

## **2013 Oral Health Environmental Assessment Impact Results**

**Prepared by the Texas Department of State Health Services, Office of Program Decision Support**

**Reviewed by the Texas Department of State Health Services Office of Program Decision Support  
and the Oral Health Program**

## Summary of Results from the 2013 Oral Health Environmental Assessment Impact (EAI)

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### Background/Purpose:

In 2001, the Division of Oral Health (DOH) in the National Center for Chronic Disease Prevention and Health Promotion at the Centers for Disease Control and Prevention (CDC) established a funding opportunity to build core infrastructure and capacity in state oral health programs<sup>1</sup>. From 2003-2008, twelve states (including Texas) and one territory were funded as part of DOH's ongoing commitment to develop methods that strengthened infrastructure and capacity for promoting oral health programs. Texas applied for and was awarded a later funding opportunity (CDC-RFA DP10-1012) through a CDC Cooperative Agreement (CA) for 2010-2013. In order to help grantees understand and plan for systemic change, DOH and state oral health program staff created an environmental assessment impact (EAI) instrument. The EAI was developed to consider the state's unique environment and provide data to guide learning and evaluation of the grantees' programs while taking into account their diversity. The EAI was used in the CDC's national evaluation of its oral health grantee programs to assess environmental changes over the funding period across the dimensions of structures and processes, resources, and climate/cultural influences.

The Texas Department of State Health Services (DSHS) Oral Health Program (OHP) first utilized the EAI in March 2005, when members of the Texas Oral Health Coalition (TxOHC) were asked to complete it to measure the level of support for public oral health in the state. The results of this assessment identified both factors that inhibited as well as factors that supported the promotion of the Texas state oral health programs. A second and third EAI were conducted and summarized in 2008 and 2011, respectively. Results are posted elsewhere in the CDC Management Overview for Logistic Analysis and Reporting (MOLAR) reporting system.

In July of 2013, as a requirement of the CDC CA recipient activity for policy development, a fourth environmental assessment of policy and systems level strategies was conducted to measure the current social and political environment for public oral health programs in Texas. In addition, several questions were added to the assessment to understand the access and utilization of the Texas Oral Health (OH) Surveillance Plan and the OH Surveillance Data Chart Book to understand the usefulness of these documents. Both of these documents are located on the DSHS OHP website at <http://www.dshs.state.tx.us/dental/tohss.shtm>. The purpose of this document is to summarize the results of the environmental assessment, including the additional questions on the surveillance plan and chart book.

### Survey Instrument:

The initial EAI consisted of 119 questions (variable names F30 – F148) and covered five key environmental dimensions including structures and processes, resources, climate/culture, infrastructure elements, and additional input. Respondents were asked whether or not certain facets of state government supported or inhibited the promotion of state public oral health programs. Topics covered within the structures and processes section included: the Governor's Office, legislation, the health department/agency, the oral health unit, local boards of health, partners, policy, and other (i.e., state geography, population). An additional set of questions (variable names F10 - F29) were added by the DSHS OHP to gather information about access and usefulness of the Texas OH Surveillance Plan and OH Surveillance Data Chart Book. Results for the additional questions are described in Appendix A.

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### Data Collection:

An electronic copy of the EAI was created using Question Pro®, an on-line survey software application. Respondents were sent a link to the EAI via email that allowed them to access and complete the EAI on-line. The link to the survey was sent to a total of 63 respondents who represented organized dentistry and dental hygiene, public health professionals, community health advocates, and the DSHS OHP regional dental teams across Texas. The respondents were given two weeks to complete the on-line survey (copy provided in Appendix B). A total of 21 respondents completed the EAI, representing a 33.3 percent response rate. It should be noted that results from sample sizes with fewer than thirty respondents may be imprecise and should be interpreted with caution.

### Methods:

A rating form was used to summarize the EAI to rate the strength of the environmental factors, also called “change forces,” that currently shape the oral health program in Texas. All identified change forces were rated on a 9-point scale based on the respondent's answers on the EAI. This rating ranged from strongly supports (+4) to strongly inhibits (-4). These ratings were then averaged to create the average rating score. This average score was then categorized using the change force analysis grid (CFAG) as supporting or inhibiting. The CFAG is used to describe the type of change that may be helpful in influencing the oral health program's progress. The average rating score and the change force for 2011 and 2013 were compared to assess the program's progress. Descriptive statistics were also calculated. A summary is provided in Table 1, including a comparison to the 2011 results. Additional details about the results are provided in Appendix C. All data was analyzed using Excel and SAS 9.2.

### Results:

Table 1: Comparison of Oral Health Environmental Assessment Rating Scores and CFAG Results, EAI Texas, 2011 and 2013

Environmental Factors	2011 Average Rating Score	2011 Change Force	2013 Average Rating Score	2013 Change Force	Direction of Change Forces
<b>Overall Structures and Processes</b>	0.22	Mildly Supports	0.94	Mildly Supports	Stable
✓ Governor's Office	-0.60	Mildly Inhibits	0.29	Mildly Supports	Positive
✓ Legislation	-1.02	Mildly Inhibits	0.75	Mildly Supports	Positive
✓ Health Department Agency	0.13	Mildly Supports	1.01	Mildly Supports	Positive
✓ Health Department Unit	1.45	Mildly Supports	1.47	Mildly Supports	Stable
✓ Local Boards of Health	-0.07	Neutral	0.48	Mildly Supports	Positive
✓ Partners	0.81	Mildly Supports	1.34	Mildly Supports	Stable
✓ Policy	0.00	Neutral	0.65	Mildly Supports	Positive
✓ Other	-1.00	Mildly Inhibits	-0.21	Mildly Inhibits	Stable
<b>Resources</b>	0.64	Mildly Supports	0.45	Mildly Supports	Stable
<b>Infrastructure Elements</b>	0.90	Mildly Supports	0.84	Mildly Supports	Stable
<b>Additional Input</b>	0.38	Mildly Supports	0.95	Mildly Supports	Stable
<b>Climate/Culture</b>	-0.37	Mildly Inhibits	0.30	Mildly Supports	Positive

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Table 1 shows the average rating score for the environmental factors identified as overall structures and processes. These data indicate a change force as related to the influence of the current OH environment on the success or failure of policy or system interventions is mildly supportive. A more detailed analysis of the 2013 data shows structures and processes as related to the functioning of the oral health program reveals that only “other” factors, which include geography of the state, population as urban, rural, or frontier, relations between the oral health unit and the unit responsible for fluoridation, and/or the ability to address special populations with regards to oral health in Texas, are mildly inhibitive forces in the current environment. All other environmental influences were found to be mildly supportive change forces. In comparison to the 2011 results, several of the factors, such as the governor’s office, legislation, the health department, and policy were found to be a more supportive force in 2013 than in 2011. The change force for other factors, such as partners, resource, and infrastructure influences have remained stable.

The summary findings for the 2013 results are outlined below:

### Factors that Inhibit Oral Public Health

Forty-six (46) percent of the respondents identified the geography of the state and population differences as urban, rural, or frontier, in the other topic as mildly inhibitive in the promotion of Texas state oral health programs.

1. Other - 46%

### Factors that Support Oral Public Health

Respondents also identified facets of state government that tend to mildly support the promotion of oral health programs. Below is a list of those supportive factors identified and the percent of respondents who identified such factors as supportive.

2. The Oral Health Unit – 65%
3. Partners – 62%
4. Health Dept. Agency – 61%
5. Policy – 57%
6. Legislation – 56%
7. Governor’s Office – 40%

As evidenced by these results, as well as those in 2011, the supporting and inhibiting forces for oral public health appear to be equally weak, indicating the oral health program can expect sporadic change. The preferred direction or strategy for the oral health program for this type of environment should be one of incremental targeted change that focuses on building leverage points. Partnerships and alliances specific to initiatives are critical. The oral health program should seek to establish incremental “wins” and focus on building a supportive environment for long-term growth and sustainability.

### **References:**

1. Lavinghouze, S, et al. The Environmental Assessment Instrument: Harnessing the Environment for Programmatic Success, *Health Promotion Practice*, April 2009, Vol. 10, No. 2, 176-185.

### Appendix A:

As discussed above, DSHS OHP added several questions to the environmental assessment to gather information about the access and utilization of the Texas OH Surveillance Plan and the OH Surveillance Data Chart Book currently available on the DSHS OHP website. In general, the questions inquired whether or not respondents accessed and utilized the surveillance plan and/or the data chart book, how useful they found each, and reasons why they may or may not have found the documents useful. Results are listed below:

#### Texas Oral Health Surveillance Plan

Nearly one half (47.6 percent) of all respondents who completed the EAI indicated that they had accessed and utilized the surveillance plan on the DSHS OHP website. One hundred percent (100 percent) of those respondents stated that they found the plan useful. Several reasons for why these respondents found the document useful are listed below:

- *(The plan)* explains the purpose of the BSS (*Basic Screening Survey*) study and gives information on other OHP duties.
- *(The plan)* is an informative research tool as part of developing outreach programs for the health department.
- The plan gives you a general idea about oral health surveillance activities by the health department.
- *(The plan)* is useful for finding general public health information about Texas.
- It *(the plan)* provides a framework when data will be collected for the state.

The same respondent who stated that “the plan provided a framework when data will be collected for the state” also indicated that they had “a problem with the plan (*in that*) it is sporadic at best and regular data collection is proposed but not always carried out”.

Of the remaining respondents who completed the survey, 52.4 percent indicated that they had not accessed or utilized the surveillance plan. Reasons given for lack of access were (1) respondent didn't know that the plan was available on the website, (2) respondent did not have time to access the plan, (3) respondent had no need to access the plan, (4) respondent stated that the plan was not applicable to them. Additionally, one respondent indicated that they did not access the plan because they had other staff that handled access to the plan for them.

#### Texas Oral Health Surveillance Data Chart Book

Only 14.3 percent of respondents who completed the EAI stated that they had accessed or utilized the OH Surveillance Data Chart Book. All 14.3 percent of those who accessed the chart book found it useful. Reasons given for why the respondents found the chart book useful were (1) the chart book has informative state statistics” and (2) “it provides a snapshot look at the state over time”. However, the same respondent who indicated that the chart book provided a snapshot also indicated that the chart book should be more comprehensive and should include more data analysis and interpretation.

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The remaining 85.7 percent of respondents who completed the survey indicated that they had not accessed the chart book. All of the reasons given for not accessing the chart book were similar to those given for not accessing the surveillance plan.

**Appendix B:**

Environmental Assessment Impact (EAI) Form

Governor’s Office

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Presence of champion for oral health within the governor’s office	<input type="checkbox"/>								
State government planning process for oral health	<input type="checkbox"/>								
Governors oral health agenda	<input type="checkbox"/>								

Legislature

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Presence of legislative champion for oral health	<input type="checkbox"/>								
Legislature leadership supportive of oral health	<input type="checkbox"/>								
Legislative oral health agenda	<input type="checkbox"/>								

Health Department (Agency)

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Presence of oral health champion within the health department	<input type="checkbox"/>								
Health department oral health policy	<input type="checkbox"/>								
Health department oral health planning process	<input type="checkbox"/>								
Health department oral health agenda	<input type="checkbox"/>								
Reporting lines of authority between the oral health unit and the department/agency	<input type="checkbox"/>								
Health department leadership	<input type="checkbox"/>								
State chronic disease coordinator	<input type="checkbox"/>								
State public health officer	<input type="checkbox"/>								

**Summary of Results from the 2013 Oral Health Environmental Assessment Impact (EAI)**

Oral health placement in agency organizational chart	<input type="checkbox"/>									
Division of public health functions (in one agency or several)	<input type="checkbox"/>									
Hiring process/policy	<input type="checkbox"/>									
Stability of organization (reorganization happens often or not)	<input type="checkbox"/>									
Competition for visibility and dollars among chronic disease programs	<input type="checkbox"/>									
Agency budget and fiscal priorities	<input type="checkbox"/>									

Oral Health Unit (department)

	Strongly Inhibits	Inhibits	Somewhat at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewhat at Supports	Supports	Strongly Supports
Involvement of the oral health dental director in infrastructure development	<input type="checkbox"/>								
Ability for all staff to be involved in strategic oral health planning and direction	<input type="checkbox"/>								
Succession planning for state dental director	<input type="checkbox"/>								
Location of oral health staff (centralized or decentralized)	<input type="checkbox"/>								
Oral health distance from state oral health officer -- lines of reporting and access to	<input type="checkbox"/>								
Presence of an oral health program coordinator	<input type="checkbox"/>								
Ability to work with diverse populations	<input type="checkbox"/>								

Local Boards of Health

	Strongly Inhibits	Inhibits	Somewhat at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewhat at Supports	Supports	Strongly Supports
State agency authority over local health departments with regards to oral health program	<input type="checkbox"/>								

Partners

	Strongly Inhibits	Inhibits	Somewhat at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewhat at Supports	Supports	Strongly Supports
Presence of oral health champions outside of the health department or oral health unit	<input type="checkbox"/>								

**Summary of Results from the 2013 Oral Health Environmental Assessment Impact (EAI)**

Ability to collaborate with other states on oral health	<input type="checkbox"/>									
Location of other chronic disease programs within your state agencies	<input type="checkbox"/>									
Oral health advocacy groups	<input type="checkbox"/>									
Private foundation support for oral health	<input type="checkbox"/>									
Medicaid oral health agenda/policy	<input type="checkbox"/>									
Support for oral health from nontraditional partners	<input type="checkbox"/>									
Level of interagency collaboration with regards to oral health	<input type="checkbox"/>									
Existence of memorandum of understanding/agreement (MOUs/MOAs) between oral health unit and other oral health programs	<input type="checkbox"/>									

Legislation/policy

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Practice Act	<input type="checkbox"/>								
Mandatory oral health screening	<input type="checkbox"/>								
Loan repayment programs	<input type="checkbox"/>								

Other

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Geography of state	<input type="checkbox"/>								
Population (urban/rural/frontier)	<input type="checkbox"/>								
Relations between the oral health unit and the water department (or unit responsible for fluoridation)	<input type="checkbox"/>								
Ability to address special populations with regards to oral health in Texas	<input type="checkbox"/>								

Resources

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Financial resources for oral health unit	<input type="checkbox"/>								

**Summary of Results from the 2013 Oral Health Environmental Assessment Impact (EAI)**

Financial resources for oral health education promotion	<input type="checkbox"/>								
Health department human resources for oral health program (OHP)	<input type="checkbox"/>								
Presence of OHP dental director	<input type="checkbox"/>								
Access to epidemiologic support for OHP	<input type="checkbox"/>								
Access to evaluation support for OHP	<input type="checkbox"/>								
Access to sealant coordinator for OHP	<input type="checkbox"/>								
Access to fluoridation manager for OHP	<input type="checkbox"/>								
Access to program manager for OHP	<input type="checkbox"/>								
Access to communication specialist for OHP	<input type="checkbox"/>								
Access to health education specialist for OHP	<input type="checkbox"/>								
Access to coalition coordinator for OHP	<input type="checkbox"/>								
Access to dental consultants for OHP	<input type="checkbox"/>								
Access to support staff for OHP	<input type="checkbox"/>								
Access to fiscal department human resources for OHP	<input type="checkbox"/>								
Expertise in the state to promote OHP growth	<input type="checkbox"/>								
Oral health unit leadership team with regards to OHP	<input type="checkbox"/>								
Number of partner organizations with regards to OHP	<input type="checkbox"/>								
Number of partnerships with other chronic disease programs with regards to OHP	<input type="checkbox"/>								
Number of contract employees v. number of state staff with regards to OHP	<input type="checkbox"/>								
Web presence	<input type="checkbox"/>								
Academic programs	<input type="checkbox"/>								
Medicaid coverage	<input type="checkbox"/>								

**Infrastructure Elements**

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Staff capacity within the state OHP	<input type="checkbox"/>								

**Summary of Results from the 2013 Oral Health Environmental Assessment Impact (EAI)**

Comprehensive burden document	<input type="checkbox"/>								
Comprehensive state plan	<input type="checkbox"/>								
Diverse, statewide coalition	<input type="checkbox"/>								
Surveillance system/measures that provide the oral health data needed for stakeholders, program evaluation, and program growth	<input type="checkbox"/>								
Surveillance system as it specifically relates to ability to provide information for program evaluation	<input type="checkbox"/>								
Surveillance data as it specifically for children not yet school age	<input type="checkbox"/>								
Surveillance data as it specifically for school-aged children	<input type="checkbox"/>								
Surveillance data as it specifically for adolescents	<input type="checkbox"/>								
Surveillance data as it specifically for adults	<input type="checkbox"/>								
Surveillance data as it specifically for senior population	<input type="checkbox"/>								
Surveillance data as it specifically for special needs populations	<input type="checkbox"/>								
Policy development	<input type="checkbox"/>								
Partnerships	<input type="checkbox"/>								
Fluoridation Management	<input type="checkbox"/>								
Evaluation capacity and use	<input type="checkbox"/>								
Fluoridation campaigns	<input type="checkbox"/>								
School-based/school-linked dental sealant programs	<input type="checkbox"/>								

Additional Input

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Presence of state mandate for OH program	<input type="checkbox"/>								
State-level legislation/policy on community water fluoridation	<input type="checkbox"/>								
Ability of OH Unit to provide decision makers with information beyond data alone	<input type="checkbox"/>								
Ability of OH Unit to draft legislation/policy	<input type="checkbox"/>								
Ability of OH Unit to provide training and technical assistance for	<input type="checkbox"/>								

**Summary of Results from the 2013 Oral Health Environmental Assessment Impact (EAI)**

building local capacity									
Current level of local capacity building efforts	<input type="checkbox"/>								
Ability for OH Unit to access outside technical assistance from national sources	<input type="checkbox"/>								
Ability for OH Unit to access outside technical assistance from other states	<input type="checkbox"/>								

Climate/Culture

	Strongly Inhibits	Inhibits	Somewh at Inhibits	Mildly Inhibits	Neutral	Mildly Supports	Somewh at Supports	Supports	Strongly Supports
Legislative history of using oral health data to direct fiscal decisions	<input type="checkbox"/>								
Health department emphasis on using oral health data to direct program and fiscal decisions	<input type="checkbox"/>								
Oral health unit history of using oral health data to direct program and fiscal decisions	<input type="checkbox"/>								
Legislature focus on intervention vs. prevention oral health programs	<input type="checkbox"/>								
Health department (agency) focus on intervention vs. prevention oral health programs	<input type="checkbox"/>								
Oral health unit (department) focus on intervention vs. prevention oral health programs	<input type="checkbox"/>								
Statewide norms and values (high valuation of oral health as a public health issue)	<input type="checkbox"/>								
General state government value of oral health as a public health issue	<input type="checkbox"/>								
Ability to recognize that oral health services are a party of primary care by those outside of the oral health unit	<input type="checkbox"/>								
Communications between oral health unit and governor's office/staff	<input type="checkbox"/>								
Communications between oral health unit and legislature	<input type="checkbox"/>								
Communications between oral health unit and state public health officer	<input type="checkbox"/>								
Communications between oral health unit and state chronic disease coordinator	<input type="checkbox"/>								
Communications between oral health unit and local boards of health or health departments	<input type="checkbox"/>								
Relationship between oral health unit and other oral health organizations in the state	<input type="checkbox"/>								

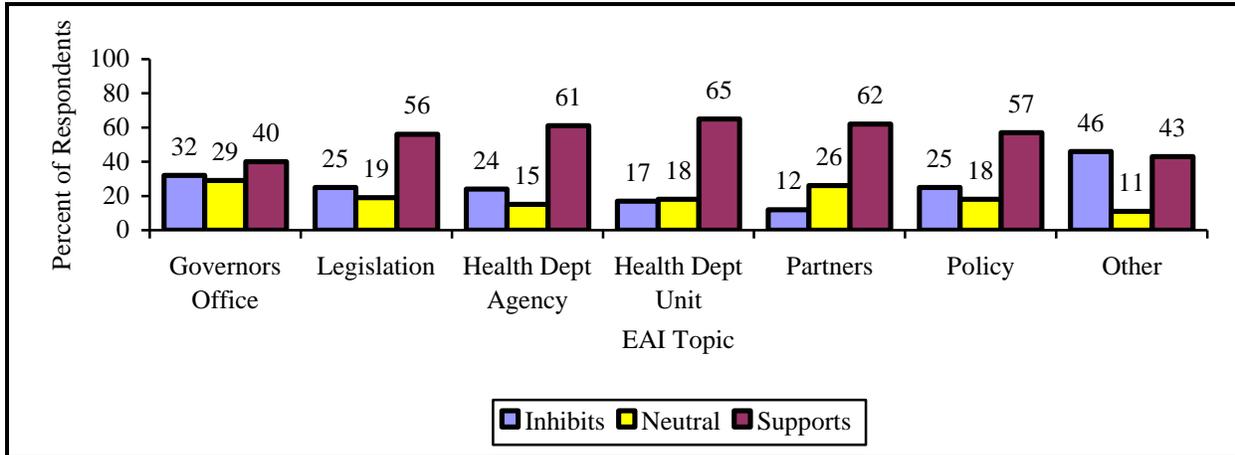
**Summary of Results from the 2013 Oral Health Environmental Assessment Impact (EAI)**

Relationship between oral health unit and general public	<input type="checkbox"/>								
Relationship between oral health unit and private care providers	<input type="checkbox"/>								
Relationship between oral health unit and state dental society	<input type="checkbox"/>								
Relationship between oral health unit and state hygiene society	<input type="checkbox"/>								
Relationship between state dental society and legislature	<input type="checkbox"/>								
Relationship between state dental hygiene society and legislature	<input type="checkbox"/>								
Public education/awareness of oral health and disease	<input type="checkbox"/>								
Attitudes towards dental visits within the general population	<input type="checkbox"/>								
Attitudes towards public health efforts in general within the general population	<input type="checkbox"/>								
General support for growth in public oral health programs from the outside-in (i.e., outside groups have a loud voice for growing public health (PH)-OH programs)	<input type="checkbox"/>								
General support for growth in public oral health programs is from the inside-out (i.e., health department has the loudest voice)	<input type="checkbox"/>								

**Appendix C:**

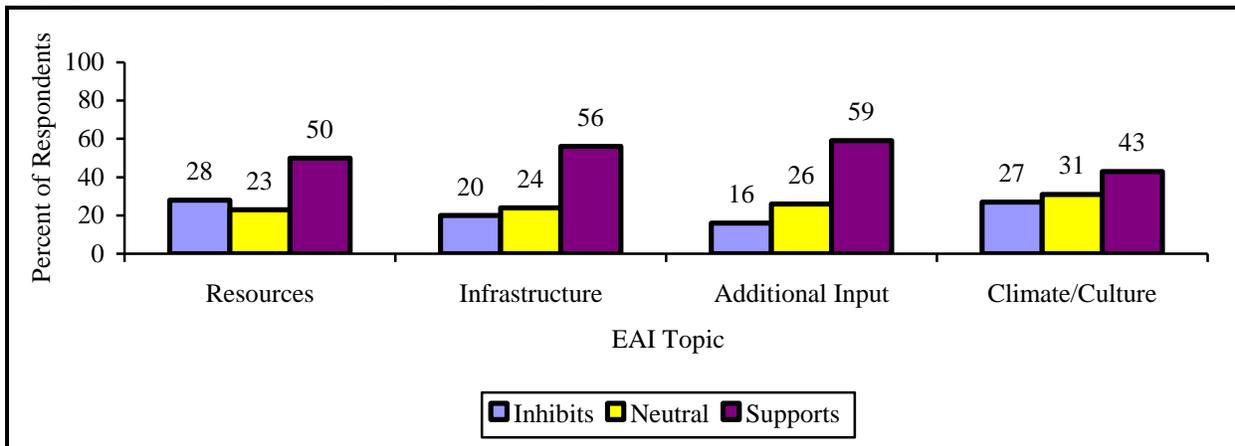
Respondents were inclined to report a neutral response for local boards of health (data not shown). The graphs below include topics depicted in each EAI module and include the percentage of respondents who felt public oral health programs in Texas were either supported or inhibited by current policies, government, or other factors.

**Graph 1: Level of Support for Public Oral Health Programs, Overall Structure and Processes, EAI, Texas, 2013**



Rounding may cause factor totals to sum above 100

**Graph 2: Level of Support for Public Oral Health Programs, Resources, Infrastructure, Additional Input, and Climate or Culture, EAI, Texas, 2013**



Rounding may cause factor totals to sum above 100