

North Carolina Race to the Top-  
Early Learning Challenge

# Transformation Zone Evaluation

FINAL REPORT

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# Executive Summary

## Background

The NC Transformation Zone was designed to provide intensive supports and community infrastructure-building efforts to improve outcomes for young children in high need areas (NIRN, 2012). Eight evidence-based or evidence-informed interventions termed “strategies” were employed in the Transformation Zone (TZ). The strategies targeted family strengthening, infant-toddler childcare, and literacy. Intensive technical assistance focused on implementation science and systems change was provided to enhance early childhood systems knowledge, skills, and infrastructure. The TZ initiative provided opportunities for learning in partnership with the state and other communities. Following a competitive selection process, four eastern North Carolina counties were selected to participate. The TZ Evaluation gathered data from February 2014 through September 2016. The overall purpose of the evaluation was to examine the extent to which state and county entities enhanced their capacity to improve the quality of their early childhood systems by implementing evidence-based and evidence-informed practices.

## Transformation Structures and Processes

A working infrastructure was put in place for each county and for the state. An Active Implementation approach (Metz & Bartley, 2012) guided the creation of linked leadership and implementation teams at state and county levels. Several funding and administrative agencies and technical assistance providers were responsible for supporting TZ activities. The TZ project established a team-based approach to manage the complex, multiple levels of work. A Grant Management Team was responsible for overseeing the financial and operational aspects of the TZ initiative. A TZ State Leadership Team consisted of leaders from each state agency funder and other state agencies in the North Carolina early childhood system. A State Implementation Team consisted of strategy content experts (Purveyors), state agency administrators from each TZ Funder, National Implementation Research Network (NIRN) specialists, and State and County Implementation Coaches. County Leadership Teams, consisting of local agency and community leaders, provided oversight and vision of the project plan and outcomes at the county level. County Implementation Teams met frequently and regularly, serving as the connection between the County Leadership Team and the community. A state-level Coach Coordinator guided and supported the administration efforts of four County Implementation Coaches.

Two types of technical assistance were provided: active implementation and systems change. Technical assistance for supporting county goals related to messaging with families and county stakeholders was provided by the North Carolina Partnership for Children (NCPC) in the last year of the grant. Eight strategies were selected for implementation: two family strengthening strategies, four childcare quality strategies, and two literacy strategies. Each has clear aims and was chosen to address a level of the early childhood system. Strategy content and delivery were supported by State/regional Purveyors and local Service Providers.

## Evaluation Methods

Using a developmental evaluation approach, the TZ Evaluation examined the extent to which the state of North Carolina and four rural counties enhanced their capacity to improve the quality of the early childhood system. Adaptations, progress, and challenges were shared with stakeholders during the course of the project using feedback loops to promote evaluative thinking and continuous quality improvement. Transformation Zone evaluation methodology included creating a logic model and conducting interviews, focus groups, field observations, online surveys, and document reviews.

The evaluation questions examined policy, practice, and infrastructure changes that support successful implementation of evidence-based and evidence-informed programs. Evaluators were charged with evaluating the effectiveness of the project overall in promoting local and state capacity building and systems change and not the effectiveness of individual strategy implementation. The evaluation questions addressed included the following:

1. What are the benefits of the work in the Transformation Zone?
  - a. Have communities been able to enhance their **capacity** to improve the quality of their early childhood systems? How?
  - b. What state and local **policy and practice changes** in the early childhood system have occurred as the result of the work in the Transformation Zone?
  - c. Have the participating state agencies or local communities **strengthened the infrastructure** to support the successful implementation of evidence-informed practices?
2. What are the **unintended consequences**?
3. If system change has or has not occurred or has been limited, what are the factors influencing this?

## Evaluation Findings

Benefits of the Transformation Zone included enhanced capacity to improve the quality of early childhood systems related to state-county collaboration and increased systems awareness; strengthened county and state infrastructures; and small policy and practice changes. There were also some unintended consequences. Factors that influenced transformation included high-quality technical assistance, coaching, leadership and data use. Key things learned included:

*Infrastructure matters.* The infrastructure of teams created the context for transformation to occur—relationships within counties shifted as members identified a shared purpose.

*Successful implementation of the strategies was dependent on collaboration.* Counties made progress in their efforts to embed evidence-informed early childhood programs in their county systems.

**Expert technical assistance matters.** Counties received intensive technical assistance related to Active Implementation (NIRN) and systems change (ABLE Change) including support related to applying the knowledge and skills in their teamwork and collaboration.

**Supportive leadership matters.** Supportive leadership made a positive impact at several junctures in the TZ project. Several stakeholders speculated that more progress might have been made in the presence of ongoing, consistent state leadership.

**Coaching was central to success.** The coaching role provided a strong foundation for change in the Transformation Zone. Over time, coaches served as ambassadors for feedback between county teams and between county and state agencies and leaders.

**County capacity to use data was critical for success.** Knowledge and skills related to data use for decision-making stand out as being among the most important factors that increased communities' capacity to implement and sustain change. In the end, all county teams increased their capacity to collect, analyze, and use data.

**Counties learned how to engage families in their work by gathering and sharing information.** Counties initially struggled to engage community members in the strategies. With technical assistance, each county solicited families' perspectives and made efforts to respond to community needs.

## Sustaining the Work

Although the evaluation concluded in 2016, the work started during the Transformation Zone will continue in the counties, and we conclude the report by highlighting the counties' current strategic plan priorities and efforts at the state to sustain progress made. In the last year of the grant, counties received technical assistance (TA) to support sustaining changes and developing strategic plans. Each county's strategic plan included priorities, goals, objectives, and specific activities to support their objectives. ■



## Introduction

The Federal Race to the Top-Early Learning Challenge (RttT-ELC) program awarded grants to states to enhance the quality of learning and development in early childhood and close the achievement gap for children with high needs. Specific aims were to increase the number and percentage of low-income and disadvantaged infants, toddlers, and preschoolers enrolled in high-quality early learning programs; design and implement an integrated system of high-quality early learning services; and ensure that use of assessments conforms to recommendations of the National Research Council's reports on early childhood (US DHHS ACF OECD, 2016).

Four-year grants were awarded to 20 states focused on five areas of reform: state systems; high quality, accountable programs; promotion of early learning and development outcomes; the early childhood education workforce; and measurement of outcomes and progress (NC DHHS, RttT-ELC, 2016). North Carolina's grant, funded in January 2012, included the North Carolina Transformation Zone, a systems-level initiative designed to help selected rural counties and the state use implementation science to increase school readiness via improved knowledge, skills, and capacities.

The TZ Evaluation gathered data from 2014 through September 2016. The overall purpose of the evaluation was to examine the extent to which state and county entities enhanced their capacity to improve the quality of their early childhood systems by implementing evidence-based and evidence-informed practices.

This report summarizes the findings of the TZ Evaluation. The report is organized into five sections. Section I provides background on the project, including a description of the NC Transformation Zone, how counties were selected for the project, and a brief description of the counties. Section II describes the structures and processes that were employed in the Transformation Zone, including state and county teams, technical assistance providers, and the strategies implemented as part of the project. Section III describes the evaluation methods, including the research questions and data sources. Section IV presents the evaluation findings. Section V provides a summary of the findings and describes plans for sustaining the work.

## Background

The NC Transformation Zone was designed to provide intensive supports and community infrastructure-building efforts to improve outcomes for young children in high need areas (NIRN, 2012). To enhance services to children and families in under-resourced rural communities, the North Carolina Transformation Zone aimed to: “1) strengthen standards, assessment and capacity to collect and use data to drive pro-



gram quality and continuous improvement; 2) invest in people and relationships to increase teacher and system effectiveness and sustain change; and 3) target high-intensity supports and community infrastructure-building efforts to turn around poor outcomes for young children in our highest need counties” (NC Office of the Governor RttT-ELC Application for Initial Funding, pp. 66-67).

Eight evidence-based or evidence-informed interventions termed “strategies” were employed in the Transformation Zone. The strategies targeted family strengthening, infant-toddler childcare, or literacy. Intensive technical assistance focused on implementation science and systems change was provided to enhance early childhood systems knowledge, skills, and infrastructure. The TZ initiative provided opportunities for learning in partnership with the state and other communities. It was understood that it would take years to fully embed what was learned from the Transformation Zone into state and county policies and practices, and it was hoped that the benefits to communities and the state would be sustained beyond the grant period (NIRN, 2012).

Seventeen under-resourced rural counties in North Carolina were eligible to apply for participation in the Transformation Zone. Fifteen of these counties submitted letters of intent to apply, and 13 of the 15 submitted applications. After review of applications, six of the 13 counties were selected for site visits to assess commitment and readiness. Following the site visits and consideration of geographic and demographic characteristics, four of the six counties were selected to participate.<sup>1</sup> The four counties are located in rural, eastern North Carolina. Demographics for each county are reported in Table 1. The TZ counties shared in common high unemployment and relatively low family income, but varied with respect to service availability (e.g., childcare centers and pediatricians) and resources for children and families. The demographics for North Carolina as a whole are presented for comparison purposes.

**TABLE 1: TRANSFORMATION ZONE PARTICIPATING COUNTIES**

	County A	County B	County C	County D	NC
<b>Population<sup>a</sup></b>	47,464	20,344	14,726	5,721	9,848,060
<b>% Unemployment<sup>b</sup></b>	6.1	7.0	6.6	8.3	5.5%
<b># Births<sup>a</sup></b>	488	186	167	58	118,983
<b>% &lt; age 5</b>	8	4.5	6.5	4.3	6.0
<b>Median family income<sup>c</sup></b>	\$51,200	\$41,000	\$43,000	\$42,000	\$46,693
<b># Licensed childcare facilities<sup>a</sup></b>	43	27	17	5	4,766
<b>Enrollment childcare facilities<sup>a</sup></b>	1,088	502	536	75	234,455
<b># Physicians<sup>a</sup></b>	13	4	23	2	65,253
<b>Square Miles</b>	959	741	233	1,424	48,618
<b>% Race</b>					
Black	25.4	61.6	34.4	30.0	21.9
Hispanic	7.6	1.7	3.2	8.0	8.8
White	71.8	36.0	63.2	67.8	65.2
<b># Schools</b>	14	9	4	3	2,643

Sources: North Carolina Department of Health and Human Services; Public School Review; US Census;

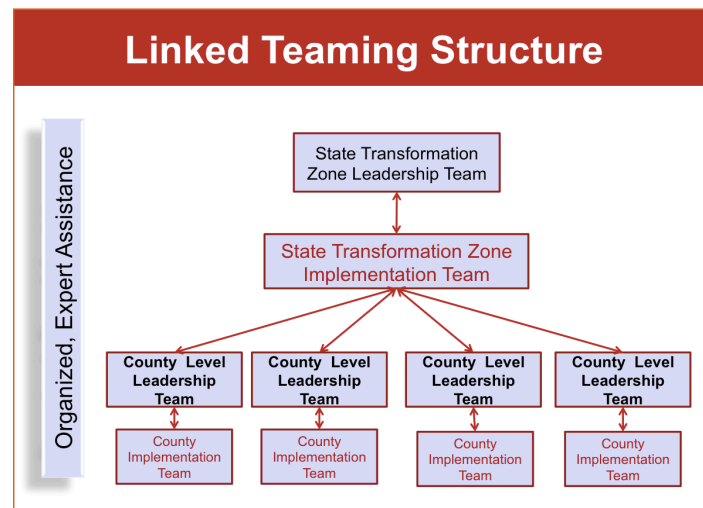
<sup>a</sup>2013, <sup>b</sup>2015, <sup>c</sup>2011

<sup>1</sup> The four counties are labeled A, B, C, and D in this report to respect confidentiality.

## Transformation Zone Foundational Structures and Processes

At the inception of the Transformation Zone initiative, a working infrastructure was put in place for each county and for the state. An Active Implementation approach (Metz & Bartley, 2012) guided the creation of linked leadership and implementation teams at state and county levels. Linked teams are depicted in Figure 1. Several funding and administrative agencies and technical assistance providers were responsible for supporting TZ activities as well, including the NC RttT-ELC Grant Management team, the NC Division of Child Development and Early Education (DCDEE), the NC Division of Public Health (DPH), North Carolina Partnership for Children (also known as Smart Start), Child Care Services Association, National Implementation Research Network (NIRN), and the ABLc Change team at Michigan State University.

FIGURE 1: LINKED STATE AND COUNTY TEAM STRUCTURE (FIXSEN, ET AL. 2012)



### State Teams

The **Grant Management Team** was responsible for overseeing the financial and operational aspects of the TZ initiative. The team provided leadership and support for the evaluation and various agency and other state team activities.

Three state agencies served as the **Funders** for eight strategies. The NC Division of Public Health administered the family strengthening strategies of Triple P and Family Connects. The NC Division of Child Development and Early Education administered childcare strategies of infant/toddler care and support for healthy social behavior. The NC Partnership for Children administered the early literacy strategies and Child Care Health Consultation.

The **TZ State Leadership Team** originally consisted of leaders from each state agency funder and other state agencies in the North Carolina early childhood system. In an official capacity, the lead agency for the grant is the North Carolina Early Childhood Advisory Council (ECAC). The role of the State Leadership Team was intended to: (1) provide vision and guidance to counties, (2) serve as the forum through which county concerns could be raised and addressed by leadership, and (3) be a voice at the state table for eliminating barriers to change and supporting lasting change. The

State Leadership Team was to serve as a “focused, accountable structure for developing, sustaining, and assessing the coordinated efforts in the TZ and make recommendations that will increase the likelihood of consistent, high-fidelity implementation and coordination of early childhood strategies in all TZ counties” (National Implementation Research Network, 2014). The Grant Management Team participated in the State Leadership Team in an advisory capacity. The State Leadership Team was designed to work collaboratively to align early childhood systems at the state level and keep the ECAC informed. Furthermore, the State Leadership Team was intended to support the State Implementation Team to “develop implementation capacity at the state and county levels, using the same approach and lessons learned to extend benefits of this transformative process throughout North Carolina” (National Implementation Research Network, 2014).

The **State Implementation Team** consisted of strategy content experts (Purveyors), state agency administrators from each TZ Funder, NIRN specialists, and State and County Implementation Coaches. Grant Management representatives participated in State Implementation Teams in an advisory role. The role of the State Implementation Team was envisioned as assisting with installation and implementation of strategies; communicating state priorities and policies with County Leadership Teams; and bringing county perspectives and needs to the State Leadership Team, particularly policy-level challenges that might be addressed by the State Leadership Team.

## County Teams

**County Leadership Teams** consisted of local agency and community leaders and provided oversight and vision of the project plan and outcomes at the county level. Each team had a convener who represented the grantee and served in a leadership capacity on the County Leadership Team, though the actual function of the convener varied across counties. County Implementation Coaches also served in an ex officio capacity on the County Leadership Team, typically to assist with the convening processes (e.g., agenda preparation, meeting minutes, etc.).

**County Implementation Teams** met frequently and regularly, serving as the connection between the County Leadership Team and the community. They provided regular guidance, data collection, and communication functions in the processes of strategy implementation. They responded to direction from the County Leadership Team, and provided feedback to the Leadership Team regarding community needs and strategy implementation. Led by a local convener and County Implementation Coach, each County Implementation Team consisted of agency personnel and a Literacy Coordinator, who participated in regular meetings and county implementation activities.

## Coaches

The Transformation Zone infrastructure included a state-level Coach Coordinator and four County Implementation Coaches, all employed and supervised by NCPC. The Coach Coordinator guided and supported the administration efforts of County Implementation Coaches, and communicated information and feedback between the state-level and county teams. While each county had a convener who was responsible for convening the county teams and approving the agenda, each County Implementation

Coach performed many of the administrative tasks to support the County Leadership and Implementation Teams and was the primary figure in the feedback loops between county teams, and with Purveyors, Funders, NIRN, NCPC, and other providers.

### **Purveyors**

State **Strategy Purveyors** and **local/regional Service Providers** were responsible for developing and administering each of the strategies. State Purveyors were personnel who largely developed the service model and primarily administered the program from the state and/or regional levels. Local Service Providers were typically responsible for facilitating implementation of the strategies and having direct contact with community stakeholders. Purveyors worked with NIRN to articulate their program models and facilitate strategy delivery.

### **Technical Assistance**

Two frameworks for systemic change were used to support TZ counties' efforts: Active Implementation and ABLe Change.

**Implementation Science/Active Implementation Framework.** Primary support, leadership, and administration related to TZ structures and processes were provided by NIRN's Implementation Specialists. The goal of implementation science is to support active implementation of evidence-based practices (Metz & Bartley, 2012). The NIRN Implementation Specialists have worked with the TZ since the grant's inception to support science-based implementation processes within TZ counties around eight strategies. This framework focuses on tools for ensuring an appropriate infrastructure for implementing evidence-based practices. NIRN provided guidance in the structuring of the TZ project and selection of the counties. They provided ongoing training and support to TZ structures: State Implementation Team, County Leadership and Implementation Teams, Strategy Purveyors, and Coaches. The NIRN Implementation Specialists have served as ex-officio members on state-level TZ teams and regularly attended county-level teams. By virtue of their extensive involvement in all levels of the work, they supported decision-making on a regular basis, primarily acting as a communication loop among county and state teams. NIRN used County Capacity Assessments as a tool for examining how infrastructure was developing to support implementation of evidence-based practices.

**Systems Change/ABLe Change Framework.** The ABLe Change Framework is an approach toward community systems change that focuses on systemic action learning teams, simple rules, and small wins (Foster-Fishman & Watson, 2011). ABLe Change Framework developers from Michigan State University provided technical assistance to county teams related to garnering community support, engaging families, assessing community systems, and enhancing community capacity for change. The consultants provided retreats in each county in the spring of 2014 to jump-start the initiative, and met remotely with County Implementation Coaches on a regular basis since fall of 2014 to train and support their systems change efforts. ABLe Change consultants also presented at State Implementation Team (SIT) and cross-county meetings. County retreats—designed to widen the base of community support—were conducted in fall of 2015. A tool used by ABLe Change specialists is the system scan—a survey designed

to be used by communities to build system awareness and establish shared understanding of needs related to building a strong system of services.

**Coaching.** NCPC provided oversight for the work of the State TZ Implementation Coach Coordinator, County Implementation Coaches, and the ABL<sup>e</sup> Change contract. They also offered technical assistance and administered the literacy strategies.

**Messaging.** NCPC also provided technical assistance for supporting county goals related to messaging with families and county stakeholders in the last year of the grant. In response to County Leadership Teams' interest in increasing family engagement with early childhood initiatives, NCPC's communications team worked with each county to assess, develop, and refine communication strategies in their communities. The goal was for each county to have an individualized communication plan in place by the end of the grant.

## Strategies

Eight strategies were selected for implementation: two family strengthening strategies, four childcare quality strategies, and two literacy strategies. Each had clear aims and was chosen to address a level of the early childhood system. Some strategies were evidence-based programs or approaches that have previously been shown effective in improving outcomes for young children and families. Others were designed to increase access to services but are not considered evidence-based programs. All strategies chosen met criteria for usability: with a clear program description, core intervention components, operational definitions to guide practice, and fidelity assessment (Fixsen, Blasé, Metz, & Van Dyke, 2013). Strategy content and delivery were supported by state/regional Purveyors and Local Service Providers.

### Family Strengthening Strategies

- **Triple P** is a coordinated multilevel system of parenting education and supports that focuses on all developmental periods of childhood.
- **Family Connects** is a home visiting program based on the Durham Connects model that supports parents by linking them with health providers and other community resources.

### Childcare Quality Strategies

- **North Carolina Babies First** is a program designed to offer high quality early learning experiences to at-risk infants and one year olds in the TZ. The initial program consisted of part-day slots in high quality center-based childcare programs for infants and one year olds. Following feedback from County Leadership Teams that part-day slots did not meet the needs of families, the program was changed to include transportation (February, 2014) and provide a full-day program (May 2014).
- **Infant-Toddler Expansion Grants** assist childcare teachers in the TZ to implement best practices in infant and toddler classrooms with the goal of improving the program's star rated license.

- **Healthy Social Behaviors** promotes social-emotional health in childcare settings through on-site technical assistance.
- **Child Care Health Consultation** promotes health and safety in early childhood programs using a coaching model by registered nurses.

### Literacy Strategies

- **Motheread**® and its offshoots **Fatheread**, **B.A.B.Y.**, and **Story Exploring** are literacy skills-building programs for parents, expectant parents, children, and teachers.
- **Reach Out and Read**® partners with primary care providers to prescribe books to children and encourage children and families to read with the goal of helping children succeed in school.

## Evaluation Methods

The TZ Evaluation was initiated in February 2014 to examine the extent to which the state of North Carolina and four rural counties enhanced their capacity to improve the quality of the early childhood system. The evaluation employed a developmental evaluation approach (Patton, 2002), which is “designed to be congruent with and nurture developmental, emergent, innovative and transformative processes” (p. 28). The TZ Evaluation team examined how implementation science and systems change technical assistance supported transformation in the early childhood systems at the state and local levels. Adaptations, progress, and challenges were shared with stakeholders during the course of the project using feedback loops to promote evaluative thinking and continuous quality improvement.

## Evaluation Questions

The evaluation questions examined policy, practice, and infrastructure changes that support successful implementation of evidence-based and evidence-informed programs. Evaluators were charged with evaluating the effectiveness of the project overall in promoting local and state capacity building and systems change and not the effectiveness of individual strategy implementation. The evaluation questions included the following:

1. What are the **benefits of the work** in the Transformation Zone?
  - a. Have communities been able to enhance their **capacity** to improve the quality of their early childhood systems? How?
  - b. What state and local **policy and practice changes** in the early childhood system have occurred as the result of the work in the Transformation Zone?
  - c. Have the participating state agencies or local communities **strengthened the infrastructure** to support the successful implementation of evidence-informed practices?

2. What are the **unintended consequences**?
3. If system change has or has not occurred or has been limited, what are the **factors influencing** this?

### Evaluation Team

The Evaluation Team was based at Frank Porter Graham Child Development Institute at the University of North Carolina at Chapel Hill. A systems change expert based at North Carolina State University provided consultation on systems change processes and evaluation. The team was guided by and provided updates and feedback to an Evaluation Work Group, which met monthly and consisted of representatives from the Grant Management Team, NIRN, and NCPC. The Evaluation Work Group served as a mechanism for providing ongoing, rapid cycle feedback to county, technical assistance, state, and grant management teams. The Evaluation Work Group also provided the Evaluation Team the opportunity to learn regularly about activities in the counties and at the state level.

### Evaluation Activities and Data Sources

Complex developmental systems require a plan and vision that examine inputs, activities, outputs, outcomes, and ultimately, a desired impact (Patton, 2006). Transformation Zone evaluation methodology included creating a logic model (see Appendix A) and conducting interviews, focus groups, field observations, online surveys, and document reviews. Interviews and focus groups were conducted with a variety of stakeholders including County Leadership and Implementation Team members, Implementation Coaches, Strategy Purveyors, Service Providers, and state level administrators at different intervals during the evaluation. Field observations were conducted to gather information about change processes occurring at local and state levels around practice, policy, and infrastructure. Online surveys were distributed to local agency personnel to gather information about community context. Administrative data were used in multiple ways, including informing the development of interview, focus group, and field observation guides. Documents such as memoranda of understanding, team meeting agendas, notes, and reports were also reviewed. Table 2 summarizes the evaluation data sources by type, participant, and year.

### Coding and Analysis

During 2014 and 2015, the team analyzed data by identifying and coding themes related to study questions, using a modified constant-comparative approach (Strauss & Corbin, 1998). In the constant-comparative approach, new data are compared with previous findings to understand emergent progress in a dynamic process. For interviews and focus groups, a quarter of the transcripts were double-coded, and all decisions related to interpretation of findings required the agreement of at least two of four evaluation team members and typically reflected consensus of the team. Follow-up questions to partners and stakeholders were frequent to verify both accuracy of information received and appropriateness of interpretation.

Codebooks were developed for analyzing interview data and monitoring reports. Established codebooks were used for other document reviews (Saldaña, 2016). When

preliminary themes were identified, the research team discussed common themes and created a codebook. After consensus was reached for primary themes, the research assistants read the transcripts again to identify codes within each theme. Once research assistants agreed on codes, each code was defined. Transcripts for coding were then randomly assigned to each research assistant and coded using the finalized codebook. Four randomly selected transcripts were double-coded to ensure reliability among coders. The research assistants met to discuss codes and agreements/disagreements and to calculate inter-rater reliability. They maintained inter-rater agreement above 80 percent. See Appendix B for a sample codebook.

For this summative final report, main findings from all previous Transformation Zone Evaluation publications (see Table 3) were considered, as well as three sets of additional interviews (i.e., State Leaders, Strategy Purveyors, and Project Conveners). All previous publications were reviewed by research assistants for key findings over the duration of the project and findings were consolidated.

In order to analyze data from the three additional sets of interviews, research assistants adapted the codebook used in analyzing previous interviews with coaches and teams to better reflect questions asked in each set of interviews. Additional iterative edits were made to each codebook as coding nuances were revealed in the coding process. Two research assistants coded each interview separately then met to discuss codes and agreements/disagreements. Once consensus was reached, the data were organized into two documents: (1) an Excel spreadsheet of main takeaways organized by code and, (2) a corresponding Word document of illustrative quotes organized by code. The consolidated data were then used to write findings. Data informed the findings, and the Evaluation Team reviewed findings for accuracy and completeness.



**TABLE 2. TRANSFORMATION ZONE EVALUATION DATA SOURCES**

Data	To Examine	Participant/Source	Year and Number
Online Survey	<ul style="list-style-type: none"> <li>• Alignment between strategies and county need</li> <li>• Impact of selected strategies on county and state</li> <li>• County context</li> <li>• Collaboration networks</li> </ul>	<ul style="list-style-type: none"> <li>• County stakeholders</li> <li>• Health care providers, Childcare providers,</li> <li>• Parents, Law enforcement, County agency staff, School personnel</li> </ul>	<ul style="list-style-type: none"> <li>• 2014 (n=30)</li> </ul>
Interviews	<ul style="list-style-type: none"> <li>• Role in implementation</li> <li>• Coaching role</li> <li>• Change in county before and after implementation</li> <li>• Facilitators and barriers to change and meeting goals</li> <li>• Impact of work on county and state</li> </ul>	<ul style="list-style-type: none"> <li>• Key informants</li> <li>• Coaches</li> <li>• Coach Coordinators</li> <li>• Funders</li> <li>• Purveyors/Service providers</li> </ul>	<ul style="list-style-type: none"> <li>• 2014 (n=7), 2016 (n=12)</li> <li>• 2014 (n=4), 2015 (n=4), 2016 (n=4)</li> <li>• 2015 (n=2), 2016 (n=1)</li> <li>• 2014 (n=4)</li> <li>• 2014(n=20), 2016 (n=8)</li> </ul>
Focus Groups	<ul style="list-style-type: none"> <li>• Change in county before and after implementation</li> <li>• Facilitators and barriers to change/meeting goals</li> <li>• Impact of work on county and state</li> </ul>	<ul style="list-style-type: none"> <li>• County Leadership Teams</li> <li>• County Implementation Teams</li> </ul>	<ul style="list-style-type: none"> <li>• 2014 (n=4), 2016 (n=4)</li> <li>• 2014 (n=4), 2016 (n=4)</li> </ul>
Document Review	<ul style="list-style-type: none"> <li>• TZ goals</li> <li>• County context supporting/inhibiting implementation</li> <li>• Decision-making processes</li> </ul>	<ul style="list-style-type: none"> <li>• Meeting agenda and notes</li> <li>• MOUs/contracts</li> <li>• Theories of change</li> <li>• Reports</li> <li>• Coaching priorities</li> </ul>	
Field Observations	<ul style="list-style-type: none"> <li>• Independent observation of implementation, collaboration, and county impact</li> </ul>	<ul style="list-style-type: none"> <li>• Cross-county team mtgs</li> <li>• County team mtgs</li> <li>• Coach team mtgs</li> <li>• Coach priorities mtgs (NIRN)</li> <li>• Coach peer mtgs (ABLE)</li> <li>• CCHC mtgs</li> <li>• Cross-county literacy mtgs</li> <li>• State team/funders mtgs</li> <li>• ELC planning mtgs</li> <li>• TA coordination mtgs</li> <li>• TA planning mtgs</li> </ul>	<ul style="list-style-type: none"> <li>• 2014 (n=1), 2015 (n=3), 2016 (n=1)</li> <li>• 2015 (n=23), 2016 (n=5)</li> <li>• 2014 (n=1), 2015 (n=6)</li> <li>• 2015 (n=29)</li> <li>• 2015 (n=7)</li> <li>• 2015 (n=3)</li> <li>• 2016 (n=3)</li> <li>• 2014 (n=5), 2015 (n=1), 2016 (n=2)</li> <li>• 2015 (n=19), 2016 (n=7)</li> <li>• 2015 (n=8), 2016 (n=8)</li> <li>• 2016 (n=7)</li> </ul>

**TABLE 3. TRANSFORMATION ZONE EVALUATION PUBLICATIONS**

TZ Evaluation Report	Date of Report	Date Emailed	Distribution List
TZ system network mapping	August 2014	August 18, 2014	Evaluation Work Group
Coaches brief	August 2014	September 2, 2014	Evaluation Work Group, Coaches
County (combined coach brief and county focus groups)	October 2014	October 30, 2014	Evaluation Work Group, Coaches
Purveyor findings	December 2014	February 2, 2015	Evaluation Work Group, Purveyors and Service Providers
Funder findings brief	December 2014	February 2, 2015/February 20, 2015	Evaluation Work Group/DCDEE and DPH representatives
Stakeholder findings brief	February 2015	March 6, 2015	Evaluation Work Group, Coaches
Evaluation update (1st newsletter)	March 2015	March 31, 2015/May 6, 2015	Evaluation Work Group, Coaches, Purveyors and Service Providers
Evaluation update (2nd newsletter)	June 2015	June 18, 2015	Evaluation Work Group, Coaches, Purveyors and Service Providers
Evaluation update (3rd newsletter)	July 2015	July 31, 2015	Evaluation Work Group, Coaches, Purveyors and Service Providers
Midpoint report	December 2015	December 18, 2015	Evaluation Work Group, Coaches, Purveyors and Service Providers, County Teams
Midpoint report executive summary	December 2015	December 18, 2015	Evaluation Work Group, Coaches, Purveyors and Service Providers, County Teams
Evaluation update (4th newsletter)	February 2016	February 29, 2016	Evaluation Work Group, Coaches, Purveyors, Service Providers, TA Providers
Evaluation update (5th newsletter)	May 2016	May 6, 2016	Evaluation Work Group, Coaches, Purveyors, Service Providers, TA Providers
Early Literacy Strategies Implementation Report	August 2016	September 2, 2016	Evaluation Work Group, Coaches, Conveners, Literacy Coordinators, Literacy Purveyors

## Evaluation Findings

Evaluation activities for the Transformation Zone were guided by the evaluation questions posed in the grant and a logic model developed after the grant started.

The Transformation Zone Evaluation was tasked with addressing key questions:

1. What are the **benefits of the work** in the Transformation Zone?
  - a. Have communities been able to enhance their **capacity** to improve the quality of their early childhood systems? How?
  - b. What state and local **policy and practice changes** in the early childhood system have occurred as the result of the work in the Transformation Zone?
  - c. Have the participating state agencies or local communities **strengthened the infrastructure** to support the successful implementation of evidence-informed practices?

2. What are the **unintended consequences**?
3. If system change has or has not occurred or has been limited, what are the **factors influencing** this?

In 2014, the Transformation Zone Evaluation designed a logic model for the project in collaboration with State Implementation Team members, Grant Management, and TA providers. It was modified slightly in 2015 and again 2016 to align with changes in the project, namely the addition of ABLLe Change TA and the messaging initiative (see Appendix A). Among the desired proximal outcomes were enhanced state and county collaboration, increased systems awareness, and enhanced systems. The findings are presented below in sections organized by the evaluation questions and the outcomes from the project logic model, namely collaboration and systems awareness as beneficial outcomes of the work.

## What Are the Benefits of the Work of the Transformation Zone?

### Enhanced Capacity

Overall, according to focus group data, interviews and reports from technical assistance personnel, each county experienced enhanced capacity. According to conveners in each county, capacity was enhanced by technical assistance related to implementation science but even more so by the active participation of County Implementation Coaches. Increased community capacity was supported by and manifest in their work in teams. Specifically, County Leadership Teams described enhanced relationships across agencies serving children and families. Counties B and C developed new working relationships with local government officials. County D brought leadership from different agencies and service sectors together for the first time. County A leveraged the TZ work to dramatically transform their community capacity to improve broader goals for its citizens. They embarked on an ambitious health agenda, brought decision-making leaders to the table, established a strategic plan, set up workgroups to implement the work, and launched a sophisticated messaging campaign. In this county, some early childhood strategies remained in the strategic plan such as early literacy, but the general focus initially was on community mental health, which included children and families. All four counties engaged in strategic planning across agencies in ways that had not happened before. According to one county Convener:

*(We were) able to establish...long-lasting relationships with people and we were able to actually figure out how we can sustain what we're doing through the county commissioners ... that has also morphed into establishing a relationship with a foundation that we think is going to be able to fund some of the things that we're talking about as well. (Convener)*

There is evidence of some enhanced capacity at the state level, based on interviews and meeting notes. The Division of Public Health, which has specific plans to continue implementing Triple P, enhanced their capacity to use data and some implementation tools. Their plan is to more actively engage communities in the work. NCPC realized substantial transformation in their ability to internally (within their organization) and externally (with stakeholders throughout the state) support processes related to

implementation science and systems change. As manifest in interviews and TZ documents, NCPC demonstrated evidence of transformation through: (1) increased ability to listen to communities' needs, goals, and priorities, particularly rural communities; (2) increased ability to use data to inform and support decision-making; (3) enhanced knowledge related to implementation science and systems change; and, (4) increased capacity to support communities of practice related to implementing evidence-based approaches. As the TZ project progressed, NCPC leaders assumed a state leadership role and were especially influential in supporting coordination of the two distinct TA methodologies (NIRN and ABLLe Change), strategic planning at the county level, and county messaging to engage families and communities in early childhood initiatives.

**State/County Collaboration.** The TZ Evaluation Team gathered agendas and minutes from meetings and attended state and county meetings for much of the project. For the most part, County Leadership and Implementation Teams met regularly. In County D, the leadership team met less frequently which may have been associated with slower progress in the early months of the project. State teams however, met much less frequently. The State Leadership Team met regularly in the first months of the project, disbanded while a state Funders' team representing the agencies met in the interim and began meeting again in 2016. State Implementation Team members met regularly through July of 2015. NCPC held regular meetings to coordinate TA provision and other short-term tasks. Cross-county meetings to share successes and challenges were held once in 2014, three times in 2015, and included State Implementation Team members, County Leadership and Implementation Team members, TA personnel, Grant Management personnel and Strategy Purveyors and Service Providers. These meetings served as a forum for cross-sector and multi-level collaboration and communication.

Working within the teams that were established as part of the Transformation Zone, county and state teams collaborated with TA providers and purveyors to implement the strategies and serve children and their families. At least two of the counties successfully pursued independent funding beyond the grant, and all counties have plans to secure funds to continue early childhood systems work.

Early on there were challenges noted by state and county leaders in establishing feedback loops among county teams, between county and state teams, and across county teams. Feedback loops, or sharing across teams at all levels of the system, were planned to foster learning, to refine and improve practice and policy, and to affirm or recommend changes in direction (Patton 2006). In an analysis of the team maps conducted at the beginning and end of the project (see Appendix C), the Evaluation Team determined that a primary challenge related to feedback loops was there was not sufficient shared agency membership across the teams. The county convener and/or coach served as the communicative feedback role for the counties, and the state coach and TA providers frequently attended county meetings and provided feedback from the counties to the State Implementation Team and from the state to the counties. There is not a plan currently in place to continue county-state feedback beyond the grant. One state leader emphasized the importance of collaboration and communication:

*I think we still need to continue to build our communication loops between the counties and the state. I would hope at the state level that we take ownership of how we deliberately and intentionally invite our counties to the table as experts on what they do and how we get their voice heard. And not just that but how we respond back to them. If you're gonna ask for the voices, you're gonna have to be prepared to respond in some way. (State Leader)*

**Increased Systems Awareness.** County teams, state teams, Funders, and Strategy Purveyors experienced and demonstrated increased systems knowledge and skills over the course of the project. As reported in focus groups and interviews, this awareness was manifest in learning to use data, implementing strategies, and engaging with families.

One of the greatest challenges for county team members was learning to identify, collect, and use data to inform decision-making. Supported by TA providers, county teams, and especially coaches, learned to use different types of data in their transformation work. Supported by implementation science TA, county teams assessed county capacity for implementation, solicited data from Strategy Purveyors, and collected data on literacy strategies. Though they varied in their comfort using data, coaches eventually used data dashboards to communicate with teams about strategy implementation. Later, engaging in work with ABLe Change TA, coaches led community-based systems scans designed to learn about community needs and conduct strategic planning.

Strategy implementation varied by county over the course of the project and, and data regarding implementation and uptake were difficult to obtain due to contractual limitations on data sharing. Nevertheless, according to focus group data with county teams, each county at least partially implemented multiple strategies; and successfully implemented at least one of the literacy strategies (Yazejian, Gallagher, Cianciolo, & Jones, 2016).

Informed by discussions with county teams in the first year of the TZ, NCPC identified family engagement as a need for the systems work. This need was confirmed through data collected as part of a systems scan facilitated by ABLe Change TA providers. In particular, counties sought to engage families related to supporting children's school readiness. Following the systems scans, each county identified areas of need, resources, and priorities related to family engagement. Counties have recently developed strategic plans to act on those priorities. Literacy activities also focused on family engagement. One convener expressed increased capacity around system awareness:

*So I think we're thinking more intentionally about how we're providing services and how we get messaging out (Convener)*

### **Policy and Practice Changes**

Small-scale practice and policy changes were experienced, facilitated by county feedback to funding (State Implementation) agencies.

- **Policy Change.** County A recognized that half-day infant-toddler care would not meet local family needs. They expressed this to the purveyor (Child Care Services Association) and funder (DCDEE), asking for both transportation and full-day childcare provisions. Working with Grant Management, adjustments were made, and the Infant-Toddler program accommodated the need for full-day care and transportation.
- **Practice Changes.** Sustaining of some of the TZ strategies serves as examples of practice change at county and state levels. All of the counties plan to continue at least one literacy strategy in their communities, and the state is continuing to implement Triple P in several communities in the state.

### **Strengthened Infrastructure**

The TZ team infrastructure was designed to support implementation of evidence-informed practices during the course of the TZ grant and afterward.

**County Leadership Teams** served as the key structure for building relationships across agencies, receiving data, and initiating change in the community. Leadership teams were responsible for “getting the right people to the table”—individuals who could dedicate time regularly to learn about implementation science and systems change and who had decision-making power in their own agencies. Leaders needed to understand the TZ project and its potential impacts on the community, make decisions and delegate work, understand and communicate the impact of high quality early childhood systems and how they worked, and collaboratively review data and make decisions. This set of expectations established a high bar for the TZ counties. According to one Strategy Purveyor:

*Just the idea of connection to key leaders is perhaps even more important in rural areas, given the idea of the culture change that needs to take place. Really truly engaging leaders that are in a position to advocate for the program and for the integration and finding those trusted voices in the community that can buy in and support that. (Strategy Purveyor)*

Because County Leadership Teams relied on data to inform their decisions, counties improved their ability to collect and analyze data. In this respect, the infrastructure helped to enhance capacities. Examples include:

- County A established a group to solicit community perspectives, and as a result, broadened their focus from early childhood systems to health for all citizens. This helped to recruit a larger community base to their leadership and implementation teams and strengthened the team’s efforts to craft and carry out a strategic plan.
- County C engaged in community listening and learned that many wished for Saturday public library hours. Using that data, they were able to problem-solve and quickly respond, arranging for the library to be open on Saturdays.

**County Implementation Teams** were a second level of structure embedded in the TZ and were designed to support strategy implementation, collect data, provide feedback from and implement the vision and directions of the County Leadership Team. Teams varied in size and represented local early childhood and social service agencies (See Appendix C for team memberships). Considered the “worker bees” of the TZ work, County Implementation Team members were responsible for working with their agency to oversee the implementation of the strategies within their agencies.

One example of this increased capacity was manifest in the literacy strategies. Within counties, the literacy strategies of *Motheread* and *Reach Out and Read* were installed relatively quickly, implemented broadly, and, according to leadership and implementation teams, have been sustained largely due to the presence of a trained coordinator. The Literacy Coordinator worked with literacy Strategy Purveyors, gathered and shared data, and acted as the feedback communicator (for the literacy strategies) between local teams and purveyors. Furthermore, NCPC established and convened a community of practice with Literacy Coordinators and coaches to support implementation of the strategies. These intentional structures likely accounted for the degree to which the literacy strategies were seen by county and state leaders as the most effectively implemented interventions.

**County Implementation Coaches** were another key infrastructure that strengthened the work during the TZ project. The coaches were members of the county implementation teams and worked in an ex officio role with the County Leadership Teams; both teams considered the coaching role essential to advancing TZ strategies and systems change. County Implementation Coaches facilitated communication among their teams and communicated to state-level personnel on behalf of their counties. Working long hours with many stakeholders, the coach was responsible for learning implementation science while teaching it to the county teams. They led data collection efforts and worked intensively with TA providers (NIRN and ABL Change) to use the data toward program and systems improvement. A State Implementation Coach provided individualized support to each coach and their teams. By design, the coaches were not involved in County Leadership Team activities; however, as the project progressed, coaches served as planners, facilitators, and advisors to their teams. Over the course of the TZ project, participants realized and expressed the importance of the coach role for the successes that were realized:

*A huge piece of our work focuses around the four stages of implementation science, being sure to address challenges and barriers. Making use of improvement cycles, being very intentional to keep that open feedback loop with the leadership team. (County Implementation Coach)*

*I would have to say the biggest support or the most valuable support was ... came through the implementation coach. I can't say enough about the importance of that position ... to the success of the programs of implementing the strategies. (Convener)*

**State Leadership and Implementation Teams** were designed to mirror the processes of the county teams at the state agency level. Both were staffed at the beginning of the TZ project, but the State Leadership Team had ceased meeting by the time the evaluation had begun. The State Implementation Team met regularly through the early and middle months of the project. Their last formal meeting as an Implementation Team was in July of 2015; members have been active in the re-convening and support of the State Leadership Team in 2015–2016. Subsequently, the State Implementation Team, and sometimes a subcommittee of Funders representing the State Leadership Team met regularly to respond to county requests and provide project direction. Later in the project, the State Leadership Team was re-instated, and members began to develop terms of reference for supporting early childhood systemic change beyond the scope of the grant. DCDEE, which oversaw childcare strategies, opted out of adopting implementation science and systems change learning, citing their engagement with strategies would end with the grant period. However, DCDEE remains engaged in funding statewide strategies for infant-toddler care and Healthy Social Behaviors and Child Care Health Consultation.

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### **Team Structure and Linkages**

Appendix C contains figures that illustrate the TZ infrastructures by county. Leadership teams are meant to be the visionary group for the work with representation from as many sectors serving early childhood systems as possible. Each of the County Leadership Teams has diverse representation ranging from 7–12 agencies. Implementation teams were designed to be smaller and focus on the active implementation supports for strategies. Their work is strategy-specific, and team members are meant to communicate directly with Strategy Purveyors and local/regional Service Providers. The Implementation Coach on each team is meant to provide feedback to and from the County Leadership Team, State Implementation Team, and Strategy Purveyors and Local/regional Service Providers. Agency representation on each County Implementation Team ranges from four to five.

Linkages between teams were seen as a key mechanism supporting change in the TZ. These linkages worked fairly well between the County Leadership and Implementation teams, supported by shared participation of the Implementation Coach and convener. However, the County Implementation Teams were decoupled from the Strategy Purveyors, who reported and interacted primarily with the Funders. The exception to this rule was the literacy strategies that communicated regularly with Purveyors due to the presence of a literacy coordinator. The lack of an active State Leadership Team created a perception in the county teams of a communication void. However, the State Implementation Team that included grant management staff, strategy Funders and technical assistance specialists, met regularly to listen to county feedback, problem-solve, and acted as a limited action structure for adapting to county and state agency needs.

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### **Enhanced Systems**

As observed in focus group discussions, interviews and document review, TZ county systems were enhanced. Counties accessed tools developed by the state to articulate key indicators of school readiness; County C used these tools to begin sharing readiness messages with early childhood providers and families. All counties identified indicators



of enhanced early childhood systems in their strategic plans. Focus group and interview data provided evidence of enhanced systemic capacity to gather, evaluate and use data to make decisions. Furthermore, counties have identified priorities in their strategic plans related to child readiness and family well-being and to engaging and communicating with stakeholders.

At the mid-point evaluation in 2015, TZ counties and, to a lesser extent the state, experienced increased infrastructure and process capacity related to implementation science and systems change. Conceptually, the team infrastructure as intended supported county and state collaboration related to identifying needs, resources, and support for effecting change. In practice, the State Implementation Team encouraged communication and listened to counties (via coach feedback and cross-county meetings) in order to identify areas where they could provide support. County teams, lacking experience in soliciting family engagement, used the team framework to divide the workload of gathering community information and making recommendations for implementation of strategies and other interventions. The policy-practice feedback loops emerged in counties as helpful but not necessarily fully developed. At both state and county levels, practices were impacted by feedback but policies were not.

Because NCPC remained engaged with the ongoing TZ processes and conversations at the county level, they embarked on two new goals to provide support to county and state agencies for: (1) improving communication related to school readiness, and (2) improving coordination of services related to family engagement. According to one state leader:

*We have NCPC doing the most to actively integrate implementation practice... they grew ready to look at their own practice and how to apply implementation...they've been a vocal advocate for changing practice in relation to what impedes or what facilitates implementation. (State Leader)*

### **What Are the Unintended Consequences?**

The scope of the TZ project was very ambitious: it spanned state and county work around increasing capacity to use implementation science to affect systems change using eight strategies. In addition, the project goals themselves transformed over the course of the TZ initiative. The most notable unintended consequence was the challenge and effort associated with integrating two disparate approaches to technical assistance provided to the counties and state.

Initially, state agencies and county teams worked to implement eight distinct strategies while learning to use implementation science via assistance from NIRN. Soon after the TZ project started, awareness emerged (as shared by state and county focus groups and interviews) that the work was largely top-down and had not engaged counties in exploration of their contexts and needs. To remediate challenges related to stakeholder buy-in and community/family engagement, a second technical assistance source was contracted: ABLe Change. Implementation science and ABLe Change are drawn from

different theory and practice perspectives. They use different nomenclature, group process, and data collection and usage. Learning to use two models was very difficult for teams, coaches, and state agencies. TA providers and NCPC met frequently to coordinate efforts between the two models, but in the end individual counties engaged more in either implementation science or systems change. It was difficult to balance the two sets of work:

*There was not time spent at the beginning really fully understanding how these two models could be aligned and coordinated. So I think that was a big problem... I think the models could come together tremendously well, and I think it's one of our collective failures that we did not figure out how to make that work better together. (State Leader)*

Another unintended consequence was related to efforts made to reduce the top-down design and listen to rural community voices regarding early childhood transformation. By design, counties' main commitment was to work within a team structure to learn how to implement eight early childhood strategies. In practice, as counties met, talked, and built relationships, they sometimes identified priorities that fell outside the auspices of the intended work. As described earlier, one county reconfigured their teamwork to serve a goal to enhance health of all citizens in the county. Another county opened the library on Saturday and launched agency mixers that were activities outside of the intended strategies. These and other activities were clear examples of transformation based on counties' needs and priorities.

The emergence of NCPC as a clear leader for transformation might be considered another unintended consequence. When state leadership ceased convening, a "vacuum" remained. For a period of time NIRN personnel filled the role while bearing responsibility for providing the bulk of technical assistance. Encouraged by NIRN, NCPC stepped into the leadership role. As reported in interviews, NCPC aimed to support the processes and shifted the vision of the project in some meaningful ways. For example, they contracted with ABL Change to support family engagement around systems change. NCPC engaged in listening to counties and reconvened state leaders to commit to a relationship with the counties. As leadership in the project shifted, new vision emerged:

*I think NCPC picked up the vision for the T&Z and carried it forward... I think it changed slightly when they became the vehicle for it, because some of the system's change pieces became different. They came more around equity but also more around this idea of parent voice. Pieces that were really important but weren't involved in that initial vision which I think was more about system's change to support good implementation practice. So I think NCPC were really the people that drove it forward. (State Leader)*

## If System Change Has or Has Not Occurred or Has Been Limited, What Are the Factors Influencing This?

Several factors within and across counties and at the state level may have been associated with the progress made in enhancing early childhood systems. Table 4 below summarizes some of the factors at the county level, and the following sections highlight aspects of technical assistance, coaches, leadership, and data use that may have been important factors influencing systems change.

**Technical Assistance.** According to county stakeholders' perceptions shared in focus groups and interviews, without ongoing, high-quality, intensive technical assistance, counties would not likely have acquired the knowledge and skills needed to make the gains they did. One convener commented on the benefit of having on-site technical assistance:

*NIRN came and built a relationship with us. If you look at the Improvement Cycles, having the experts there to work with you is probably a better way than sending the information through someone else. (County Convener)*

**County Implementation Coaches.** The active presence and functional leadership of County Implementation Coaches moved each county forward in its work. Participants unanimously expressed the importance of the coach to the progress.

**Leadership.** Original state visionary and functional leadership left the project early on. However, NCPC's institutional capacity, persistent motivation, and willingness to lead effectively supported the transformation that counties achieved. For example, in listening to counties express their successes and struggles related to engaging communities in the work, NCPC dedicated resources to supporting counties' capacity to develop and implement a communication/messaging plan. As the project was coming to an end, each county made substantive gains in implementing its messaging plan. However, counties that had leadership in place earlier in the project realized more extensive change.

Changes in state government, a lack of clear direction, and personnel changes were cited in interviews as reasons for the disbanding of the State Leadership Team:

*I think that we never got to a place where good communication was happening between state agencies in anything but sort of an information sharing mechanism, like "I just tell you what I'm doing and then we both go home" in the end. I don't think we ever got to a place where state partners were seeing themselves as working together on anything. (State Leader)*

This need for more leadership and direction for the TZ project had several consequences, most importantly a perceived lack of state support for the counties. County teams expressed dissatisfaction that they were required to commit to hard work to align and change their early childhood systems while the state was not. According to one county Convener:

*I never felt the relationship between what we were doing in the four counties and our statewide counterparts. Even when we were in the room together there was still a very, very, dotted line. And I just failed to see a real connection between the state and local. (Convener)*

**Data Use.** Counties' ability to use data served as a significant leverage for change. All counties collected data to assess community literacy needs. Two counties solicited families' perspectives and crafted priorities to address those perspectives. All counties conducted systems scans to assess community needs and used the scan data in their strategic planning. When counties failed to get data from Strategy Purveyors, it impacted the communities' engagement in the strategies and their perception of the strategies' effectiveness. Counties were less likely to sustain strategies when they did not have access to data regarding the strategy's implementation. A need for greater support of data use was evident as expressed by one state leader:

*We're trying to get (the counties) to use existing data right now though. They don't even know what data exists... So I think that the state could have provided some guidance around 'here are the various kinds of data you currently collect' and 'here's who you contact at the state level to get it'. Because sometimes they collect the data, they just never look at it. (State Leader)*

**Strategy Contracts.** County Implementation Teams struggled to realize their desired impact with implementation. This was due in part to a lack of provision for governance mechanisms in the design of the TZ between the Strategy Purveyors and the County Implementation Teams who were supposed to be supporting strategy implementation. Strategy contracts typically did not include a requirement to coordinate directly with County Leadership and Implementation Teams. Strategy Purveyors were not contractually obligated to attend County Implementation Team meetings nor was there any obligation for purveyors to share data concerning their implementation efforts. Only the literacy strategies had regular representation on the County Implementation Teams. Family strengthening and childcare strategies met occasionally with all teams but not in a way that effectively supported implementation, according to team focus groups and interviews.

Family strengthening strategies were administered by DPH through contracts with Strategy Purveyors that required data be shared with DPH and not necessarily with county teams. Thus, County Implementation Teams experienced limits with authority and access to support implementation. Leadership teams discussed that this seemed to be related to their difficulty getting buy-in from their communities. Accordingly, County Implementation Teams had limited ability to influence strategy implementation as intended. Despite this, some County Implementation Teams worked diligently and were able to have some success.

Related to the challenge with accessing data from Strategy Purveyors, one County Implementation Team member explained:

*We have qualitative data, but when it comes to assessing outcomes, we (only) know outputs. There's no baseline that's established to know if we are achieving outcomes. (County Implementation Team)*

And a state leader explained it was difficult to incorporate new data communication that was not included in the original agency-purveyor contracts contracts:

*We would have rather seen more push there to see data shared that was useful in a way to the counties. State agencies pushed back, you know and it was too hard for them to come up with one more report.*  
(State Leader)

TABLE 4. FACTORS BY COUNTY

	County A	County B	County C	County D
Context	Large, diverse county with strong systems of care.	Population very dispersed. Few children in county in regulated care.	Diverse county with good services but unaligned systems.	County divided into two main regions, with one region geographically isolated.
Leadership	Early strong leadership emerged.	Struggled to get right leadership to the table.	Had early champions that kept the work moving forward; right, effective leadership was engaged with strong connections to county board.	Leadership team struggled to get right leaders to the table, met infrequently, leading to a slow start.
Coach	Coach had previous understanding of implementation science.	Coach helped county identify need to locate children needing services.	Coach embraced systems change and family engagement.	Coach built relationships—brought in new Leadership Team members and knowledge about implementation science and systems change.
Achievements	Listened to county stakeholders. Formed a health initiative using TZ infrastructure.	Identified priority of finding children in need of services; established relationship with county board for future funding.	Identified needs to align county systems and services and engage families in children’s school readiness.	Overcame early obstacles; recruited leaders; and identified need to educate and engage families in early childhood goals.

## Transformation Zone Key Findings: What Has Been Learned and What Comes Next?

This section summarizes the key findings of the evaluation and describes plans for sustaining changes at the county and state level.

### Key Findings

**Infrastructure mattered, especially the creation of teams.** The team infrastructure created early in the TZ as part of Active Implementation principles was, according to county leadership and implementation teams, a key to successful change. In particular, the creation of a County Leadership Team with the “right people” at the table who were willing to dedicate time and resources to systemic change was perceived to be essential to success. The infrastructure of teams created the context for transformation to occur—relationships within counties shifted as members identified a shared purpose.

*Also, one of the biggest gifts and challenges has been working across the aisle and strengthening of ties between agencies. The way that we're working together to create a common vision is really important.*  
*(County Team Member)*

County Implementation Teams were also important, especially for implementation of the literacy strategies. But the relative disconnect of other strategies from implementation structures in the counties rendered both the strategies and implementation teams less successful, according to leadership and implementation team stakeholders.

**Successful strategy implementation benefitted from collaboration between Purveyors and County Implementation Teams.** Counties made progress in their efforts to embed evidence-informed early childhood programs in their county systems. For the literacy strategies, a county Literacy Coordinator collaborated regularly with Strategy Purveyors, participated as part of the County Implementation Team, and reported to the County Leadership Team. The literacy strategies were the earliest and most successful of the strategies, according to county focus groups and interviews. All four counties plan to sustain literacy strategies beyond the grant. In the absence of strong feedback loops and collaboration between Strategy Purveyors and county teams, transformation progress was slowed, and in the case of several of the strategies, will not be sustained.

**Expert technical assistance mattered.** Counties received intensive technical assistance related to Active Implementation (NIRN) and systems change (ABLE Change) including support related to applying the knowledge and skills in their teamwork and collaboration. Strategy Purveyors also benefitted from technical assistance; although some of the strategies were evidence-informed, additional support was needed to render them implementation-ready. County stakeholders endorsed the importance of technical assistance for their transformation progress.

**Supportive leadership mattered.** Supportive leadership made a positive impact at several junctures in the TZ project. Early strong leadership helped County A launch their health collaborative. Getting the right leaders to the table in County C helped move their agenda for systems change and family engagement forward. NCPC's leadership around systems change, messaging, and support for a literacy community of practice positively impacted all TZ counties. Several stakeholders speculated that more progress might have been made in the presence of consistent, ongoing state leadership. Administrative changes related to governmental shifts in agency leadership in 2012 may have left the state system with less ability to sustain a team infrastructure and less ability to respond to complex system needs from the counties (Foster-Fishman, et al., 2007).

**Coaching was central to success.** The coaching role provided a strong foundation for change in the Transformation Zone. Over time, their role expanded beyond implementation coaching; coaches served as ambassadors for feedback between county teams and between county and state agencies and leaders. They often convened and prepared for meetings; translated implementation science and systems change work for their county teams; and conducted data collection, analysis, and reporting. According to County Leadership Team focus group feedback, without the central work of the coaches, it is unlikely change would have occurred.

**County capacity to use data was critical for success.** According to county stakeholders and TA providers, knowledge and skills related to data use for decision-making stand out as being among the most important factors that increased communities' capacity to implement and sustain change. When counties collected data from community stakeholders, shared the data with leaders, and used the data to make decisions about strategic planning, they increased community buy-in and attracted more community members to the work. Counties A and C embarked upon this process earlier and made quicker progress. In the end, all county teams increased their capacity to collect, analyze, and use data.

As counties learned to use data to make decisions, they solicited information from Strategy Purveyors for each strategy. When Strategy Purveyors shared data (as with literacy strategies), counties were more likely to take on ownership of the strategy's success. When Strategy Purveyors did not share data, county uptake was less pronounced. In the end, counties have chosen to attempt to sustain strategies that shared data and information with the counties. One Strategy Purveyor noted this as an area for improvement:

*I think that second part, the community feedback loop and community stakeholders really knowing how well our program's doing, and also how the program can benefit the community at multiple levels, I think that piece was sort of missing. (Purveyor)*

**Counties engaged families in their work by gathering and sharing information.**

Counties initially struggled to engage community members in the strategies. County stakeholders acknowledged that learning to engage families was a critical aspect of successful transformation. With technical assistance support including use of community surveys and messaging, each county solicited families' perspectives and made efforts to respond to community needs. One county convener noted the following:

*I'm seeing more people involved, and parents are getting more engaged. And so we're seeing the results of doing the research and getting the information out there that it's making a difference. (Convener)*

**Exploration of county needs and approaches to meeting needs in support of community buy-in and engagement are important for successful transformation.**

Change in the TZ moved slowly initially; technical assistance was experienced by the counties as primarily top-down and didactic. All evidence-based strategies had been chosen for the counties, and they engaged in Active Implementation—an implementation approach that also had been selected by the project designers. Counties initially resisted this uniform approach to meeting individual community needs and requested individualized TA, citing unique community needs. As one Convener reported:

*I'm not really sure I would have done anything differently. I think the biggest thing that bothered me about this was not knowing all the information up front. I wish we'd had an opportunity to select the programs... after being given time to explore the things in our community that we actually needed that could make a difference (Convener)*

**It may be wise to limit the scope (number of strategies) in Transformation Zone work.** Eight evidence-informed and evidence-based strategies were chosen for implementation. County Leadership Teams expressed a concern that learning to implement so many strategies simultaneously was overwhelming, with one stakeholder sharing that it was like “learning to build a plane while flying it.” While efforts were made to have counties choose strategies to prioritize, all counties chose to implement all strategies. The workload was often overwhelming, and made more complex by the addition of a second technical assistance framework (ABLE Change). It is possible that the scope of the project including the number of strategies, may have slowed progress in the early months of the TZ. As expressed by one state leader:

*I think we all knew very shortly after we got the grant that we were crazy to have done so many strategies and to think about applying implementation science. So I don't think it took us long before we realized “Oh my gosh what on earth were we doing?!” (State Leader)*

### Continuing to Transform: Strategic Plans and Sustaining Change

Although the evaluation concluded in 2016, the work started during the Transformation Zone will continue in the counties, and we conclude the report by highlighting the counties’ current strategic plan priorities and efforts at the state to sustain progress made. In the last year of the grant, counties received TA to support sustaining changes and developing strategic plans. Each county’s strategic plan included priorities, goals, objectives, and specific activities to support their objectives. The content of the plans by county are summarized in Table 5 below.

**TABLE 5: COUNTY STRATEGIC PLAN PRIORITY AREAS**

	County A	County B	County C	County D
Priority Areas/ Goals	Continue Health Initiative via: <ul style="list-style-type: none"> <li>• Childcare</li> <li>• Health</li> <li>• Literacy</li> <li>• Family</li> </ul>	Preparing Children for Kindergarten via: <ul style="list-style-type: none"> <li>• High Quality Services</li> <li>• Community Awareness</li> </ul>	Enhancing School Readiness via: <ul style="list-style-type: none"> <li>• Alignment/Coordination of Services</li> <li>• Community Awareness</li> <li>• Family Engagement</li> </ul>	Preparing Children for Kindergarten via: <ul style="list-style-type: none"> <li>• High Quality Services</li> <li>• Community Awareness</li> </ul>

State leadership increased its engagement and effort in the last year of the grant. NCPC continued to support coordination of TA, the literacy community of practice, messaging, and coaching, and increased efforts related to convening the State Leadership Team. The State Leadership Team met five times in 2016 (as of this writing) and is slated to meet in December, establishing terms of reference and priorities for work beyond the time and scope of the grant.



As of the end of the Transformation Zone, counties with strategic plans in place are moving toward aligned early childhood systems. The state is behind the counties in early childhood systemic alignment, but the reconvening of the State Leadership Team in 2016 holds promise for future alignment. Ideally, the TZ was designed to support alignment across the counties; however early on counties expressed a strong desire to have their TA and experiences individualized. Each county views its identity as highly different from other counties with very different needs and resources and priorities. Over the course of the project, there were multiple opportunities for cross-county collaboration via meetings, the literacy community of practice, and technical assistance trainings. While county teams expressed some areas where they shared interests, the counties remained largely independent in their activities. ■

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## Appendix A—Transformation Zone Logic Model

Version Date: 4-20-16

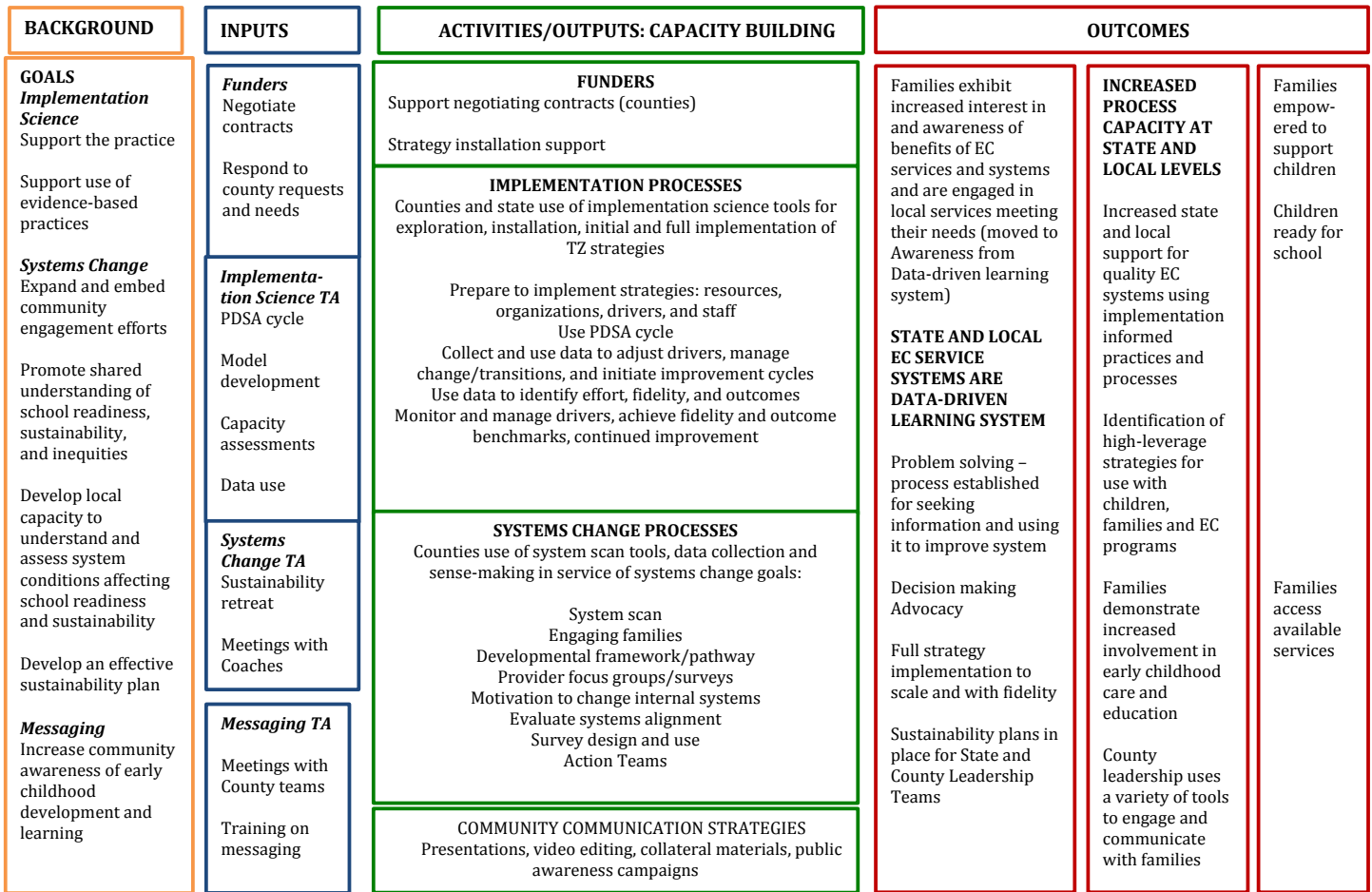
### TRANSFORMATION ZONE LOGIC MODEL

BACKGROUND	INPUTS	ACTIVITIES/OUTPUTS: CAPACITY BUILDING	OUTCOMES		
<p><b>RATIONALE</b>  <b>County rurality</b> – Strong sense of community identity, loyalty and concern for welfare of citizens</p> <p>Challenges associated with poverty and under-resourced systems</p> <p><b>Fragmented EC system</b> – At state and local levels</p> <p><b>Low levels</b> of education/academic performance in community</p> <p><b>State systems capacity</b> – Current state system bounded by separately managed, funded entities:            DCDEE            DPH            DPI/OEL            NCPC            DSS</p>	<p><b>Grants management:</b>            Facilitate negotiation of contracts</p> <p>Oversee grant activities</p> <p><b>State and county teams:</b>            Leadership</p> <p>Implementation</p> <p><b>Coaches:</b>            State level</p> <p>County level</p> <p><b>Purveyors:</b>            Model development</p> <p>Strategy facilitation/delivery</p>	<p><b>GRANTS MANAGEMENT</b>            Convene state-level early childhood teams            Respond to county and purveyor requests</p> <p><b>COUNTY TEAMS</b>            Identify membership and leadership to accomplish goals            Identify member connections to community            Meet regularly to assess, identify needs, advocate            Articulate asks to appropriate source            Develop strategic plans            Negotiate transitions in personnel, programs            Develop county feedback loops among service providers, agencies, community</p> <p><b>County Leadership Team:</b>            Provide vision and direction to implementation team            Provide visibility to effort and political support            Provide funding/Allocation of resources            Assist with barrier removal and problem-solving            Facilitate the work of the implementation teams</p> <p><b>County Implementation Team:</b>            Carry out implementation and system-building activities            Support collaborative relationships            Know strategies, implementation science, systems change</p> <p><b>COACHES</b>            Support implementation science use in county activities            Team development            Process improvement            Usable intervention development            Lead assessment efforts            Educate teams regarding implementation science and systems change            Provide behavioral coaching            Team-based project management</p> <p><b>PURVEYORS</b>            Articulate models for community implementation            Provide support for strategy use and tools</p>	<p><b>STATE/COUNTY COLLABORATION</b>            State/county entities:            Meet regularly to discuss county needs related to EC programs &amp; services</p> <p>Collaborate to establish programs &amp; funding to meet county needs for EC services</p> <p>Use monitoring evaluation and feedback to share information and articulate needs and expectations</p> <p><b>INCREASED SYSTEMS AWARENESS</b>            EC infrastructure includes community engagement plans</p> <p>Key indicators of school readiness, effective early childhood system, implementation</p> <p>Counties implement communication strategies for community awareness</p>	<p><b>INCREASED INFRA-STRUCTURE CAPACITY AT STATE AND LOCAL LEVELS</b></p> <p>EC leadership at state and local levels listen and respond (communicate and collaborate) to identify needs, resources and support</p> <p>Effective policy-practice feedback loops</p> <p>Aligned county ECE systems</p> <p>Cross-TZ team alignment</p> <p>Programs are aligned with and critical to prioritized outcomes</p>	<p>Shared EC vision and unified, coordinated system at state and local levels</p> <p>Aligned state early childhood systems</p> <p>Fully funded EC programs for families experiencing poverty</p> <p>Public awareness of the importance of the first 2,000 days</p>

# Transformation Zone Logic Model (cont.)

Version Date: 4-20-16

## TRANSFORMATION ZONE LOGIC MODEL



## Appendix B—Sample Codebook

<p>The following codes reference themes, definitions, and examples related to interviews with key informants (e.g. state leaders' interviews) in the Transformation Zone (TZ). Data were reviewed for evidence of changes in behavior, policy and practice, (e.g. increased system quality and evidence-informed practices). Examples from state agency informants include quotes and information drawn from quotes.</p>		
Theme	Definition	Examples
<b>Role</b>	Statements about own role in the TZ project , as well as the presence or absence of other leaders, administrators, coordinator/convener, visionaries, champions, and/or other type of influential person	“My position was to be the leadership for our (DCDEE) Race to the Top projects. So it was fine that I had contract administrators and program people to deal with the day to day, but then when they needed decisions made, it needed to come up to my level.”
<b>Relationships</b>	Presence or absence of evidence of increased or enhanced collaboration and communication within or across state agencies, within or across county agencies, and/or across state and county agencies	“Because I think when the original team that worked on the grant application had a shared understanding of what we were trying to accomplish in the TZ. And then when various people left, it was a lot harder to get everybody on board. And I don’t...not quite the same level of commitment to the TZ.”
<b>Systems Awareness</b>	Expressed understanding or lack of understanding about TZ system functions (community engagement, engaged leadership and implementers, cross-agency collaboration, teamwork, etc.). Includes statements that interviewee does/not understand system functions or interviewee statements about whether others do/not understand system functions	“...we knew we didn’t have all the right people to the table...”
<b>Data-driven learning systems</b>	Presence or absence of evidence of state and county teams using data and/or feedback loops for decision-making – including collection, review, analysis, reporting, application to policy/practice	“For us to create policy with that (county voices) being a valuable piece of data, I don’t think we’re gonna get anywhere.”

## Sample Codebook (cont.)

<b>Governance</b>	Presence or absence of evidence of new, external forums for discussions that will extend beyond the life of the grant	“What’s important to me is in all of this that we already had through the Transformation Zone an identified leadership team/structure, and now we have the opportunity to bring that group together in a new way, not just to focus on the Transformation Zone but to really think about how to align our strategies across the state.”
<b>Policy</b>	Presence or absence of specific evidence of changes in rules, procedures or guidelines as a result of the TZ	“And I still think we have some holes there that I think prevent us from building the true relationships that we need and understanding that we need to make better policy decisions and figure out how we don’t duplicate but rather leverage our resources.”
<b>Practice</b>	Presence or absence of specific evidence of preparation, training or implementing work as a result of the TZ	“Like if I think NCPC specialists, the two of them and the Coaches are really becoming quite adept with implementation in their agency. And now they are working with a handful of other folks on building their capacity.”
<b>Benefits</b>	Presence or absence of evidence of gains, advances, and advantages as a result of TZ activities	“There’s work around moving toward a state-level program for family engagement.”
<b>Technical Assistance (TA)</b>	Presence or absence of technical assistance provided throughout the TZ project period. Includes comments on overall coordination or lack of coordination of TA providers	“I think we probably could have used more TA in our attempts to work with ABLe Change...there wasn’t a clear plan of intersection or alignment.”

## Sample Codebook (cont.)

<b>Unintended consequences</b>	Presence or absence of evidence of unplanned effects and outcomes as a result of work in the TZ. These are primarily surprises that were not part of the original plan. They are typically rare and yet meaningful. One example would be the creation of Beaufort’s Behavioral Health Task Force	<p>“There’s a bill. It is really coming out of our recommendations, so we’re excited. “ White</p> <p>“We had several meetings back in the winter with the House Select Subcommittee on Early Childhood and Family Support. And they really wanted to understand the statewide system, and they wanted the key players to make recommendations for how to strengthen the system.”</p>
<b>Other</b>	Meaningful Information not coded in other categories (theme/issue identified).	<p>“But I wouldn’t say it’s an overarching wind for this project that we built capacity at the state level. I think the state agencies have multiple pressures and multiple challenges, and it’s an ongoing, constant effort.”</p>

### Coding Process

All transcripts were reviewed prior to drafting the codebook in order to capture key themes present throughout. Once the codebook was created, three transcripts were randomly selected for reviewing and coding by research assistants, who met to discuss their individually-coded transcripts. Next, research assistants met with the Co-PI to discuss their coding and any issues that arose. The codebook was edited accordingly. Three additional transcripts were selected, coded, and discussed by research assistants in order to reach consensus. The process was once again reviewed with the Co-PI. All remaining transcripts were coded and reviewed.

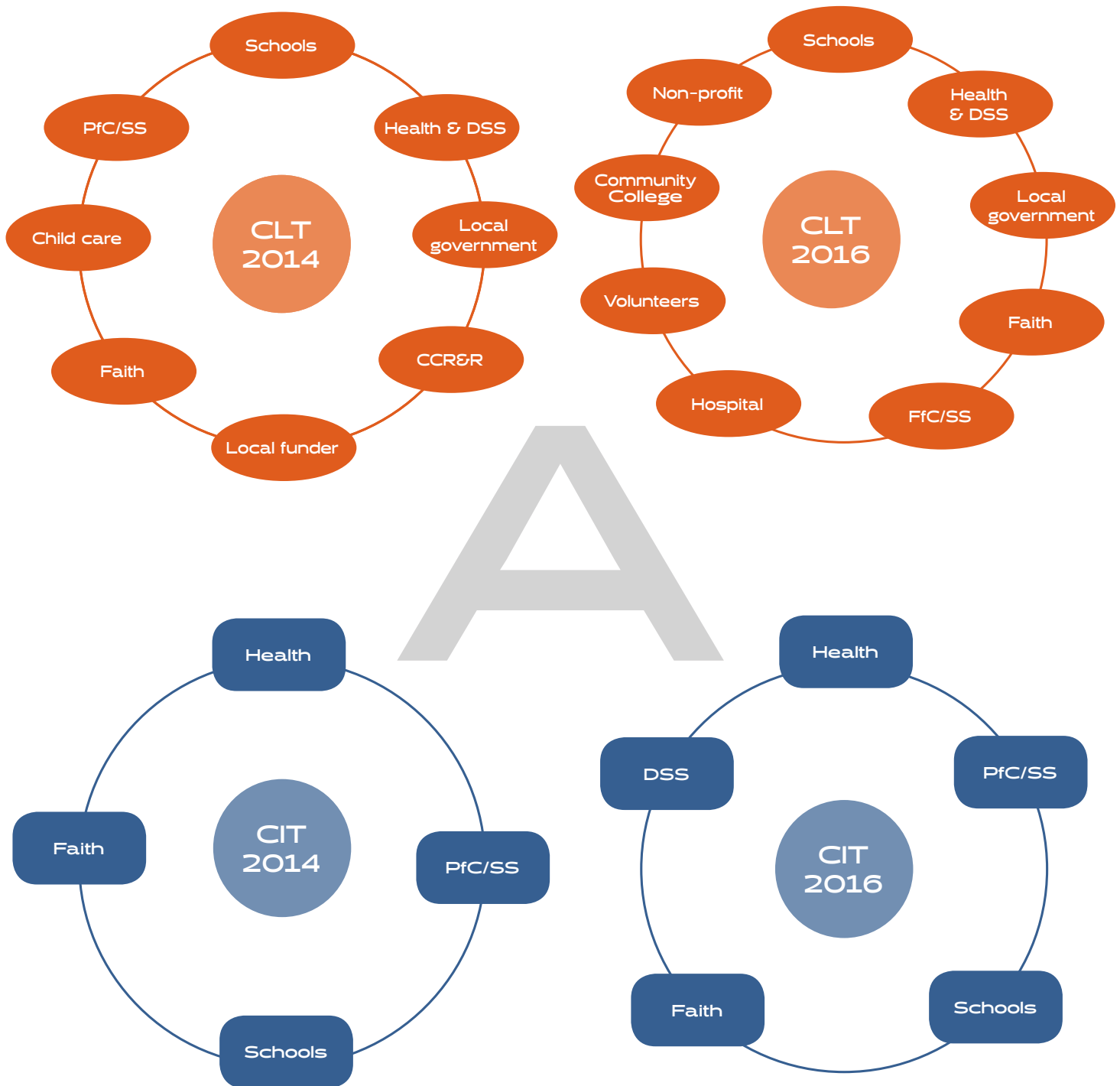
### Coding Guidelines

Throughout the coding process, the following guidelines were used:

- Information provided by interviewees was coded as is. If additional information was needed, the interviewee was contacted.
- There was no triple coding of any text. If possible, sections that seemed to have three relevant codes were to be broken down into hermetic units with one or two codes assigned to each unit.
- At times, interviewees shared advice for, or lessons learned from, the TZ project; a code not directly reflected in the codebook. These data were evaluated for inclusion into one of the other codes when possible.
- If the interviewee and/or agency demonstrated knowledge of “systems awareness” and shared ways in which they acted on that awareness, it was coded as a “policy change” and/or “practice change”.
- At times, it was challenging for coders to distinguish comments made by interviewees as “policy change” or “practice change”. Units were double-coded for policy or practice as needed.

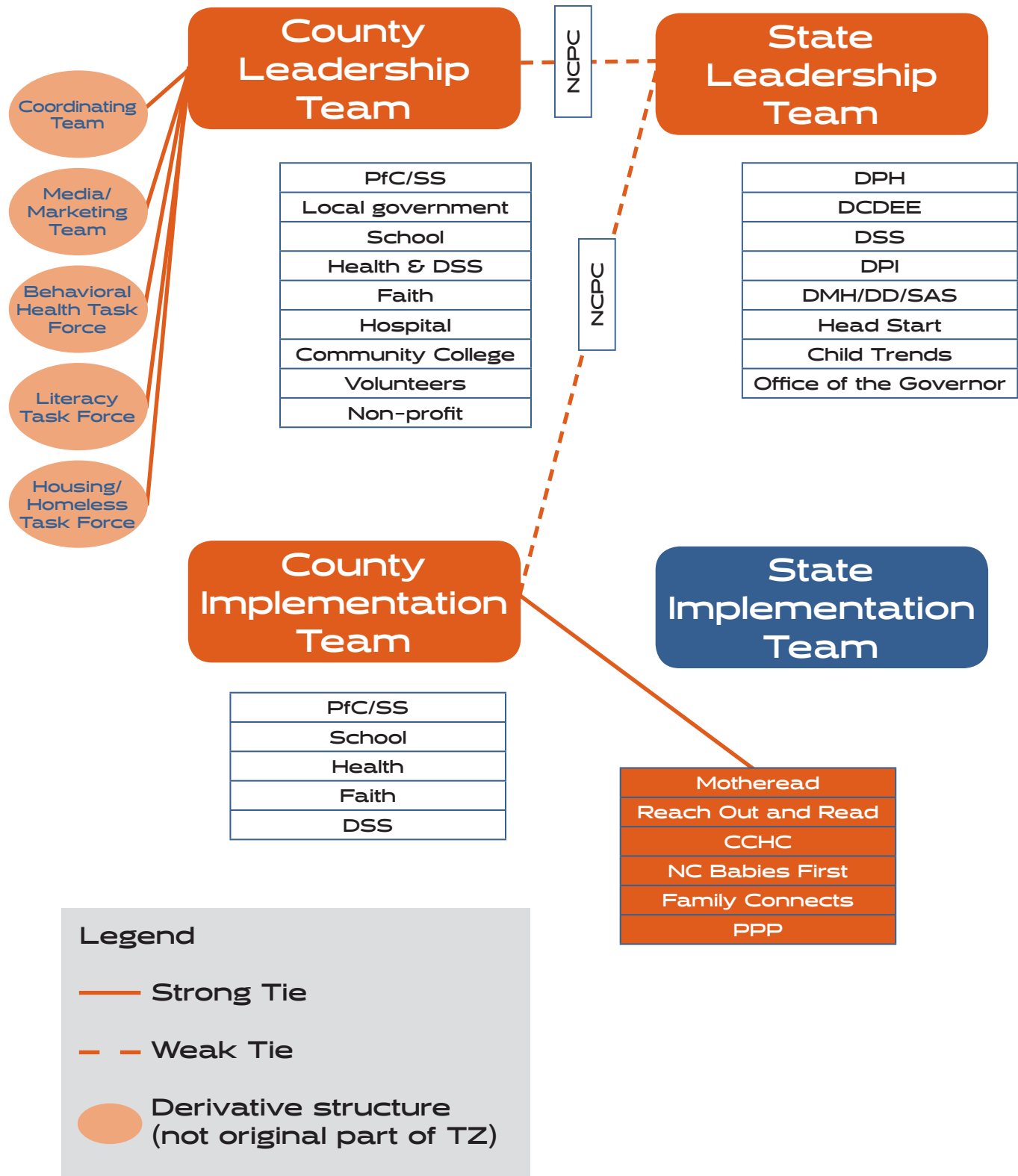
# Appendix C—County Team Composition and Linkages

## County A: TZ Team Composition 2014 and 2016

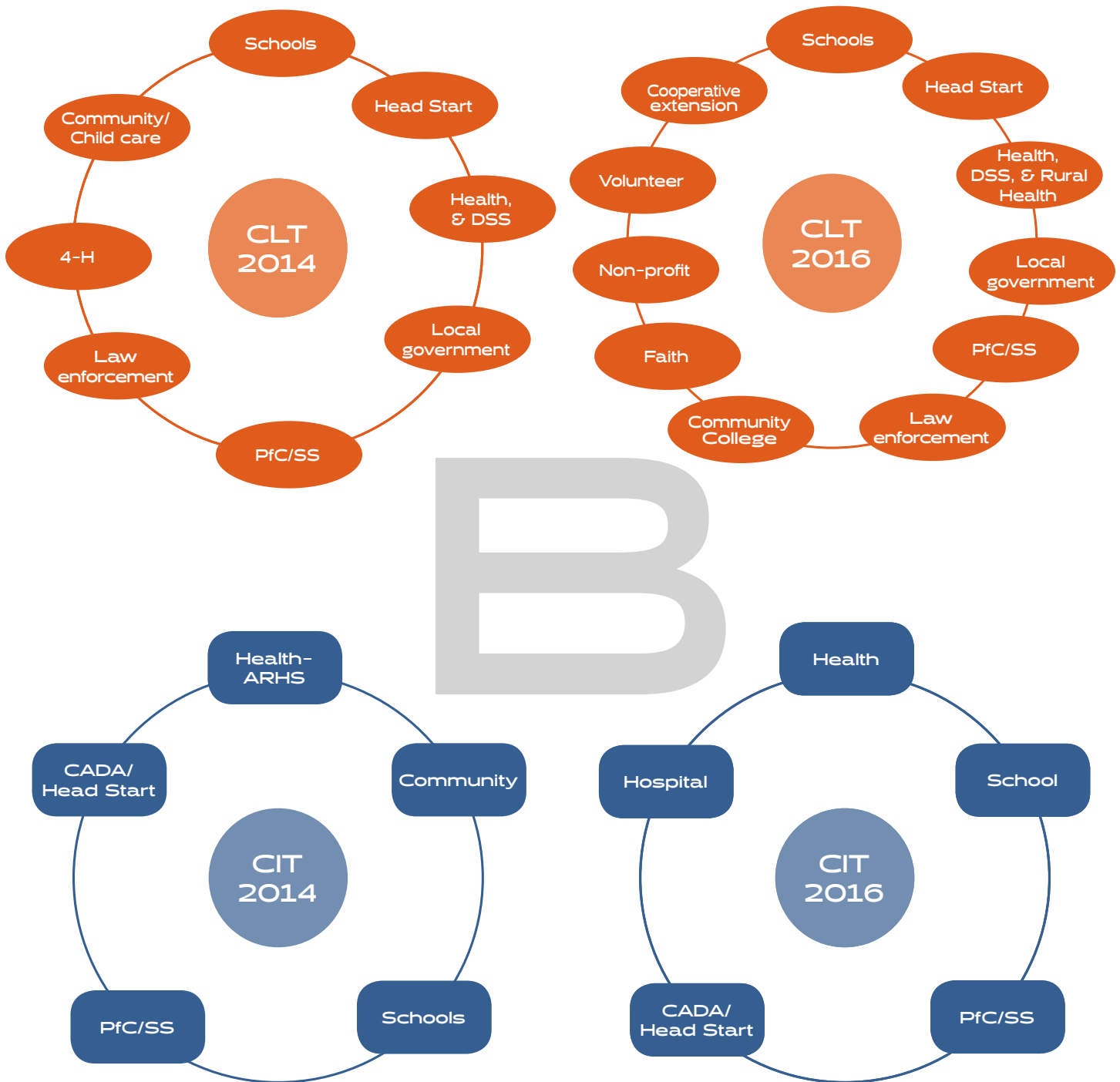




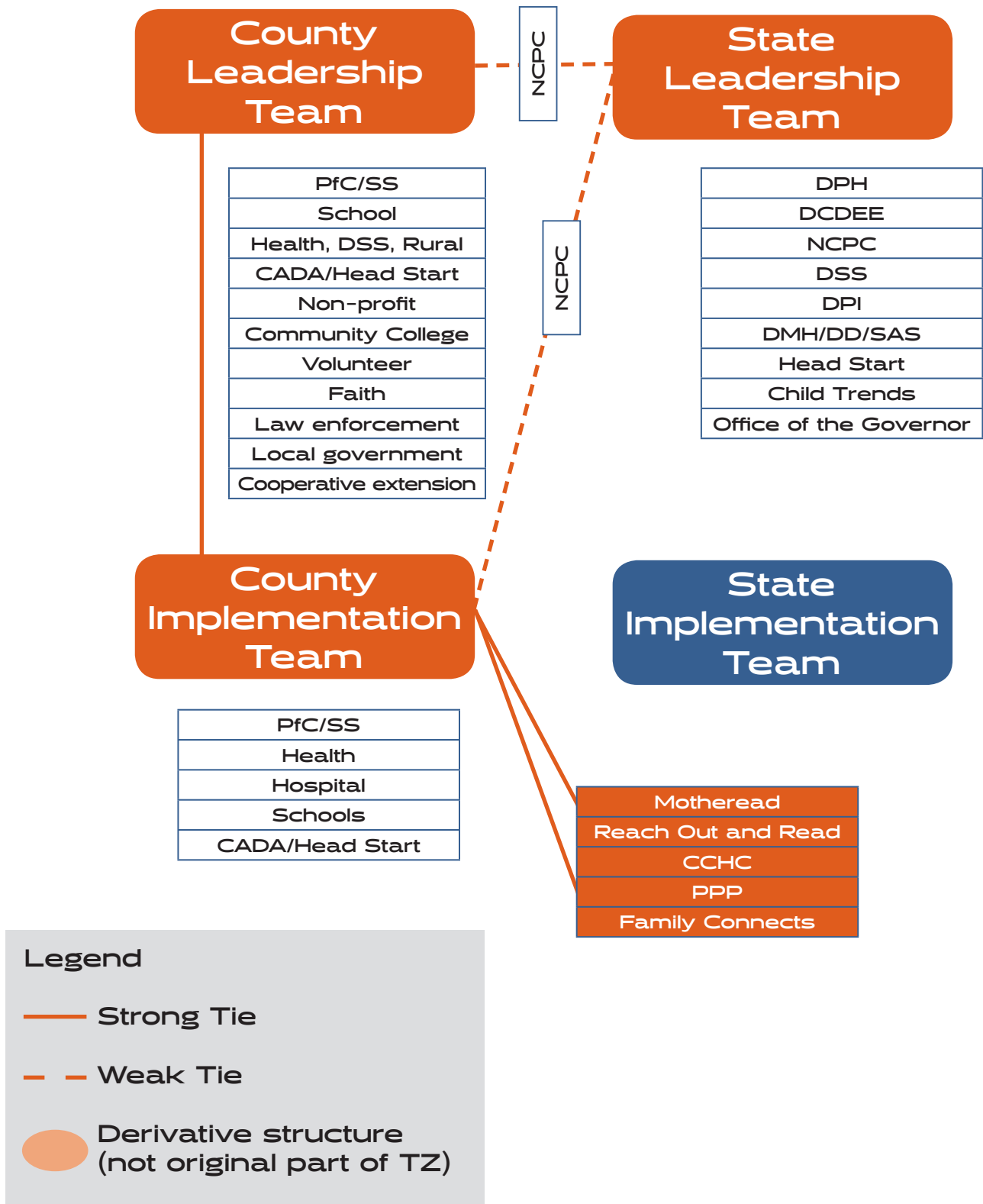
County A: TZ Linkages and Organization 2016



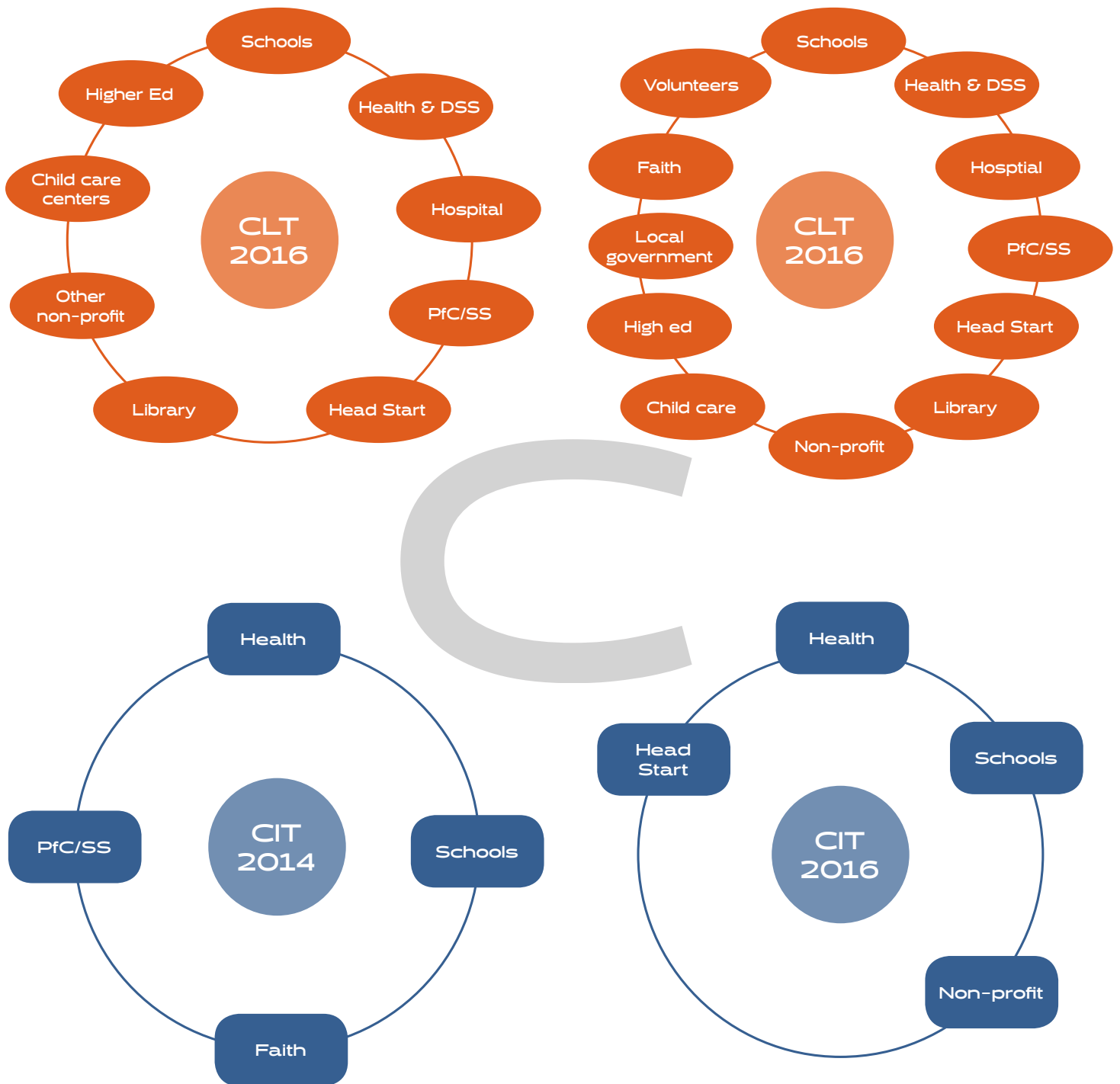
## County B: TZ Team Composition 2014 and 2016



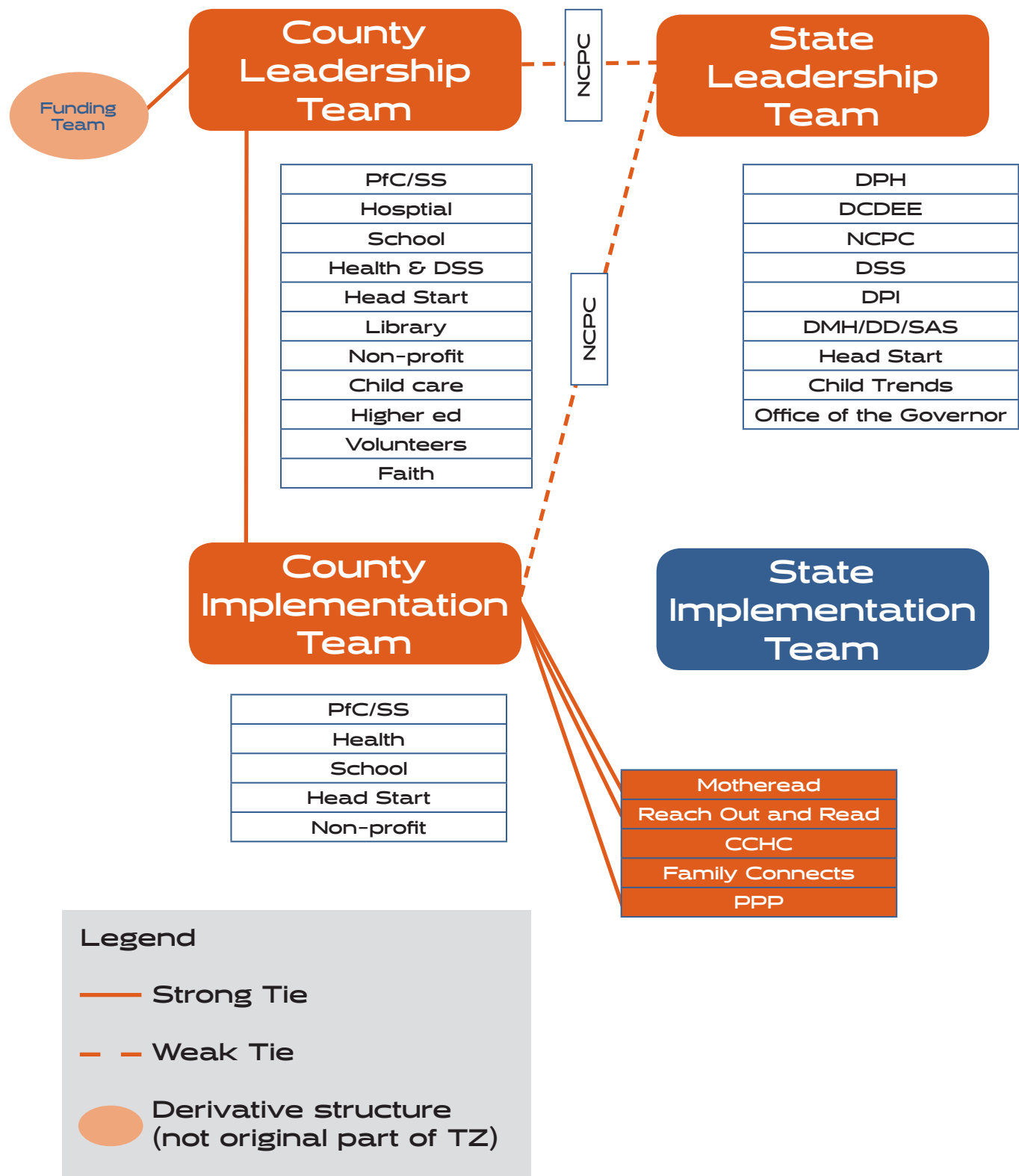
County B: TZ Linkages and Organization 2016



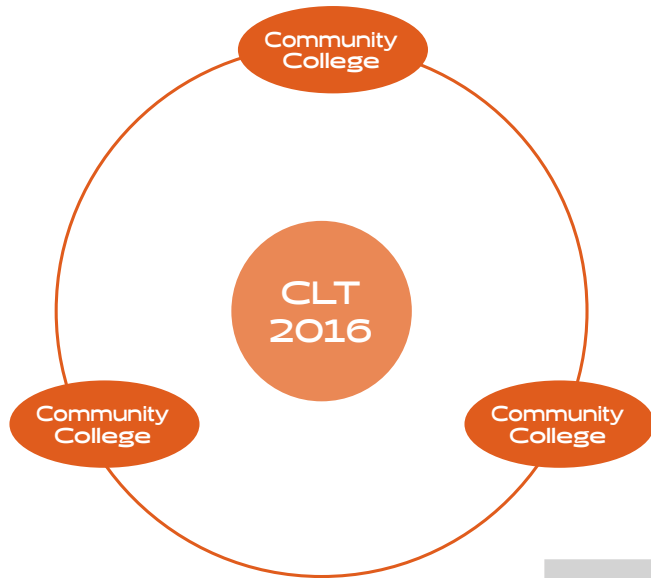
## County C: TZ Team Composition 2014 and 2016



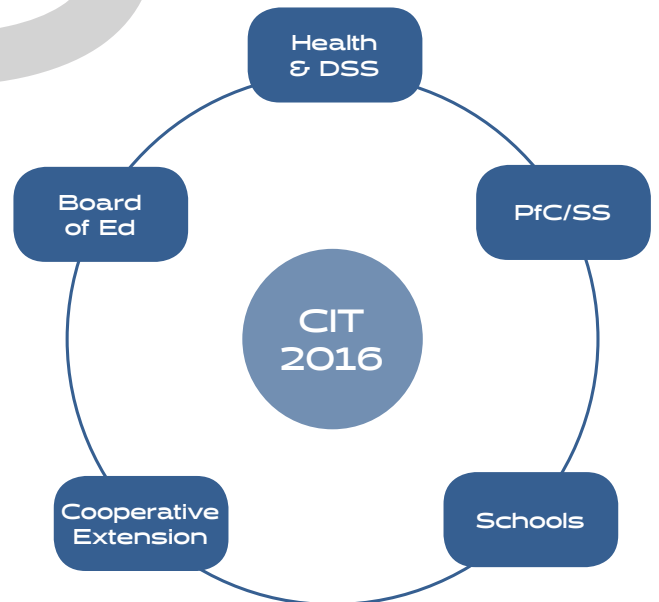
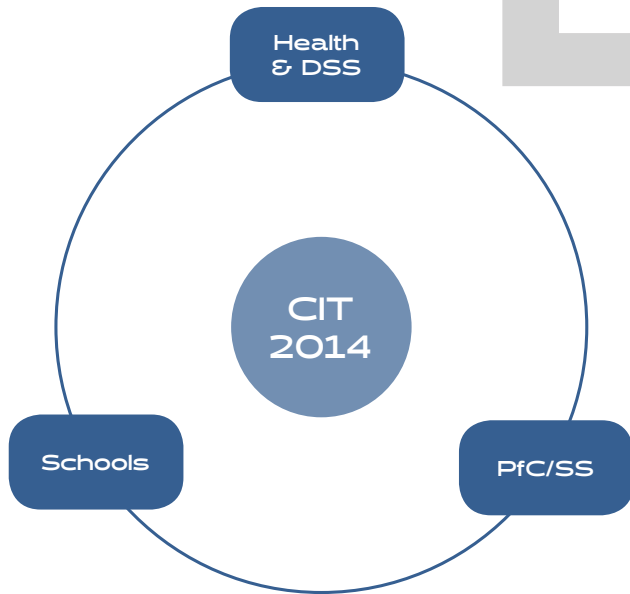
## County C: TZ Linkages and Organization 2016



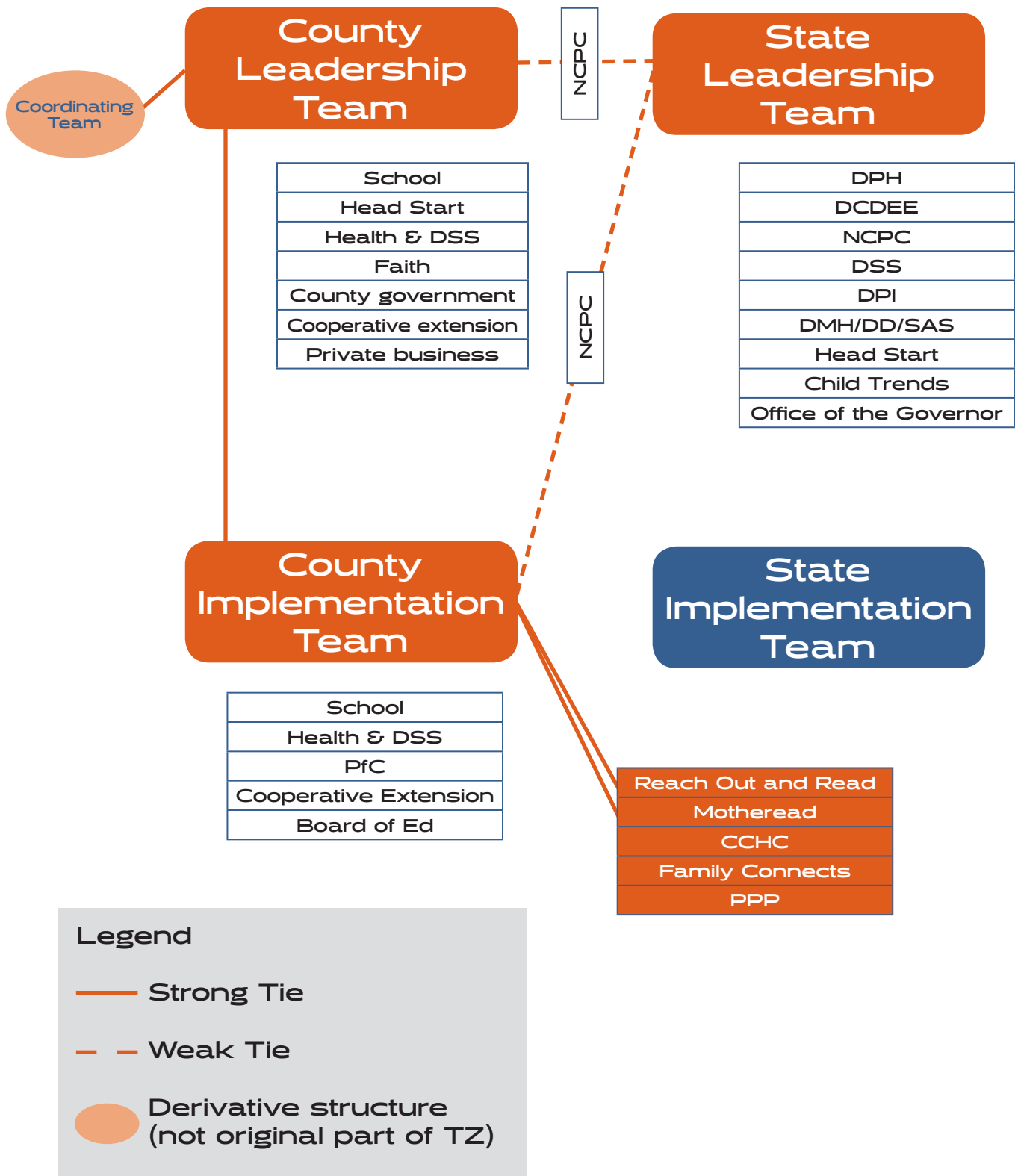
## County D: TZ Team Composition 2014 and 2016



D



County D: TZ Linkages and Organization 2016





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