. Applied research for the planning profession often focuses on identifying, describing, or assessing the objectives planners pursue through their work or the education, training, and interventions planners use to meet their objectives.

Basic research: A systematic process of inquiry designed to create or expand knowledge about fundamental principles. Basic research for the planning profession often focuses on identifying, describing, or assessing the physical and social systems that comprise or shape communities.

Community indicators: Quantitative or qualitative measures of social, physical, or economic conditions or trends that affect the well-being of a community.

Decision-support tools: Information and communication technologies designed to improve decision-making processes. Decision-support tools for the planning profession include, but are not limited to, geographic information systems, scenario building software, and three-dimensional modeling.

Nature-based solutions: Solutions to societal problems that incorporate, or are inspired by, ecological processes.

Planning intervention: Any action designed to improve community conditions. Planning interventions include—but are not limited to—creating or changing processes, plans, policies, regulatory or assistance programs, partnerships and agreements, land uses or real property, infrastructure, or services.