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# Essential Elements for Developing/Expanding Comprehensive Cancer Control Programs: Design Options for State Health Agencies

# **Final Report**

# Prepared for

Division of Cancer Prevention and Control Centers for Disease Control and Prevention 4470 Buford Highway, NE Atlanta, GA 30341

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# **Executive Summary**

This report presents the results of a project conducted for the Division of Cancer Prevention and Control (DCPC) of the Centers for Disease Control and Prevention (CDC). The project was designed to provide information that CDC can use to prepare guidance for State Health Agencies (SHAs) developing comprehensive plans for cancer prevention and control. Case studies were conducted of cancer prevention and control programs in six states. Two of these – Michigan and North Carolina – had already initiated comprehensive cancer control programs. Four others – Arkansas, Illinois, Maine and Utah – were considering doing so in the near future. The majority of the project data were collected during site visits to states in mid-1998. Researchers met with SHA staff and other stakeholders in cancer prevention and control in the state.

# 1. State Health Agency Leadership and Commitment

cancer control plans were identified from the analysis of the case studies.

Comprehensive cancer planning requires strong leadership from the SHA with a commitment of one or more staff persons. Obtaining buy-in in advance from SHA leadership, state legislators and other policy makers is critical. SHAs must promote advisory committee ownership of the plan while providing guidance as needed to ensure that the plan is consistent with sound public health principles. Balancing the need for broad input with the necessity to accomplish a large amount of work in a short period of time requires that planning groups utilize small groups and task forces with technical and logistic support from SHA staff. Comprehensive planning may require up to a year of partnership development followed by a year for reviewing data and setting objectives.

# 2. Public-Private Partnerships

Effective public-private partnerships bring expertise and resources to comprehensive cancer control planning and implementation. Planning groups should

include a broad spectrum of partners with a stake in cancer prevention and control. Most especially, SHAs should actively facilitate the involvement of minority representatives in planning groups, monitor minority participation as planning progresses and act to improve minority participation if it declines. Planning groups should allow for differences in the ability of members to participate intensively in the process. Difficulty in attending meetings should not in and of itself limit membership on the planning group.

# 3. Access to Data and Scientific Expertise

Access to valid data and sound scientific expertise is needed to assess needs and identify gaps in cancer prevention and control programs. However, it may not always be possible to obtain complete and adequate data before making planning decisions. The planning group needs to utilize existing data sources to the fullest extent possible, develop new data sources where necessary, and enhance its capacity to analyze and apply data over time. It is especially critical that gaps in what is known about cancer risk in minority and underserved populations be addressed. Specific and measurable objectives and indicators of progress are an important outcome of the first cycle of planning.

#### 4. Resources

Funding to support both planning and implementation of comprehensive cancer control programs needs to be considered as part of planning. Even if the plan receives support from the legislature or from state agencies, resources are unlikely to be adequate to implement all of the strategies proposed. Ensuring resources for implementation requires that individuals be enlisted not only for their expertise, but also as representatives of organizations that can deliver on commitments. Planning groups should include all health sectors that are, or will be, involved in delivering the entire spectrum of cancer prevention and control services from prevention through treatment, rehabilitation, and palliation.

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# 1.0 Introduction and Background

This report presents the results of a case study project conducted for the Division of Cancer Prevention and Control (DCPC) of the Centers for Disease Control and Prevention (CDC) by the Battelle Centers for Public Health Research and Evaluation (CPHRE). The project was designed to provide information that CDC can use to prepare guidance for State Health Agencies (SHAs) developing comprehensive plans for cancer prevention and control. Case studies were conducted of cancer prevention and control programs in six states. Two of these – Michigan and North Carolina – had already initiated comprehensive cancer control programs. Four others – Arkansas, Illinois, Maine and Utah – were considering doing so in the near future. The study sought to:

- Document the process of comprehensive cancer control planning as it occurred in comprehensive states,
- Identify factors that facilitated or hindered the comprehensive cancer control planning process in comprehensive states,
- Describe assets for comprehensive cancer control planning in those states that had not yet begun this process, and
- Suggest support that will be needed for states that have not yet done so to undertake planning for comprehensive cancer control.

The data collection for the case studies was conducted in mid-1998 and the data reported here are current as of that time. All of the states that participated in the case studies have moved beyond the stage of planning observed in this study. The comprehensive

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<sup>&</sup>lt;sup>1</sup> In this report, we refer to Michigan and North Carolina as "comprehensive states" and Arkansas, Illinois, Maine, and Utah as "pre-planning states."

states have proceeded with implementation of their plans. For the pre-planning states, this document provides a baseline description of states immediately before they began comprehensive cancer control planning. A subsequent project will track the development of comprehensive cancer control planning and implementation in the four pre-planning states as well as in Kansas and Kentucky.

## 1.1 Background

A comprehensive approach to cancer prevention and control provides a means for public health agencies and the private health sector to build on recent gains in reducing the cancer burden in the United States. Cancer remains the second leading cause of death in the United States but the overall cancer incidence rate decreased 0.7% per year between 1990 and 1995.<sup>2</sup> However, decreases in cancer incidence vary by cancer site, gender, race and ethnicity. Minority populations, especially African Americans, have a disproportionately high cancer mortality rate. Integrated planning and the coordinated implementation of cancer prevention and control programs can reduce these disparities and improve the health status of the entire population by assuring that the full spectrum of prevention and control needs are met.

DCPC provides training and technical assistance to states for the prevention, early detection and treatment of cancer. Federal programs for cancer prevention and control traditionally are site-specific or risk factor-specific, reflecting either the legislation that authorizes their funding or agency budgets. DCPC works with state health agencies as well as national partners in five priority programs: the National Program for Cancer Registries, the National Breast and Cervical Cancer Early Detection Program, the National Skin Cancer Prevention Education Program, the Colorectal Cancer Control Initiative, and the Prostate Cancer Control Initiative. Other CDC organizations implement programs to address risk factors such as tobacco use and occupational and environmental exposure to carcinogens.

Most state cancer control activities are supported by federally funded categorical programs because limited state funding is seldom adequate to support program initiatives at

<sup>&</sup>lt;sup>2</sup> Wingo, PA et. Al. "Cancer Incidence and Mortality, 1973-1995." Cancer 82 (1998):1197-1207.

the state level. Within SHAs, site-specific cancer programs often operate in different organizational entities than do risk factor-specific programs. State agencies responsible for cancer registries, vital statistics and surveillance may also be organizationally separate from cancer control units. Finally, cancer programs in the SHA may not be coordinated with health education, health promotion and outreach activities conducted by provider groups, private organizations, consumer groups, and community-based organizations.

Better integration of cancer control activities among all of the organizations involved in cancer prevention and control within states would reduce duplication of effort and improve the delivery of programs at the state and community levels. For this reason, CDC has worked with SHAs and partners in the private sector to build a comprehensive approach to cancer prevention and control, defined as "an integrated and coordinated approach to reduce the incidence, morbidity and mortality of cancer through prevention, early detection, treatment, rehabilitation and palliation."

In laying the foundation for this work, DCPC sponsored a number of discussions with SHAs, private organizations and experts in cancer control to explore the appropriateness and feasibility of comprehensive cancer control and to develop options for proceeding with such planning. One outcome of this exploratory work was a request for examples of effective approaches used by SHAs to plan comprehensively for cancer prevention and control. In 1998, CDC supported the conduct of multi-site case studies in response to this request.

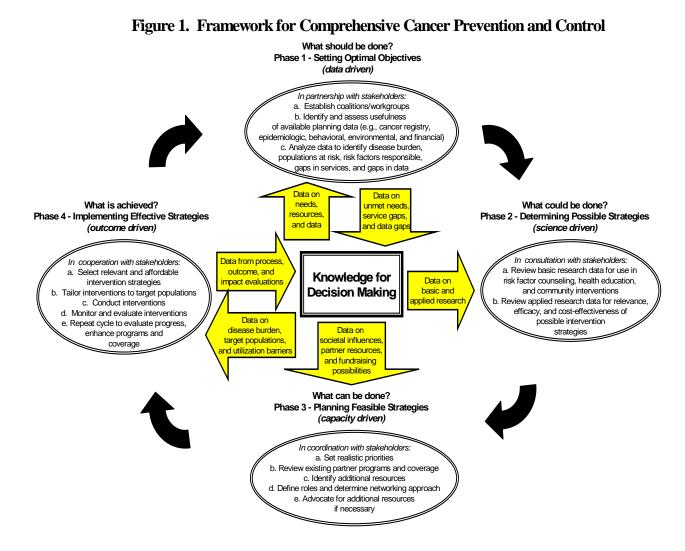
## 1.2 A Conceptual Model for Comprehensive Cancer Planning

The design of the case study project began with development of a model for effective comprehensive cancer control planning in SHAs. The model was based on CDC's consensus-building process with states and a review of published sources to identify the kinds of information needed to understand how comprehensive cancer control planning operates and the factors that indicate readiness to initiate such a process. The model also served as a template for building the case study protocol, organizing data collection, and coding data for analysis.

The model illustrated in Figure 1 proposes four phases of planning.

- Phase 1 Setting optimal objectives. In a comprehensive cancer control program, the
  SHA engages in a data-driven process of setting objectives. Objectives are based on
  information about cancer burden and risk factor prevalence in the state and a resource
  inventory of existing facilities and services. Objectives are defined to be measurable and
  time-phased.
- *Phase 2 Determining possible strategies*. Programs are designed or modified to meet the objectives with well-defined strategies. This part of the process should be guided by state-of-the-art medical and behavioral evidence about interventions that work.
- Phase 3 Planning feasible strategies. Planning for the implementation of strategies involves identifying and accessing resources (staff, expertise, health promotion materials, equipment and funding) for cancer prevention and control. In this phase, planners assess the resources that public and private organizations and individual stakeholders can bring to strategy implementation and assign roles to these partners. Strategies should include evaluation planning in their design.
- *Phase 4 Implementing effective strategies*. Planning is translated into implementation that results in desired outcomes. Ongoing monitoring and collection of evaluation data is part of strategy implementation.

Once the planning cycle has been completed, it begins again with a reassessment of the objectives based on evaluation, a reworking of the strategies, and implementation of improved strategies. A pool of data that are used to guide decisions is central to all phases of the planning process.



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## 1.3 Methodology

The multiple-site case study approach utilized a standard research protocol and a single set of instruments to permit comparison across six states on the key elements of programs and to maintain quality control of the research. (The detailed methodology for this project is shown in Volume II, Appendix C.) The protocol contained criteria for selecting states, a definition of the unit of analysis, the questions to be addressed, and procedures for data collection, data management and data analysis.

States were chosen using criteria defined by characteristics of state programs that are expected to affect cancer control planning by SHAs. We selected two states that had completed a comprehensive cancer control planning process (Michigan and North Carolina) and four states that had not yet begun comprehensive cancer control planning but were contemplating doing so (Arkansas, Illinois, Maine, and Utah). The matrix used to select states is shown in Appendix B.

The research design posed two levels of questions. Research questions defined the major topics and were derived directly from the elements of the conceptual model. Study questions were designed to produce the information needed to answer the research questions during data collection and were used to develop study instruments. The unit of analysis was the set of activities directed to the planning, design, implementation and evaluation of cancer prevention and control programs by the SHA and its planning partners.

The majority of the project data were collected during site visits to states in mid1998. Researchers met with SHA staff and other stakeholders in cancer prevention and
control in the state. Persons interviewed included SHA cancer program directors and staff,
other SHA chronic disease staff, data management staff, members of community
organizations and providers who deliver services to clients of public health programs. Data
were augmented by a review of documents related to planning or cancer programs that were
provided by CDC and the states. A project database containing field interview data and
documentary data was developed to support the preparation of case study reports. Data were
analyzed using text analysis software. The cross-site analysis was performed by comparing

findings across comprehensive and pre-planning states for individual topics. Conclusions were derived from these comparisons.

# 1.4 Organization of This Document

Subsequent sections of this report summarize the findings and lessons learned from this project. Section 2.0 describes essential elements for comprehensive cancer prevention and control planning that were derived from the case studies. In Section 3.0 we present the lessons learned from the case studies that may be useful to other states that are engaged in similar planning processes.

The state-specific data on which the report is based are tabulated in Appendix A to this volume. Site selection criteria and a matrix characterizing all states on these criteria is shown in Appendix B, also in this volume. Complete documentation of the case study approach is provided in a companion volume to this report. This volume includes the detailed methodology for the case studies (Appendix C), the protocol used to govern data collection (Appendix D), the data collection instruments used in site visits (Appendix E), and the code book that was used to support the qualitative data analysis (Appendix F).

# 2.0 Essential Elements in Comprehensive Cancer Control

Four elements emerged from this study as essential for the design and implementation of comprehensive cancer control plans in states:

- Strong leadership from the SHA with commitment of one or more staff persons,
- Effective public-private partnerships that bring expertise and resources to comprehensive cancer control planning and implementation,
- Access to valid planning data and sound scientific expertise to support effective planning and evaluation, and
- Funding to support both planning and implementation of comprehensive cancer control programs.

#### 2.1 State Health Department Leadership and Commitment

Willingness on the part of the SHA to devote staff, resources and attention to initiating and maintaining comprehensive cancer control is a necessary condition for such an effort. There needs to be consistent leadership from the SHA. In the two comprehensive states included in the case study, there was at least one individual – a champion – who kept the process moving forward over the two years of planning. SHA staff was dedicated to comprehensive cancer control. The SHA recruited and negotiated with private partners and coordinated with other government agencies – registries, vital statistics, environment, local health departments – to bring resources to the project. Effective communication with legislators and high-level policy makers in the SHA was also critical.

SHA participation in the comprehensive cancer control planning process differed somewhat between the two comprehensive states. In North Carolina, state officials were fairly visible in comprehensive cancer control planning. Members of the state agency that includes the SHA are voting members of the Advisory Committee on Cancer Coordination and Control (ACCCC) by statute, as are representatives of three other designated state agencies. Moreover, the Executive Director of the ACCCC was salaried by the SHA.

In Michigan, in order to ensure that the plan would be an initiative driven by the Michigan Cancer Consortium (MCC), the SHA ceded control of the process to the MCC and restricted its own role to one of facilitation and logistic support. No SHA staff was a voting member of the MCC. This step was taken because administrators of the agency in which the SHA was located made it clear that the planning body could not expect state funds for plan implementation. SHA leaders felt that, for partners to be willing to support implementation with funding and other resources, it was essential for them to have ownership of the plan.

The degree to which the SHA leads the planning process is less important during the early phases of planning – setting objectives and priorities – because all partners make a similar contribution to the plan at this stage. It is less feasible for the SHA to be a silent partner in implementation because the SHA is responsible for implementing public health programs, including federally funded initiatives like the National Breast and Cervical Cancer Early Detection Program (NBCCEDP). At the time of this study, SHA staff in Michigan were considering changing their role during the implementation phase, possibly becoming a collaborating agency on those activities within their purview. Michigan's approach to handle this transition may provide guidance to other states in the future.

#### 2.2 Public-Private Partnerships

SHAs cannot implement comprehensive cancer control without strong collaboration among public and private partners. All partners must relinquish some of their autonomy in the interest of coordinating and improving the efficiency of cancer prevention and control activities. This requires stable working conditions and a history of trust that can be expanded.

In Michigan and North Carolina, planning groups built on previous advisory bodies that were constituted to advise the SHA about cancer prevention and control. Two of the preplanning states had similar groups that might form the nucleus of a comprehensive cancer control planning group. Presently these groups consist primarily of providers and representatives of university-based cancer centers. The groups would need to be broadened to include community organizations and minority representation, private voluntary organizations, and other organizations and agencies with a stake in cancer prevention and control. In states where advisory groups do not currently exist, more preliminary work may be necessary to convene the necessary partners. In any case, planning facilitators should carefully consider what agencies and organizations – both public and private – are needed to develop and implement a comprehensive cancer control plan.

Representation from community-based organizations and minority and rural groups is essential because these organizations have access to racial/ethnic minorities and underserved populations. Organizers in the comprehensive states actively sought minority representation on planning bodies. Yet in both states, some minority representatives reported difficulty in maintaining participation and conveying their views to members with widely varying perspectives. Similar concerns were expressed by minority group representatives and rural residents in some of the pre-planning states. Despite the difficulty of securing minority and rural representation, state staff in both comprehensive and pre-planning states recognized that these groups must be recruited to planning bodies. Techniques such as rotating meeting sites, substituting conference calls for some meetings, and offering travel and per diem to members who must travel to meetings were suggested by respondents to facilitate participation by a broader planning group membership.

#### 2.3 Access to Data and Scientific Expertise

Access to valid planning data and sound scientific expertise is needed to assess needs and identify gaps in cancer prevention and control programs. In the comprehensive states, subcommittees used research results and data on needs and resources to produce measurable and time-phased objectives. Committees working on less well-studied topics, such as primary prevention, often had objectives that proposed a desired change in the direction of a program outcome over an indefinite time period.

Data on incidence, morbidity, mortality, risk factors and health services are required for the state population and for large subpopulations, especially minority populations and underserved groups. Additionally, there must be access to state-of-the-art science on effective interventions for reducing the burden of cancer in the population. The experience of Michigan and North Carolina shows that private partners are critical contributors here. However, since the most important data sources for comprehensive cancer control planning are registries and BRFSS data managed by SHAs, epidemiological expertise within the SHA is needed to support utilization of these sources.

Both comprehensive states improved data utilization by strengthening relationships between those who manage the data and those who use it. In Michigan, a staff person was designated to be a liaison between managers and users of state data sources. North Carolina worked with state staff and with partners in universities to compile data. States beginning a comprehensive planning process can build on the experience of Michigan and North Carolina in linking these components of public health programs.

Data on cancer burden and trends and the availability of health resources to address them are important both to planning and to the evaluation of planning and implementation. Local area data on community-level cancer burden, needs and resources were reported in both comprehensive and pre-planning states as necessary support to planning. Community-level prevalence data are especially important to appropriate delivery of interventions in states that seek to reach isolated rural populations and ethnic minorities. There was minimal evidence of community-level research into the distribution of cancer in either the comprehensive or pre-planning states, with the exception of Michigan and Illinois.<sup>3</sup>

High-quality data are also critical for evaluating planning and implementation. Data needed for evaluation must be specified prior to planning and implementation so that the

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<sup>&</sup>lt;sup>3</sup> Michigan had used funds from a Kellogg grant to develop data for community health assessments by local health departments. Some community-level cancer data were compiled in Illinois as part of the IPLAN process.

necessary information is collected. Postponing consideration of evaluation until after planning has begun reduces the usefulness of evaluation results for improving the process and choosing among alternative implementation strategies. Programs and strategies may not be evaluable because baseline data or process data were not accumulated during implementation. Delayed evaluation design also increases the risk that observed outcomes cannot be attributed to the program because it is not possible to distinguish between the effects of program design, program implementation and program context on outcomes.

#### 2.4 Resources

Comprehensive cancer control requires funding to support both the planning process and the implementation of strategies. In the comprehensive states, SHA support for planning consisted largely of staff time and materials. Some respondents in both states said that it would have been helpful to have funding to offset some of the costs of participation for planning group members, especially minority representatives and cancer survivors.

Implementation of the plan requires a direct allocation of resources to address priorities emerging from the plan. Funding that is not restricted by the requirements of categorical programs is desirable if those high-priority objectives that do not fit into categorical programs are to be met. In all of the pre-planning states, direct state funding of cancer prevention and control programs is limited and tends to be categorical in nature. Funds from tobacco taxation also tend to be designated for specific activities rather than being made available for general cancer prevention and control.

The requirement in Michigan that MCC members commit to support plan implementation as a condition of their membership on the planning group was one solution to obtaining resources. The effectiveness of this approach in maintaining viable programs had not been evaluated at the time of this study. However, this commitment can be expected to lead to new and more coordinated resources for cancer prevention and control across the state.

## 3.0 Lessons Learned

In this section, we present lessons learned during this study. We derived these lessons from the development of study results, but they also incorporate advice given by states that had completed comprehensive cancer control planning.

# 3.1 SHA Leadership and Commitment

#### 3.1.1 Defining the Role of the SHA

Those entering a collaborative planning process – including those who initiate it – relinquish a degree of control and agree to accept the group priorities and coordinate their own actions with those of other members. The extent to which this happens will vary from state to state. SHAs must facilitate strong advisory committee ownership of the plan, while providing guidance to ensure that the plan is consistent with sound public health principles. SHA staff may wish to keep a low profile during planning to ensure that all planning partners have ownership in the plan that is produced. However, at the time of implementation, SHAs will need to act on the plan in a way that will meet their responsibility as the public health agency in their state. The role of the SHA in both planning and implementation should be defined explicitly early in the planning process to reduce the potential for more difficult negotiations later in the process.

#### 3.1.2 Obtaining Buy-in to Comprehensive Cancer Control Planning

Obtaining buy-in in advance from those whose support is necessary for success is critical, as is keeping these individuals informed of milestones and decisions as the initiative progresses. The identity of these individuals and how early they are brought into the process can be expected to vary from state to state. SHA staff can set the political groundwork for planning by maintaining good communication with SHA leadership, state legislators and other policy makers. Peer exchanges among SHA staff from several states at various stages

in planning could become an opportunity to share experiences with obtaining political support at the state level. Peer exchanges can occur in any forum where SHA staff meet – national meetings of cancer program and data staff, training activities, Internet discussions and newsletters. Partnering with national organizations, such as the ACS, may also be helpful in convening these discussions and supporting legislative education.

## 3.1.3 Utilizing Small Groups to Accomplish Tasks

Balancing the need for broad input with the necessity to accomplish a large amount of work in a short period of time requires delegating much of the work to subgroups of the partnership. Planning groups should utilize small groups and task forces to complete their work. In the comprehensive states, most planning was accomplished by small working groups – subcommittees, task forces, work groups and *ad hoc* committees – with technical and logistic support from SHA staff. This is an efficient organization for reaching decisions, producing interim products and meeting timelines.

The way in which these groups are organized matters less than that the members are given clear directives and definite but reasonable timelines. It is also important to allow both cross-cutting and risk factor-specific perspectives to be represented on task forces. For example, Michigan organized advisory committees according to cancer sites and risk factors but also considered primary prevention and systems issues. North Carolina organized subcommittees for cross-cutting issues but subdivided several of these into cancer site-specific work groups. However, to promote partner ownership of the process and the plan itself, all decisions about priorities should be made in the larger planning group.

## 3.1.4 Setting Realistic Time Frames

All participants in planning should work within realistic time frames. While the planning process should be kept moving at a reasonable pace, flexibility around timelines may be needed. The experience of the comprehensive states shows that up to a year of groundwork may be required before the partnership can begin to actively plan. Another year should be allowed for reviewing data and setting objectives. Partners cannot develop objectives faster than consensus can emerge in the planning group. If this process is propelled too rapidly, important objectives may be lost because of dissension or objectives may be defined that are too vague to be measurable.

## 3.2 Public-Private Partnerships

# 3.2.1. Ensuring Minority Participation in the Planning Process

Unless hard-to-reach segments of the population can be reached with health education messages and early detection efforts, it will not be possible to reduce the cancer burden substantially. Involving representatives of minority and underserved populations in the planning process is thus important to ensure that proposed strategies meet their needs and can be successfully implemented. SHAs should actively facilitate the involvement of minority representatives in planning groups. It is necessary to be proactive in obtaining minority representation by visiting minority communities and identifying potential members who can speak for their communities. Planners should monitor minority participation as planning progresses and act to improve minority participation if it is observed to decline at some point in the process. If minority membership is to be truly representative, some minority members may need to have funding to offset travel expenses and time.

## 3.2.2 Allowing for Varying Levels of Partner Participation

Giving voice to a broad range of partners in all regions of the state requires flexibility and diligent follow-up on the part of planning facilitators. Planning groups should allow for differences in the ability of members to participate intensively in the process. Both comprehensive states encountered problems in accommodating meetings to the schedules and competing commitments of members. Difficulty in attending meetings should not in and of itself limit membership on the planning group. There are other contributions that can be made in compiling data, reviewing products and providing feedback. However, members who missed a meeting should be briefed in writing or by telephone so that meeting time is not spent updating absent members about events at the previous meeting.

#### 3.3 Access to Data and Scientific Expertise

## 3.3.1 Mobilizing Data for Planning

While it is important that planning and priority-setting for comprehensive cancer control is based on sound evidence, data and research findings are not equally available or accessible in all areas where the partnership will need to make decisions. Additionally, not all partnerships will have access to the same level of data analysis and presentation skills. While decision-making based on evidence is a goal, planners may need to move forward in some instances without sufficient evidence. The important outcomes are that existing data sources are used to the fullest extent possible, that new data sources are developed where necessary, and that the capacity to analyze and apply data is enhanced over time.

#### 3.3.2 Building Local Data on Minority and Underserved Populations

Evidence from this project shows that local data on the needs of minority and rural populations and the resources available to them do not exist in a usable format in many states. The gaps in what is known about these populations must be addressed if plans are to serve sectors of the population with a high risk for undetected or untreated cancer. None of the states that were part of this study had adequate data on the incidence, mortality, morbidity, and cancer risk for African-American, American Indian and other minority

groups. Data on rural populations and community-level data also needed to be compiled in some states. Developing data for planning may be among the high-priority objectives resulting from the first cycle of planning.

#### 3.3.3 Developing Models for Measurable Objectives

Comprehensive cancer control partnerships are likely to include a broad membership with varied levels of experience in group process and consensus building. Providing members with guidelines and examples is an important role for planning facilitators. Models for measurable objectives would be especially helpful guidance to planning groups in refining their own objectives and phrasing them in ways that are time-phased and measurable. Otherwise objectives may be developed that are so general that they can be applied to almost any intervention. If specificity is lacking in objectives, they cannot drive decision-making about alternative allocation of resources to programs. Broad goals and objectives may lead to implementation outcomes no different than those that would have occurred without any planning. This is an area where technical assistance can be provided directly by CDC or by expert consultants.

#### 3.3.4 Developing Measurable Indicators

Measurable indicators of performance must be developed as part of the objective-setting process. This is necessary for subsequent monitoring of the implementation process. Evaluation should be viewed as part of planning, not as a separate effort. For evaluation to be integrated into the planning process, planners should define the accomplishments that will be considered success at the time that objectives are developed. Refinement of performance indicators and their incorporation into the plan should be continued as part of the process of determining strategies and planning programs. A concrete strategy for developing indicators will ensure that planners begin thinking about evaluation early in the process.

#### 3.4 Resources

# 3.4.1 Ensuring Resources for Implementation

Explaining to partnership members early in the process that they are being called together both to plan and to implement the plan is crucial if the plan produced by the group is to be used to guide statewide efforts. Even if the plan receives support from the legislature or from state agencies, resources are unlikely to be adequate to implement all of the strategies proposed. Furthermore, because this is a comprehensive plan covering the continuum of care from prevention to palliation, some activities will be within the responsibilities of private partners.

Planning groups should include members who can commit staff and financial resources from their organizations to support implementation of the plan. An important lesson to be learned from comprehensive states is that resources for implementation should be built into the planning process from the beginning. Planning groups should include all health sectors that are, or will be, involved in delivering the entire spectrum of cancer prevention and control services from prevention through treatment, rehabilitation, and palliation. Individuals must be enlisted not only for their expertise, but also as representatives of organizations that can deliver on commitments.

# Appendix A Data Tables

**Table A-1. Framework for Cancer Control Planning in Comprehensive States** 

	Michigan	North Carolina
Setting Optimal Objectives	Objectives were developed by five cancer site-specific subcommittees of the planning group, the Michigan Cancer Consortium (MCC), using a standard format developed by the MCC Executive Committee. Crosscutting priorities were developed for primary prevention and systems change by synthesizing priorities developed in these areas by the site-specific committees. Work on primary prevention objectives occurred in a subcommittee created for that purpose. Systems change objectives were developed by a workgroup comprised of the MCC Executive Committee and several volunteers.  A measurable change, a target population, and a target date for completion were specified for each of the cancer site-specific objectives and one of the primary prevention objectives. Four infrastructure development objectives referred to status changes (e.g. increases in desired outcomes).	The process for setting objectives was determined by each subcommittee of the Advisory Committee on Cancer Coordination and Control (ACCCC), and each subcommittee used a unique process. For some categorical programs, objectives already set for these programs during previous planning were incorporated into the comprehensive cancer plan.  Measurable, time-phased objectives were defined for screening outcomes where science was available to support them. Infrastructure development, policy, and education objectives defined desired outcomes without a measure specified. Prostate cancer and pain control objectives were also defined by desired outcomes.

**Table A-1. Framework for Cancer Control Planning in Comprehensive States** 

		T
	Michigan	North Carolina
Determining Possible Strategies	Objectives and priorities were determined by reviewing available data and scientific literature on mortality, incidence, relative survival, quality of life and feasibility of intervention. Registry data were obtained from the statewide registry and SEER (for a portion of the state). BRFSS data were used as were Blue Cross/Blue Shield data obtained from partners. A scarcity of data on cancer risk and services available for minority populations was reported by respondents from minority groups. Subcommittees of the MCC reviewed scientific literature and data to identify prevention and control strategies for each cancer site. Alternative strategies were assessed according to the strength of the scientific evidence for their potential impact on cancer mortality, incidence, relative survival, and quality of life and according to the feasibility of their implementation.	Registry data, surveillance data, and data from provider and university partners were used to assess needs, gaps and resources. These were supplemented by demographic data and data on health services available from the state. Use was made of health services and epidemiological data contributed by partners from academic institutions and cancer centers based on their own data collections. For example, data on the geographic distribution of health resources came from the Sheps Center for Health Services Research at the University of North Carolina. A scarcity of data on cancer risk and available services for minority populations was reported by respondents from minority groups.  Subcommittees of the ACCCC reviewed literature, registry data, and data from private partners to select prevention and control strategies. Strategies were chosen that the scientific evidence suggested would best address the needs identified using data. Draft subcommittee plans were sent to scientific experts for review. Following this review, each subcommittee finalized its strategies.
Planning Feasible Strategies	Objectives were prioritized by the MCC using a group process. The top ten objectives in each of the seven topic areas (lung cancer, breast cancer, cervical cancer, prostate cancer, colorectal cancer, primary prevention, and systems change) were forwarded to the MCC, and reduced from 70 to 39 using a mail-in vote. This was followed by a consensus building meeting of the entire MCC in which participants reduced the 39 objectives to a subgroup of 10 that would be implemented first. It was required that at least one objective from each	Priorities were established differently in each subcommittee. All decision-making was made in the subcommittees and was not synthesized prior to consideration by the entire ACCCC. The ACCCC accepted all the priorities. The only discussion was on prostate cancer.  Priorities were then incorporated into the section of the plan produced by the

**Table A-1. Framework for Cancer Control Planning in Comprehensive States** 

		T
	Michigan	North Carolina
	of the seven topic areas be selected. As a result of the group process, three additional objectives were chosen in the areas of infrastructure development and systems change for a total of ten.	subcommittee that generated them. The ACCCC committed to review evidence and proposed to reconsider priorities in two years. There are no data on whether this was done.
Implementing Effective Strategies	As a condition of membership on the MCC, organizations represented were asked to allocate staff and resources to implementation of the plan at the appropriate time.  Organizations represented on the MCC agreed to either convene or collaborate in developing action plans for each of the priority objectives. For each of the ten priority objectives, at least one organization volunteered to take the lead in initiating implementation.  Implementation was originally to be conducted during a two-year period but the time period has been extended to five years.  CDC implementation funding was received in 1998.	A lead organization and partners assumed responsibility for implementing each strategy using the overall ACCCC work plan.  Funding for implementation was sought from the state legislature, private partners, and federal funding sources. The ACCCC had a small "seed money" fund (\$250,000 in 1997). In 1998, \$140,000 of this fund was allocated by the ACCCC for priority activities.  CDC implementation funding was received in 1998.
Monitoring and Evaluation	There was a collaborative approach to evaluation that involved the state health agency and partners.  The MCC began planning for evaluation soon after the MCC itself was reorganized for comprehensive cancer planning.  The MCC prioritization process was evaluated and mid-course corrective action was taken. Evaluation of priority setting will be used to improve the process during subsequent planning cycles.  Evaluation was supported in part by a state health agency contractor.	The ACCCC Evaluation Subcommittee was convened in January 1997 and was preparing for an evaluation of plan implementation at the time of this study. At the time of this study, the ACCCC was monitoring the implementation process and had begun to plan for monitoring outcomes. A lack of early evaluation planning was perceived as a problem by respondents. Delayed evaluation planning meant that the planning process itself might not be evaluable because planning was underway before the data requirements of the evaluation were specified.

# **Table A-1. Framework for Cancer Control Planning in Comprehensive States**

	Michigan	North Carolina
Periodic Review	Regular revision of the plan is envisioned. The initial intent of the MCC to revisit priorities every two years may not be feasible. At the time of this study, a 5-year planning cycle was being considered.	Regular revision is planned. The next round will cover 2002-2007 and was planned to begin in 2000.
Length of the Planning Period	Approximately 18 months, early 1997-June 1998.	Seventeen months, January 1994-May 1996.

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States		Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah
Description of the cancer advisory boards to the state health agency on cancer prevention and control <sup>4</sup>	The Michigan Cancer Consortium (MCC) began in 1987 as a legislatively mandated advisory body to the state health agency and the legislature on cancer. It was re- organized to plan and implement comprehensive cancer control in 1997.	The Advisory Committee on Cancer Coordination and Control (ACCCC) is a legislatively mandated advisory body to the state health agency and legislature on cancer. Planning is part of its legislative mandate.	The Breast Cancer Control Advisory Board (BCCAB) was legislatively mandated in 1997 to advise the state health agency on breast cancer control.	At the time of this study, there was no statewide advisory body for any cancer that included both the state health agency and external experts. A state health agency cancer planning work group was being organized.	The Cancer Prevention and Control Advisory Committee (CPCAC) was legislatively mandated in 1987 to advise the state health agency and legislature on cancer prevention and control.	At the time of this study, there was no statewide advisory body for any cancer that included both the state health agency and external experts.
Description of statewide cancer-related coalitions	The MCC was the active coalition for cancer prevention and control at the time of this study. Previously, statewide coalitions were built around breast and cervical cancer and around tobacco under the National Cancer Institute (NCI) Assist program.	The ACCCC was the active coalition for cancer prevention and control at the time of this study. Previously, there was a Cervical Cancer Task Force. Breast and cervical cancer coalitions and tobacco coalitions were not reported by respondents.	The Arkansas Cancer Control Coalition convened public and private experts on cancer along with consumer and advocacy group representatives for the purpose of planning for breast and cervical cancer control programs.  Ten to 15 community coalitions for tobacco control.	The Illinois Coalition Against Tobacco. Illinois respondents reported a breast cancer advisory committee. However, a breast and cervical cancer coalition was not mentioned.	Respondents mentioned the Maine Breast Cancer Coalition, the Partnership for a Tobacco-Free Maine, and the Maine Coalition on Smoking or Health.	Coalition for a Tobacco-Free Utah, Fit Kids Utah (comprehensive school health), Triad (coalition of the ACS, providers and Cancer Registry staff around cancer research). There was a Breast and Cervical Cancer group formed in 1993 to do planning under the NBCCEDP, but it is not currently active.

<sup>&</sup>lt;sup>4</sup> In comprehensive states, these are the planning groups. In pre-planning states, these are groups outside of the health department that provide advice and guidance to the health department around cancer prevention and control issues.

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States		Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah
Organization of the statewide planning group or advisory board	An executive steering committee, five cancer site-specific advisory committees, and a committee on primary prevention. A work group was formed to consider systems change. Other work groups were defined for specific tasks.	An executive committee with five subcommittees (prevention, early detection, care, legislation and education, and evaluation). <i>Ad hoc</i> work groups and task forces were formed for specific issues.	The BCCAB has no subcommittee structure	Not applicable	CPCAC has no subcommittee structure	Not applicable
Leadership of the planning group or advisory board	Two co-chairs elected from the MCC membership.	A chair elected from the ACCCC membership. The Secretary of DHHS was an elected vice-chair at the time of this study	A chair elected by the BCCAB membership.	Not applicable	A chair elected by the CPCAC membership.	Not applicable

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States			Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah	
Membership of the planning group or advisory board.	Bylaws for the MCC specify that the consortium shall have up to 39 voting members including nine permanent members, up to 25 rotating members at large who were chosen for their individual expertise.  The current configuration of the MCC comprises 6 members from cancer centers, 4 from health insurers, 19 from providers or provider organizations, 1 from a community organization, 1 from the Intertribal Council of Michigan, 1 from the American Cancer Society (ACS).  With the exception of the at-large members, individuals served as representatives of organizations.  There were no voting members from the state health agency.	Twenty-four voting members were specified by the 1994 legislation. These included 2 members from the state health agency, 3 members from other state agencies, and 6 legislators. Four members were recruited from cancer centers, and 6 from provider organizations. There were two cancer survivors and one ACS representative. Numerous nonvoting members participated in planning and worked on subcommittees.	Eight members are appointed by the governor. The eight members specified by the legislation included 2 oncologists, 1 women's health advocate, and 3 representatives from provider organizations. The group was also required to include representatives from the American Cancer Society, and the Susan B. Komen Foundation. There are no state health agency members.	Not applicable	CPCAC has 14 members: half appointed by the governor and half designated by the legislature. The types of professional expertise required are specified in the legislation, and included medicine, oncology, medical and biological sciences, hospital administration, nursing, medical record administration, hospital tumor registry operations, health promotion and education, epidemiology and biometry.	Not applicable	

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States			Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah	
Minority group input to cancer planning	Minority groups represented on the MCC included the Black and Hispanic Nurses Association, the National Medical Association, and the Intertribal Council of Michigan. Some minority group members noted difficulties to participation by representatives of minority groups on the MCC and perceived that minority group concerns were not accorded a high priority by the MCC as a whole.	One slot on the ACCCC was designated for a minority professional organization, the Old North Medical Society. The state Office of Minority Health reviewed drafts of the plan.	There is no required minority representation on the BCCAB. The Office of Minority Health and the Little Rock Black Nurses Association participate in the Arkansas Cancer Control Coalition. Some minority group members perceived a lack of meaningful involvement in cancer planning.	The Division of Minority Health (DMH) was represented in the Cancer Control Internal Work Group.	There was no specific minority involvement in state cancer planning.	The Ethnic Health Program in the state health agency was represented on the tobacco coalition and was involved in previous strategic planning efforts. The Ute tribe also participated in a previous cancer strategic planning process.	
Planning experience of the state health agency	A Technical Development in Health Agencies (TDHA) grant funded by NCI to build breast cancer and tobacco control coalitions was awarded in the late 1980s.	A previous Cervical Cancer Task Force developed recommendations, but did not implement them. NCI funded a Data Based Intervention Research (DBIR) project from 1988 to 1993.	Breast and Cervical Cancer Plan (undated draft). The state health agency is conducting statewide health planning.	Strategic planning for osteoporosis, 1996. Local health planning process modeled on CDC's Approach to Excellence in Public Health (APEXPH), 1994-present. NCI-DBIR, 1987. Planning and coalition building around tobacco (IMPACT and RWJ Smokeless States).	Breast and Cervical Health Plan, 1998. State health plan, 1997. DBIR, 1993. A tobacco prevention and control plan was in process at the time of this study.	State health plan, 1998. Diabetes plan, 1994. Cardiovascular plan, 1996. A tobacco prevention and control plan was in process at the time of this study.	

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States			Pre-Planning States		
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah
State health agency participation in the planning process	The state health agency's Cancer Team provided 10.5 full-time equivalents (FTEs) to support MCC planning. This included state health agency staff and consultants under contract to the state health agency.	The state health agency employed a full-time executive director and an administrative assistant to support ACCCC. The state health agency also staffed each subcommittee. Graduate assistants from partner institutions provided additional staff support.	Because this study was conducted only one year after the BCCAB was legislatively mandated, no state health agency role was established at the time of the study. State health agency staff was attending BCCAB meetings.	At the time of this study, two internal work groups were beginning work on comprehensive cancer planning. A Cancer Control Planning Work Group is made up of staff from the Chronic Disease and the Health Promotion Divisions. The Cancer Control Internal Work Group convened high-level state health agency officials from units outside of Chronic Disease and Health Promotion to coordinate planning.	At the time of this study, a Bureau of Health Cancer Team was coordinating and integrating cancer related activities within the state health agency. State health agency staff also were attending CPCAC meetings, preparing materials on request, and facilitating access of CPCAC to resources and partners.	Not applicable

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States			Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah	
Organization of cancer programs in the state health agency	The Cancer Prevention and Control Section in the Division of Chronic Disease facilitated the MCC. This section also administers Healthy Michigan funds. Tobacco control is located in a Health Promotion Division. The Cancer registry is in the Vital Records Division. The BRFSS is in an Epidemiology Services Division. Public health is located in a superagency that also includes substance abuse, mental health and Medicaid.	The Cancer Control Branch in the Division of Community Health supports the ACCCC and the state cancer control program. Tobacco control is located in a Health Promotion Section. The Cancer Registry is in the Department of Cancer Surveillance, North Carolina Center for Health and Environmental Statistics. The BRFSS is in the Division of Epidemiology. Public health is in a super-agency that also includes human services.	Cancer programs and the cancer registry are in one Chronic Disease Division within one of six state health agency Bureaus. The 5-A-Day program, the Center for Health Statistics (BRFSS) and epidemiology are located in different bureaus.	The BCCP program is in an Office of Women's Health. The IMPACT program is in the Division of Chronic Disease. The 5-A-Day program is in Health Promotion. The Cancer registry is in the Division of Epidemiologic Studies. The BRFSS and vital statistics are in the Center for Health Statistics.	All cancer programs, including the Cancer Registry, were located in one division. The Bureau Cancer Team coordinated activities across all units in state government that conduct any activities that include cancer prevention and control as part of their scope of work.	The BCCP is in the Chronic Disease Bureau. Tobacco control is in the Bureau of Health Education. Data sources for cancer prevention and control are found in several offices, but the state health agency has a datacoordinating group that works across bureaus.	

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States		Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah
State funding for cancer-related activities	Healthy Michigan funding from the tobacco tax made about \$2.5 million available for cancer programs in the state health agency, including the program on comprehensive cancer control planning.	\$250,000 was allocated by the state legislature to support ACCCC initiatives in 1997-98. Initiatives funded included health promotion in nutrition and cancer prevention, skin cancer prevention, colorectal cancer early detection, cancer pain control, central cancer registry improvements, and an FTE to provide staff support to the ACCCC. No additional information is available on state funding designated for cancer prevention and control during the study period. No funding from tobacco revenues was anticipated in North Carolina.	There is a state breast cancer program that is directed to uninsured and underinsured women ineligible for the federally funded BCCP program.  Legislation specifies that the state breast cancer program will be supported by tobacco tax revenues. However, the tobacco tax is not collected if the legislature appropriates at least \$3.2 million of general revenue to the Breast Cancer Control Fund and at least \$800,000 to the state Breast Cancer Research Fund. At the time of this study, the tobacco tax had never been collected because the legislature met these targets during the first year of the law.	Funding for cancer research comes from special license plates and income-tax check off. \$120,000 from the income tax check-off and another \$250,000 in state funds is reserved for cancer research. Local planning under IPLAN was supported by a federal Preventive Health and Health Services Block Grant.	Under 1997 legislation, \$13.5 million in tobacco tax revenues will be directed to a tobacco prevention and control program to be implemented at the local level. However, these funds will not be available for general cancer programming.	Funds are made available in each year by the legislature to deliver services under the state breast cancer program. In 1997, \$441,100 of state funding for cancer control was appropriated to this program.

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Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States		Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah
Types of planning partners <sup>5</sup>	American Cancer Society; provider associations; academic cancer centers; health insurers; community and minority group organizations.	American Cancer Society; provider associations; academic cancer centers, cancer survivors. No community organizations were specified as official members but representatives of these are present on ad hoc work groups.	American Cancer Society, Susan B. Komen Foundation; provider associations; academic cancer center; community health centers; community and minority group organizations.	American Cancer Society, Susan B. Komen Foundation, provider associations; academic cancer centers; community and minority group organizations.	American Cancer Society, American Lung Association, provider associations; managed care organizations, hospitals.	American Cancer Society, Indian Health Service, provider organizations; academic cancer center, community health centers, managed care organizations.
Data Sources Available	Registry data from the statewide registry and SEER (for a portion of the state); BRFSS data, and Blue Cross/Blue Shield data from partners. There was a reported lack of data on minority populations.	Registry data, surveillance data. There was extensive use of data contributed by provider and university partners. There was a reported lack of data on minority populations.	NPCR cancer registry, BRFSS data, vital statistics, hospital discharge data, research data from Arkansas Cancer Research Center.	NPCR registry, BRFSS, vital statistics, local data from IPLAN, hospital discharge data. Data on minorities is available from the state Center for Minority Health Services.	NPCR registry, BRFSS. KAP survey of screening issues and practice for breast and cervical cancer was done for the DBIR in 1995.	SEER registry; BRFSS; hospital discharge data; Utah health status survey. The Utah Population Database matches registry data with Latter Day Saints records and vital statistics.

<sup>&</sup>lt;sup>5</sup> Actual partners are presented in comprehensive states. Potential partners are presented in pre-planning states.

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States		Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah
Facilitators to planning reported by respondents	Strong leadership from the state health agency in facilitating planning. There was a legislative mandate for a cancer advisory board in the state. State funding for planning. Commitment of MCC members to implementation. Past experience with cancer planning.	Strong leadership from the state health agency facilitating planning. Strong advocacy for planning from outside the state health agency. Legislative mandate for planning with funding attached. Past experience with cancer planning.	An advisory board and a strong infrastructure for cancer prevention and control in the private sector.  Strong public-private linkages for cancer prevention and control.  Passage of Breast Cancer Act created state funds for breast cancer control.	State health agency leadership committed to comprehensive cancer control. At the time of this study, internal organization for comprehensive cancer planning was already underway. Precedent for comprehensive planning across public and private sectors in osteoporosis and several local efforts. Good data resources and expertise.	State health agency leadership committed to comprehensive cancer control.  An advisory group, and good coordination of cancer control programs within the state health agency and with private partners.  At the time of this study, the Bureau of Health had epidemiology support from a chronic disease epidemiologist under a four-year CDC/CSTE grant.	Support of coordinated, population-based planning was widespread among state health agency staff and potential private partners. Good data resources available from public and private sources.

Table A-2. Comparison of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States		Pre-Planning States			
	Michigan	North Carolina	Arkansas	Illinois	Maine	Utah
Challenges to planning reported by respondents	Defining the state health agency's role in program planning and implementation. Delays in obtaining data in a usable form. Keeping members informed when they missed meetings.	Limited staff resources for support of planning process Differences in opinion among ACCCC members about scientific issues. Allocating limited implementation funds to multiple priorities. Delays in obtaining data in a usable form. Competing travel and time commitments of ACCCC members. Difficulty including dispersed rural populations in planning.	Cancer control is not a high priority in state government. Lack of a chronic disease epidemiologist in the state health agency Reliance on categorical funding for cancer control. Limited experience with the use of data for planning. Difficulty including dispersed rural populations in planning.	Uncertain support from the state legislature for cancerrelated activities.  Limited state funding for cancer prevention and control.  Difficulty including dispersed rural populations in planning.	Uncertain support from the state legislature for cancer- related activities. State health agency staff stated that they could not add comprehensive cancer planning to their existing responsibilities because they are already over- burdened. Reliance on categorical funding for cancer control. Limited state funding for cancer prevention and control.	State health agency staff stated that they could not add comprehensive cancer planning to their existing responsibilities because they are already overburdened.  Limited state funding for cancer prevention and control.  Reliance on categorical funding for cancer control.  Difficulty including dispersed rural populations in planning.

Table A-3. Summary of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States	Pre-Planning States
Description of the cancer advisory board to the state health agency on cancer prevention and control	Both planning groups began as legislatively mandated advisory groups charged with providing expertise to the SHA and the legislature around cancer-related issues.  Michigan's group was reorganized from an advisory capacity to a planning and implementation function, while the North Carolina planning group was charged with planning by the legislature that authorized it.	Two of the pre-planning states have legislatively mandated advisory bodies similar to those found in the comprehensive states. Both have an advisory function rather than a specific planning mandate.  Two of the pre-planning states had no legislatively mandated advisory bodies at the time of this study.  A planning group was being organized in Illinois, but was internal to the state health agency.
Description of statewide cancer-related coalitions	At the time of this study, most cancer-related activities in the state were in some way linked to the work of the comprehensive cancer planning bodies. One state reported previous breast and cervical cancer and tobacco coalitions. The other did not report them.	All of the pre-planning states reported active tobacco coalitions. Two of them mentioned active coalitions for breast cancer. One state reported an inactive coalition that was formed in the past to support the NBCCEDP.
Organization of the statewide planning group or advisory board	Both planning groups had an executive committee and multiple subcommittees.  Both groups added subcommittees as the need arose (Primary Prevention and Systems Change subcommittees in Michigan and Evaluation in North Carolina).  Subcommittees were organized around cancer sites in Michigan and around types of activities in North Carolina.  Michigan created a special subcommittee on primary prevention.  Primary prevention was one of the five standing subcommittees in North Carolina.  In both states, extensive use was made of task forces and work groups to address specific issues.	The advisory groups in Arkansas and Maine had no subcommittee structure at the time of this study. All advisory activities were conducted by the entire committee.
Leadership of the planning group or advisory board	Both states had chairs and co-chairs elected by the voting membership. The Secretary of the Department of Health and Human Services was vice-chair in North Carolina.	Chairs of the advisory bodies in Arkansas and Maine were elected by the membership in a manner similar to that found in the comprehensive states.

Table A-3. Summary of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States	Pre-Planning States
Membership of the planning group or advisory board.	The size of the planning groups is 34 in Michigan and 24 in North Carolina.  Most members of planning bodies in both states were chosen as representatives of organizations rather than as individuals.  Both planning groups had a fairly large number of providers. Twenty-five of 34 designated members of the MCC (about 73%) were providers or representatives of cancer centers. Ten of 24 members of the ACCCC (about 42%) were in these two categories.  Representation of state government is different in the two states.  Michigan had no voting members from state agencies on its planning group, although members of the legislature were represented. In North Carolina, 5 of 24 members (about 21%) were from state agencies and 6 of 24 (25%) were legislators.  The American Cancer Society had representatives on both planning groups.	Cancer advisory groups in Arkansas and Maine are smaller than are those in the comprehensive states. Arkansas' group has 8 members; Maine's has 14 members.  Providers on the advisory group are defined by professional expertise rather than as representatives of organizations.  No state health agency members are designated in either state.  The Arkansas legislation mandates representation from the ACS and the Komen Foundation. The Maine law does not require such representation, although an ACS representative does participate in CPACAC meetings.
Minority group input to cancer planning	Planning groups in both states included representatives of minority provider organizations.  The MCC included a representative from the tribal council in the state.  North Carolina included the State Office of Minority Health in the planning group.  Respondents in both states reported challenges in obtaining and sustaining minority representatives for planning.	The State agency office responsible for Minority Health has worked with cancer planning efforts in the three pre-planning states with significant minority populations (Arkansas, Illinois and Utah).  Arkansas has a minority professional organization that participates on its state cancer control coalition, but not on the BCCAB.
Planning experience of the state health agency	Both states had previous NCI-funded cancer planning initiatives in the late 1980s.  Both states reported previous planning efforts for categorical programs in cancer and tobacco control.	All four states reported experience with planning for chronic disease control.  Two of the four (Illinois and Maine) had NCI-funded DBIR projects for cancer planning.  Breast and Cervical Cancer planning coalitions and other chronic disease planning were reported in three of the four states.  All of the states had some type of tobacco planning ongoing at the time of the study.

Table A-3. Summary of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

	Comprehensive States	Pre-Planning States
State health agency participation in the planning process	There was a large amount of staff support from the state health agency in both comprehensive states. Michigan estimated 10.5 full-time equivalents (FTEs) to support MCC planning, including staff and consultants. North Carolina reported two FTEs dedicated to planning, but many staff were involved on a part-time basis in staffing subcommittees.	None of the state health agencies in pre-planning states were providing support to cancer planning processes comparable to that provided in the two comprehensive states. Support being provided included attendance at advisory board meetings (2 states), and logistic support of meetings (one of the previous two states). In two states, there was no support provided to external advisory bodies, although one of these states was beginning to organize the health agency internally for planning.
Organization of cancer programs in the state health agency	In both states, categorical cancer programs were located in a different administrative unit than were tobacco control, cancer registries, and the BRFSS. Integration of these functions occurred in the planning group. In Michigan, additional integration occurred in an internal workgroup formed to coordinate cancer control programs within the state health agency.	Three of the four pre-planning states had categorical cancer programs, tobacco control, the cancer registry and the BRFSS located in more than one administrative unit. One state had all of these cancer programs in a single administrative unit. Three of the four states – including that with a single administrative unit - had crosscutting task forces in place to integrate cancer-related activities across the entire state health agency.
State funding for cancer- related activities	Both Michigan and North Carolina had state funding available for cancer programs. Michigan had about \$2.5 million in tobacco funds available for cancer programs, including support of the comprehensive cancer control planning process. North Carolina had \$250,000, allocated by the state legislature, to support initiatives resulting from the plan.	No pre-planning state had revenues to support planning and the implementation of plans. In two states, funding for state breast cancer programs were directed to service delivery for women who are ineligible for services under the federal BCCP. Illinois administers a small amount of funding from an income tax check-off that is available for cancer research but this cannot be used for programs.  Tobacco revenues are expected in Maine and may be available in Arkansas if appropriations for the state Breast Cancer program diminish. In both states, tobacco funds are designated for specific purposes (service delivery in Arkansas and community tobacco programs in Maine) and thus are not available for priority activities resulting from a comprehensive cancer plan.
Types of planning partners	Providers and provider organizations (2 states) Private advocacy organizations (2 states) Academic institutions (2 states) Community and minority group organizations (2 states)	Providers and provider organizations (4 states) Private advocacy organizations (4 states) Academic institutions (2 of 4 states) Community and minority group organizations (3 of 4 states)

Table A-3. Summary of Infrastructure for Comprehensive Cancer Control in Comprehensive and Pre-Planning States

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	Comprehensive States	Pre-Planning States
Data Sources Available	Both states used data from the statewide registry (SEER for part of Michigan). BRFSS data were used in one state. Data sources from outside of the health agency included Blue Cross/Blue Shield data in Michigan and information obtained from academic and provider partners in North Carolina.  Respondents from both states reported a lack of data on cancer epidemiology in minority groups and resources available for minority populations.	Reported data sources were similar to those found in comprehensive states. Three states have an NPCR cancer registry and a fourth has a SEER registry.  All four states reported availability of BRFSS data and vital statistics. Three states reported special data sources available from partners that could be used for planning  There was little evidence for systematic sources of data – i.e., data collected and reported at a regular interval for a known population – on the health needs of minority populations. One state said that they could obtain such data from the state minority health agency.
Facilitators to planning reported by respondents	Both comprehensive states had strong leadership from the state health agency in facilitating the planning group, and a mandate from their state legislatures supporting a statewide cancer advisory group in the state. Michigan had state funding for planning, and North Carolina had state funding for implementation of priority activities identified by the plan. Both had previous experience with cancer planning related to categorical programs.	In all of the pre-planning states, there was a commitment on the part of state health agency staff to conduct comprehensive cancer planning. Two of the states had already begun to organize for planning under the leadership of the state health agency.  Three of the four states had support and potential leadership from health care providers outside of the state health agency.  All four states had significant recent experience with cancer planning, chronic disease planning and other kinds of health planning at the state and local levels.
Challenges to planning reported by respondents	The high labor demands on state health agency staff of organizing and maintaining the planning process.  Maintaining involvement of planning group members in the efforts, especially with regard to rural and minority representatives.  Defining the role of the state health agency in implementation of the plan (Michigan).  Limited implementation funds for multiple priorities (North Carolina).	Two of the pre-planning states reported that they could not add comprehensive cancer planning to their existing responsibilities.  Three states spoke of restrictions on categorical funding for cancer control as a problem.  All four states referred to currently limited state funding for cancer prevention and control.  Uncertain future funding from the state legislature for cancer-related activities was identified in all four states.  Three states reported having had difficulty in the past with maintaining the participation of dispersed rural populations in planning because of distance and the limited resources of rural partners.  One state reported limited experience with the use of data for planning and lack of a chronic disease epidemiologist in the state health agency.

**Table A-4. Support Needs Identified for Comprehensive Cancer Control in Pre-Planning States** 

	Arkansas	Illinois	Maine	Utah
Staff support	Identified the need for a full- time equivalent staff person (FTE) to coordinate the planning process and maintain communication among participants. Also identified need for an epidemiologist to support the registry and the use of data for planning.	Identified the need for staff (FTEs) to support planning and help build planning infrastructure, especially during intense periods of activity.	Identified the need for an FTE to coordinate the planning process. Further noted that additional support is needed for cancer programs as they grow and become more complex.	Identified the need for staff dedicated to comprehensive planning.
Funding	Funding for infrastructure development.	Funding for cancer control planning.	Funding for infrastructure development at state and local levels.	Funding for the planning process; support for meals at meetings.
Training and Technical Assistance	Technical assistance is needed in management of the planning process.  The planning group also will need technical assistance in epidemiology if state health agency efforts to hire an epidemiologist are not successful.	Educating legislators, teamwork and collaboration.	Management, facilitation, communication among planning participants.	Guidelines for comprehensive cancer planning; assistance with the planning process.
Data	Data are needed to assess the cancer burden and health services needs in communities.  Cancer program evaluation data are needed to determine what cancer programs are effective.	More accessible registry data; data on screening made available in the registry. A literature review of effective public health approaches to cancer prevention and control.	Integration of data across sources, better community measures, research on the epidemiology of cancer in the state.	No support or needs were identified in this area.
Other	None.	Internal assessment in state health agency of capacity for planning; support for peer exchange.	Better relationships between the registry and research institutions.	Support for peer exchange.

## **Appendix B State Selection Criteria**

Criterion	Description	Values
Developmental	 Criteria	
Plan	The state has produced a written plan for cancer prevention and control. The plan should typically describe cancer burden for a state, define objectives for addressing the burden, and specify how objectives will be achieved.	C= The plan is comprehensive in nature; a stand–alone document that is not specific to a particular categorical program (i.e., breast and cervical cancer)  S= The plan for cancer control is not a stand–alone document, but a section or part of a general state public health plan
		BC= The plan is solely for breast and cervical cancer or another categorical program blank =There is no plan
		Source: CDC, review of available state plans.
Development	The level of state development of comprehensive cancer control.	C= Comprehensive: States that have had a planning process implemented for several years and that have moved ahead to implement at least parts of their plan
		P= Planning: States that have developed at least a draft plan, or are in the process of developing a plan, but have not yet moved on with implementation
		PP= <i>Pre-planning</i> : States that have not yet begun a planning process, but where at least some SHA staff are contemplating starting one, and/or the state is well prepared for a comprehensive approach
		NP= No Planning: No state plan, and little or not evidence that a comprehensive approach is being contemplated or is possible at the present
		Source: Battelle interviews with CDC staff, review of plans

Criterion	Description	Values
Structural/C	ontextual Criteria	
Structure	Whether an SHA is a Freestanding Independent Agency or a Component of a Superagency.	FI= SHA is a Freestanding Independent Agency CS= SHA is a Component of a Superagency  Source: "Public Health Agencies, 1995." Public Health Foundation
LHD	The state has local health departments (LHDs), defined as an governmental public health agency which is, in whole or in part, responsible to a substate governmental entity or entities. An entity may be a city, county, city-county, federation of counties, borough, township, or any other type of substate governmental entity. A local health department must have a staff of one or more full-time professional public health employees, deliver public health services, serve a definable geographic area, and have identifiable expenditures and/or budget in the political subdivision(s) it serves.	Y= Yes, state has LHDs N= No, state does not have LHDs  Source: "Public Health Agencies, 1995." Public Health Foundation. This source is an updated supplement to PHF's "Public Health Agencies 1991: An Inventory of Programs and Block Grant Expenditures."
SHU	The state has Substate Health Units (SHU) Public health units operated by the state health agency that provide direct public health services at the community level, e.g. health districts or regional health departments within the state	Y= Yes, state has SHUs N= No, state does not have SHUs  Source: "Public Health Agencies, 1995." Public Health Foundation

Criterion	Description	Values
C/GSP	The state has Contractual/Grant	Y= Yes, state has C/GSPs
	Service Provider (C/GSP)	N= No, state does not have C/GSPs
	Non-governmental agencies	
	that provide health or	Source: "Public Health Agencies, 1995." Public
	environmental services to the	Health Foundation
	community under grant or	
	contract from the state health	
	agency. They may be primary	
	care centers (i.e., neighborhood	
	health centers, HMOs, and	
	other ambulatory care	
	providers) or specialized health	
	care facilities such as substance	
	abuse clinics, HIV counseling	
	and testing sites, and family	
	planning clinics.	
State Funds	State funds (i.e. from a non-	Y = Yes, state funds are dedicated
	federal source) are dedicated to	N = No, state funds are not dedicated
	cancer control, categorical or	Source: Personal communication, CDC Staff
	otherwise.	VIII 1 1 1 1 C
Expenditures	The total public health	Whole dollar figure (in thousands of U.S.
	expenditures for a state	dollars)
	including direct SHA	Courses "Dublic Health Approise 1005 " Dublic
	expenditures, SHA	Source: "Public Health Agencies, 1995." Public Health Foundation
	intergovernmental grants to	Treatm I duration
	LHDs, and additional	
117	expenditures of LHDs.	V V
Waiver	The state has been approved for	Y= Yes, approved
	a statewide comprehensive Medicaid 1115 waiver. The	N= No, no waiver has been approved or
	1115 waiver allows states to	requested.
		Source: Health Care Financing Administration;
	conduct mandatory enrollment of Medicaid recipients into	National Association of State Medicaid Directors.
	managed care plans.	, and the second
BCCP	The length of time (in years) a	The number of years of funding from
DCCI	state has received program	inception to 1998.
	funding for National Breast and	Source: CDC, National Breast and Cervical
	Cervical Cancer Early	Cancer Early Detection Program contact list,
	Detection Program.	Summer 1997.

Criterion	Description	Values
Registry	The state has received NPCR funding from the CDC for planning or enhancement of a state cancer registry, or a state	YE= Yes, state has received NPCR funding or support for enhancement of a state cancer registry
	participates in the National Cancer Institute's SEER program.	YP= Yes, state has received NPCR funding or support for <i>planning</i> a state cancer registry
	This indicates a state's capacity to monitor the prevalence,	SEER=Yes, state participates in NCI SEER program
	incidence, and distribution of cancer. Also indicates a	Both= State receives funding/support from both CDC and NCI
	resource commitment to surveillance and production of	Blank=State has not received funding or support from CDC or NCI.
	data that can be used for planning.	Source: CDC, National Program of Cancer Registries (NPCR) contact list, Fall 1997.
DBIR	The state has participated in the National Cancer Institute's	RI= State was participant in Round 1 of the DBIR program
	Data-based Intervention Research Program (DBIR), and	R2= State was participant in Round 2 of the DBIR program
	in what round the state was a participant.	R3= State was participant in Round 3 of the DBIR program
		Blank=Did not participate in DBIR program Source: National Cancer Institute
Geographic/De	nographic Criteria	
U.S. Region	The Census region in which a state is located.	W= West MW= Midwest S= South NE= Northeast Source: County and City Data Book, 1994
Population	The population density of a	Number of persons per square mile.  Source: County and City Data Book, 1994
Density % Urban	A measure of the percent of the state population living in or near urbanized areas.	total state urban population/total state population  Source: County and City Data Book, 1994  total state urban population/total state population  Source: 1990 Census
% African- American	Percentage of the total state population that is African-American.	African American population as a percent of state population  Source: 1990 Census
% American Indian	Percentage of the total state population that is American Indian, Eskimo, or Aleut.	American Indian population as a percent of state population  Source: 1990 Census

Criterion	Description	Values
% Asian	Percentage of the total state population that is Asian or Pacific Islander.	Asian population as a percent of state population Source: 1990 Census
% Hispanic	Percentage of the total state population that is of Hispanic origin.	Asian population as a percent of state population Source: 1990 Census
%>=40yrs	Percentage of the population that is 40 years of age or older.	Population 40 years of age or older as a percent of state population  Source: 1990 Census

**Table B-1 Characterization of States by Site Selection Criteria (as of 1998)** 

State	Plan	Devel- opment	Struc ture	LHD	SHU	C/GS P	State Funds	Expenditures	Waiv er	BCC P	Regist ry	DBI R	US Region	Pop Density	% Urban	% African American	% American Indian	% Asian	% Hispan ic	%>=40 yrs of age
Alabama			FI	Yes	No	Yes	No	\$290,161	Yes	2	YP	R3	S	82	60%	25.3%	0.4%	0.5%	0.6%	39.2%
Alaska	С		CS	Yes	No	Yes	No	\$45,173	No	4	YP		W	1	67%	4.1%	15.6%	3.6%	3.2%	27.5%
Arizona			FI	Yes	No	Yes	No	\$490,790	Yes	3	YE		W	34	87%	3.0%	5.6%	1.5%	18.8%	37.5%
Arkansas		PP	FI	No	Yes	No	Yes	\$112,076	Yes	3	YP		S	46	54%	15.9%	0.5%	0.5%	0.8%	41.0%
California		PP	CS	Yes	Yes	Yes	Yes	\$1,051,763	No	7	YE		W	198	93%	7.4%	0.8%	9.6%	25.8%	35.0%
Colorado	C	P	FI	Yes	No	Yes	No	\$186,835	No	7	YE		W	33	82%	4.0%	0.8%	1.8%	12.9%	35.8%
Connecticut		PP	FI	Yes	No	Yes	Yes	\$127,828	No	3	ВОТН		NE	677	79%	8.3%	0.2%	1.5%	6.5%	40.8%
Delaware	C		CS	No	Yes	Yes	No	\$13,620	Yes	2	YE		S	353	73%	16.9%	0.3%	1.4%	2.4%	38.3%
District of Columbia	С		CS	No	No	Yes	No	\$153,867	No	2	YE	R2	S	9531	100%	65.8%	0.2%	1.8%	5.4%	38.7%
Florida	C		CS	No	Yes	No	No	\$499,343	Yes	4	YE	R3	S	250	85%	13.6%	0.3%	1.2%	12.2%	44.7%
Georgia	C	PP	CS	Yes	No	No	Yes	\$309,940	No	4	YE	R2	S	117	63%	27.0%	0.2%	1.2%	1.7%	35.6%
Hawaii			FI	Yes	No	No	No	\$339,090	Yes	2	SEER		W	180	89%	2.5%	0.5%	61.8%	7.3%	37.0%
Idaho			CS	Yes	No	Yes	No	\$21,794	No	2	YE		W	13	57%	0.3%	1.4%	0.9%	5.3%	36.5%
Illinois		PP	FI	Yes	No	Yes	No	\$460,927	Yes	3	YE	R1	MW	209	85%	14.8%	0.2%	2.5%	7.9%	38.2%
Indiana	C		FI	Yes	No	Yes	Yes	\$191,433	No	2	YE	R3	MW	158	65%	7.8%	0.2%	0.7%	1.8%	38.5%
Iowa			FI	Yes	No	Yes	No	\$80,230	No	3	SEER		MW	50	61%	1.7%	0.3%	0.9%	1.2%	40.8%
Kansas			FI	Yes	No	Yes	No	\$102,877	No	3	YE		MW	31	69%	5.8%	0.9%	1.3%	3.8%	38.4%
Kentucky	С	PP	CS	Yes	No	No	Yes	\$206,038	Yes	2	YE	R3	S	94	52%	7.1%	0.2%	0.5%	0.6%	38.9%
Louisiana			CS	Yes	Yes	Yes	No	\$161,288	No	3	YE		S	98	68%	30.8%	0.4%	1.0%	2.2%	35.5%
Maine	С	PP	CS	Yes	No	Yes	No	\$29,839	No	4	YE	R3	NE	40	45%	0.4%	0.5%	0.5%	0.6%	39.7%
Maryland	С	P	FI	Yes	No	Yes	Yes	\$935,606	Yes	6	YE	R2	S	503	81%	24.9%	0.3%	2.9%	2.6%	37.8%

**Table B-1 Characterization of States by Site Selection Criteria (as of 1998)** 

State	Plan	Devel- opment	Struc ture	LHD	SHU	C/GS P	State Funds	Expenditures	Waiv er	BCC P	Regist ry	DBI R	US Region	Pop Density	% Urban	% African American	% American Indian	% Asian	% Hispan ic	% >=40 yrs of age
Massachusett s		PP	CS	Yes	No	Yes	Yes	\$344,466	Yes	5	YE		NE	765	84%	5.0%	0.2%	2.4%	4.8%	39.4%
Michigan	С	P	CS	Yes	No	Yes	Yes	\$642,590	No	7	YE		MW	166	71%	13.9%	0.6%	1.1%	2.2%	37.7%
Minnesota			FI	Yes	No	Yes	No	\$248,948	Yes	7	YE		MW	56	70%	2.2%	1.1%	1.8%	1.2%	37.1%
Mississippi			FI	Yes	Yes	Yes	No	\$135,840	No	2	YP		S	56	47%	35.6%	0.3%	0.5%	0.6%	36.8%
Missouri	C		FI	Yes	No	Yes	No	\$226,687	No	6	YE		MW	75	69%	10.7%	0.4%	0.8%	1.2%	39.9%
Montana	C	P	FI	Yes	No	No	No	\$43,024	No	2	YE		W	6	53%	0.3%	6.0%	0.5%	1.5%	39.5%
Nebraska		PP	FI	Yes	No	Yes	Yes	\$37,639	No	6	YE	R1	MW	21	66%	3.6%	0.8%	0.8%	2.3%	38.8%
Nevada			CS	Yes	Yes	Yes	No	\$49,998	No	2	YE		W	12	88%	6.6%	1.6%	3.2%	10.4%	38.5%
New Hampshire	С	PP	CS	Yes	No	Yes	No	\$28,049	No	2	YE	R3	NE	124	51%	0.6%	0.2%	0.8%	1.0%	37.1%
New Jersey	C		FI	Yes	No	Yes	No	\$343,237	No	3	YE		NE	1054	89%	13.4%	0.2%	3.5%	9.6%	41.0%
New Mexico	C	P	FI	Yes	Yes	Yes	No	\$54,801	No	7	SEER		W	13	73%	2.0%	8.9%	0.9%	38.2%	35.5%
New York		PP	FI	Yes	No	No	Yes	\$1,434,904	Yes	5	YE	R1	NE	383	84%	15.9%	0.3%	3.9%	12.3%	40.1%
North Carolina	C	С	CS	Yes	No	Yes	Yes	\$351,572	No	6	YE	R1	S	140	50%	22.0%	1.2%	0.8%	1.2%	38.8%
North Dakota	C		FI	Yes	No	No	No	\$30,258	No	2	YP	R2	MW	9	53%	0.6%	4.1%	0.5%	0.7%	37.8%
Ohio	C	PP	FI	Yes	No	Yes	No	\$416,277	Yes	5	YE	R3	MW	269	74%	10.6%	0.2%	0.8%	1.3%	39.3%
Oklahoma		PP	FI	Yes	No	No	No	\$126,015	Yes	4	YP		S	47	68%	7.4%	8.0%	1.1%	2.7%	39.4%
Oregon		PP	CS	Yes	No	Yes	No	\$68,111	Yes	4	YP		W	31	70%	1.6%	1.4%	2.4%	4.0%	40.4%
Pennsylvania	C		FI	Yes	Yes	Yes	Yes	\$608,065	No	5	YE	R2	NE	268	69%	9.2%	0.1%	1.2%	2.0%	42.3%
Rhode Island	C	PP	FI	No	No	Yes	No	\$39,255	Yes	4	YE		NE	958	86%	3.9%	0.4%	1.8%	4.6%	40.4%

**Table B-1 Characterization of States by Site Selection Criteria (as of 1998)** 

State	Plan	Devel- opment	Struc ture	LHD	SHU	C/GS P	State Funds	Expenditures	Waiv er	BCC P	Regist ry	DBI R	US Region	Pop Density	% Urban	% African American	% American Indian	% Asian	% Hispan ic	% >=40 yrs of age
South Carolina	С	PP	FI	Yes	No	No	No	\$255,742	No	7	YP		S	120	55%	29.8%	0.2%	0.6%	0.9%	37.1%
South Dakota			FI	Yes	Yes	Yes	No	\$17,275	No	2			MW	9	50%	0.5%	7.3%	0.4%	0.8%	38.4%
Tennessee			FI	Yes	No	Yes	No	\$263,093	Yes	2	YP		S	122	61%	16.0%	0.2%	0.7%	0.7%	39.7%
Texas	C	C	FI	Yes	Yes	Yes	Yes	\$783,181	No	7	YE	R1	S	68	80%	11.9%	0.4%	1.9%	25.5%	34.2%
Utah		PP	FI	Yes	No	No	No	\$69,271	No	4	SEER		W	22	87%	0.7%	1.4%	1.9%	4.9%	28.8%
Vermont		PP	CS	No	Yes	Yes	No	\$26,210	Yes	3	YP	R2	NE	62	32%	0.3%	0.3%	0.6%	0.7%	37.7%
Virginia			FI	Yes	Yes	No	No	\$252,991	No	2	YE		S	161	69%	18.8%	0.2%	2.6%	2.6%	37.2%
Washington		PP	FI	Yes	No	Yes	No	\$265,552	No	5	YE	R2	W	77	76%	3.1%	1.7%	4.3%	4.4%	37.7%
West Virginia			CS	Yes	No	Yes	No	\$220,153	No	7	YE		S	75	36%	3.1%	0.1%	0.4%	0.5%	42.8%
Wisconsin	C	PP	CS	Yes	No	Yes	Yes	\$78,954	No	5	YE	R1	MW	92	66%	5.0%	0.8%	1.1%	1.9%	38.4%
Wyoming	С		FI	Yes	Yes	No	No	\$40,219	No	2	YE		W	5	65%	0.8%	2.1%	0.6%	5.7%	35.6%