

# FIRST 5 KERN ANNUAL REPORT

FISCAL YEAR 2013-2014



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# Acknowledgements

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Following the judicial expectation to “use outcome-based accountability” (Proposition 10, p. 4), data tracking was assisted by key stakeholders of the community. I thank the following professionals and organizations for their leadership and support:

- Commissioners Larry J. Rhoades, Al Sandrini, Emily Duran, Dena Murphy, Sam Aunai, Mick Gleason, Claudia Jonah, Rick Robles, and William Walker.
- Past Commissioners Pat Cheadle, Roland Maier, Leticia Perez, and James Waterman.
- First 5 Kern Technical Advisory Committee.
- First 5 Kern Commission staff:
  - Roland Maier, Executive Director
  - Jamie Henderson, Past Executive Director
  - Kathy Ives, CPA, MPA, Chief Finance Officer
  - Sharon Powell, Administrative Assistant
  - Anastasia Lester, Program Officer
  - Paula De La Riva-Barrera, Program Officer
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  - Theresa Martinez-Ortiz, Senior Research Analyst
  - Diana Navarro, Finance Specialist and Research Associate
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  - Crystal Gardner, Finance Specialist
  - Charlene McNama, Administrative Finance Specialist
  - Patti Taylor, Senior Finance Officer
  - Jan St Pierre, Communications Officer.
- Service providers, children ages 0-5 and their families.
- Institutional Review Board of California State University, Bakersfield led by Drs. Paul Newberry and Steve Suter.

Alternate commission members are listed in Exhibit 1 and TAC members are recognized in Appendix B. While appreciating the extensive support, I conducted the data analyses and shall be fully responsible for any inaccuracies in this report.

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## Table of Contents

<b>Executive Summary</b> .....	3
<b>Chapter 1: First 5 Kern Overview</b> .....	8
<b>Chapter 2: Impact of First 5 Kern-Funded Programs</b> .....	19
<b>Chapter 3: Effectiveness of Service Integration</b> .....	54
<b>Chapter 4: Turning the Curve</b> .....	70
<b>Chapter 5: Conclusions and Future Directions</b> .....	87
<b>References</b> .....	95
<b>Appendix A: Index of Program Acronyms</b> .....	101
<b>Appendix B: Technical Advisory Committee</b> .....	104

## Executive Summary

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Proposition 10, also known as the California Children and Families Act of 1998, is the legislation for creating Kern County Children and Families Commission (First 5 Kern). Over the past 15 years, First 5 Kern administered a trust fund from a \$.50 per pack tax on cigarettes or equivalent tobacco products to support children ages 0-5 and their families in Kern County. Guided by its strategic plan, First 5 Kern has allocated more than \$160 million since its inception to support early childhood services in local communities.

Kern County is the third largest county in California by land area, covering a region as large as the state of New Jersey. According to Proposition 10, "county commissions shall use Outcome-Based Accountability [OBA] to determine future expenditures" (p. 4). In Fiscal Year (FY) 2013-14, First 5 Kern spent over \$10 million to fund 40 programs in *Child Health, Family Functioning, and Child Development*. Approximately 7.5% of the annual budget was devoted to strengthening *systems of care* through service integration. Following the statute of Proposition 10, this report is produced to evaluate service outcomes in Kern County. A model of Results-Based Accountability (RBA)<sup>1</sup> is employed to guide collection and analysis of qualitative and quantitative data from 40 service programs.

### New Features of This Report

In FY 2013-14, First 5 Kern started preparation for *Request for Proposals* (RFP) toward the next funding cycle. On April 1, 2014, the Commission appointed Mr. Roland Maier as the new Executive Director of First 5 Kern. To support the RFP process under the new leadership, two features are incorporated in this evaluation report:

1. Broadening the evaluation horizon in a cross-county context

While First 5 Kern served Kern County for 15 years, so did its sister commissions in other counties. When common needs are identified in the California Central Valley (Johnson & Hayes, 2004), useful information from sister commissions can be considered to support evaluation of local programs funded by Proposition 10. Furthermore, the comparative perspective can help expand the horizon of First 5 Kern to strategically promote its funding priorities in the next funding cycle.

2. Enhancing data tracking between adjacent years

The state commission stipulated that "Proposition 10 programs shall allocate sufficient resources to support accountability and evaluation activities."<sup>2</sup> For programs sponsored by First 5 Kern in the current funding cycle, data tracking has been enhanced to articulate baseline and exit results across adjacent years. Since assessment data are collected annually for commission reporting, this approach avoids data attrition from the previous year, and thus, supports justification of results-based accountability in FY 2013-14.

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<sup>1</sup> OBA and RBA are used interchangeably in the literature (see [resultsaccountability.com](http://resultsaccountability.com)).

<sup>2</sup> [http://www.first5california.com/pdf/media/publications/pub\\_F5C\\_PrinciplesEquity-Spread.pdf](http://www.first5california.com/pdf/media/publications/pub_F5C_PrinciplesEquity-Spread.pdf).

In summary, these features are grounded on both internal and external considerations. The internal tracking of program data not only benefits evidence gathering to assess service impact in the past, but also facilitates program profiling to sustain service continuation in the next funding cycle. The external comparison offers First 5 Kern an opportunity to examine professional practice among other county commissions and use the information to improve comparable services in Kern County.

### Overview of Evaluation Activities

First 5 Kern's (2014b) strategic plan "requires the collection and analysis of data and a report of findings in order to evaluate the effectiveness of funded programs" (p. 16). Following the Statewide Evaluation Framework (First 5 California, 2005), qualitative and quantitative data are gathered to triangulate findings in three aspects: (1) description of service counts at the program level, (2) assessment of program impacts on the service recipients, and (3) tracking of ongoing progress on the time dimension.

The data storage and export at First 5 Kern are handled through the Grant Evaluation and Management Solution (GEMS) system. In enhancing the local capacity building, program officers and internal evaluators completed several professional development activities this year, including Training of Trainer Workshops from developers of the *Nurturing Skills Competency Scale* (NSCS), *Ages and Stages Questionnaire-3* (ASQ-3), and *Ages and Stages Questionnaire-Social Emotional* (ASQ-SE) instruments. While tracking the internal data according to Result Indicators (RI), the evaluation team analyzed external data from the Office of Statewide Health Planning and Development (OSHPD) to expand result dissemination.

Built on the internal and external perspectives, this report conforms to professional guidelines of the *Annual Report Glossary* from First 5 Association of California (F5AC) (2013) and adheres to the *Utility, Feasibility, Propriety, and Accuracy* standards for program evaluation (Yarbrough, Shulha, Hopson, & Caruthers, 2010). As a result, comparisons of program outcomes are based on well-established instruments, such as Adult-Adolescent Parenting Inventory-2 (AAPI-2), ASQ-3, ASQ-SE, Child Assessment-Summer Bridge (CASB), Core Data Element (CDE) Survey, Desired Results Developmental Profile-Infant/Toddler (DRDP-IT), Desired Results Developmental Profile-Preschool (DRDP-PS), Family Stability Rubric (FSR), North Carolina Family Assessment Scale-General (NCFAS-G), and NSCS.

Partnership building has taken place to support completion of evaluation tasks. In particular, First 5 Kern's protocol for data collection is reviewed and approved by the Institutional Review Board (IRB) of California State University, Bakersfield (CSUB) to ensure its compliance to federal, state, and local regulations. While adding no extra cost to First 5 Kern, the IRB approval conforms to the *propriety* standard advocated by the Joint Committee on Standards for Program Evaluation (Yarbrough et al., 2010). More importantly, this prudent measure directly protects the state trust funds against resource depletion from potential law suits.

In compliance with the IRB requirements, confidentiality trainings are offered multiple times each quarter, and the responsibility is assumed by an internal staff member without adding another administrative position. Meanwhile, the external

evaluator makes quarterly report presentations to IRB for the protocol renewal. Site visits are conducted by internal evaluators to monitor unexpected incidents at the program level. Through the collaborative effort, First 5 Kern no longer pays overhead to a private company for the IRB service. First 5 Kern's evaluation budget is controlled at 4.8%. Without these effective measures, a sister commission of comparable size has to spend nine percent of its budget on evaluation.<sup>3</sup>

### Highlights of Evaluation Findings

Annual program evaluation has been conducted to fulfill report requirements at both state and local levels. The state commission mandates three components in the annual report: (1) Most Recent Compelling Service Outcome, (2) Benchmark/Baseline Data, and (3) Outcome Measurement Tool (First 5 California, 2014a). The local report is required by First 5 Kern's (2014b) strategic plan:

The evaluation process provides ongoing assessment and feedback on program results. It allows the identification of outcomes in order to build a "road map" for program development. Evaluation reports are also used to identify best practices that improve services. (p. 16)

Following the state and local guidelines, evaluation findings are presented below to highlight compelling outcomes in each focus area.

#### Program Profiling for State Report

In FY 2013-14, First 5 Kern identifies three programs to illustrate exemplary services in its annual report to the state. In "Improved Family Functioning", Differential Response (DR) is highlighted for its case management of 1,920 children with a 99% rate of client satisfaction in the exit survey. More than 500 families are tracked to assess the program impact, and significant improvement of family conditions has been found in all eight domains of the NCFAS-G scale between pretest and posttest. DR also leveraged 70% of its annual budget from seven federal, state, and local agencies to sustain and expand child protective services.

In "Improved Child Development", the School Readiness Program of Bakersfield City School District (BCSD) is recognized for integrating multiple services, including assisting 30 children with health insurance enrollment, providing health screening for 179 children, case-managing 114 families, delivering home-based education for 31 children, and offering group-based education for 509 parents and 147 children. Its Summer Bridge program shows significant improvement of *cognitive, communication, self-help, social emotional, and fine motor* skills among 107 children ages 4-5. In addition, ASQ-3 data indicate performance of 397 children significantly above the corresponding thresholds in *Communication, Gross Motor, Fine Motor, Problem Solving, and Personal-Social* domains during Months 2-60. The NSCS results also show significant knowledge development among 223 parents between pretest and posttest.

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<sup>3</sup> <http://first5fresno.org/wp-content/uploads/2014/05/A9-Agenda-Item-3-F5FC-2013-2015-Proposed-Two-Year-Budget.pdf>.

Richardson Special Needs Collaborative (RSNC) is selected to demonstrate "Improved Child Health". RSNC services are provided in both English and Spanish, and the case management outcomes are tracked for 68 families. The number of families with unmet dental and eye care needs drops from 19 at program intake to 1 in the 12<sup>th</sup> month. RSNC assessment shows significantly less concerns on child health and safety between case intake and closing. Meanwhile, significant improvements have been found in child behavior, home environment, and academic performance. NSCS results indicate significant improvements of parenting knowledge and skills among 41 parents.

### Compelling Evidences Across Programs

In addition to the program-level findings, First 5 Kern develops a strategic plan to define Result Indicators (RI) in each focus area.<sup>4</sup> Accordingly, compelling evidences are aggregated from common assessments to summarize the evaluation findings across multiple programs:

- (1) AAPI-2 data are gathered from seven programs that offer court-mandated parent education services. Five programs demonstrate significant improvement of parental empathy toward child needs.<sup>5</sup> The overall results show positive improvement in posttest scores that impact 110 families across seven programs.
- (2) NSCS data are collected by 18 programs to assess the impact of parental education. Eleven programs show significant improvement of nurturing-parenting knowledge among 557 parents.<sup>6</sup>
- (3) ASQ-3 data are analyzed across 20 programs to screen child development during Months 2-60. The results indicate development levels of 2,015 children significantly above the corresponding thresholds in *Communication, Gross Motor, Fine Motor, Personal-Social, and Problem Solving* domains. Women's Shelter Network further tracks ASQ-SE data from 59 children during Months 6-60. The results reconfirm no social emotional disorder for 92% of the children.
- (4) Thirteen programs employ CASB to assess the *Communication, Cognitive, Self-Help, Social Emotional, and Motor Skills* of children ages 4-5. Twelve programs show significant improvement of cognitive skills among 345 children between pretest and posttest.
- (5) DRDP-IT is employed to assess infant development across three programs. The aggregated data show strong practical impact in all DRDP-IT assessment domains.
- (6) The DRDP-PS instrument is used by six programs. The results indicate strong practical impact on development of math skills across all programs.

### Evaluation of Program-Specific Results

Following its strategic plan, First 5 Kern supports innovative program features that demand special measurement tools. In this report, program-specific results are

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<sup>4</sup> <http://wwwstatic.kern.org/gems/first5kern/StratPlan201415.pdf>.

<sup>5</sup> Small sample size is the reason for exclusion of the remaining programs in statistical testing.

<sup>6</sup> See Note 5.

sorted in each focus area to clarify the service impact.

In “Improved Child Health”, Bakersfield Adult School (BAS) offers health literacy training to parents, and a “Be Choosy Be Healthy” (BCBH) instrument is adopted to evaluate program outcomes. Based on the BCBH data, consistent improvement of health literacy has occurred among 40 parents across *health, activity, eating, and prevention* categories within six months of the BAS intervention.

In “Improved Family Functioning”, 2-1-1 Kern County provides referral services to address a broad spectrum of family needs through phone calls and online queries. In FY 2013-14, the program extends its support to 10,393 unduplicated children ages 0-5, a 14% increase over prior year. In addition, the program provides service referrals to 602 unduplicated counts of expectant mothers.

In “Improved Child Development”, Ready to Start (R2S) is a pre-kindergarten program to enhance school readiness in Kern County. Value-added assessment has been conducted to examine improvement of child performance. The R2S standard test designates a maximum of 22 points in the areas of Reading Readiness (0-8 points), Math Readiness (0-10 points), and Supportive Skills (0-4 points). The composite mean score from 730 children increases from 13.62 to 20.15 within a five-week Summer Bridge intervention.

In community outreach, First 5 Kern funds enrollment assistance services to help children access health insurance within a 10-mile radius of their home location. In FY 2013-14, the Successful Application Stipend (SAS) program has renewed health insurance enrollments for 985 children, and completed new enrollments of 987 children this year.

First 5 Kern channels more resources to expand the service capacity while maintaining a frugal budget for its office administration. Upon its inception, the Board of Supervisors of Kern County granted permission to use “eight percent (8%) of the annual fund allocation” for administrative and staff support (Ord. G-6637, 1999). In FY 2013-14, a sister commission within the Central Valley spent eight percent of its budget for administration.<sup>7</sup> Meanwhile, First 5 Kern has kept the administrative spending at 6.14% of its total budget.

In conclusion, First 5 Kern has funded 40 programs to improve *Child Health, Family Functioning, and Child Development* in Kern County. Guided by its strategic plan, services in these focus areas are integrated through network building to support *Systems of Care* for children ages 0-5 and their families. Cost-effective measures are adopted by the commission to channel more state investment to direct services. Compelling evidence is gathered in this report to justify results-based accountability and support the Commission’s efforts to better the health and wellbeing of children throughout Kern County.

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<sup>7</sup> <http://first5fresno.org/wp-content/uploads/2014/05/A9-Agenda-Item-3-F5FC-2013-2015-Proposed-Two-Year-Budget.pdf>.

## Chapter 1: First 5 Kern Overview

It was stipulated by Proposition 10 that “each county commission shall conduct an audit of, and issue a written report on the implementation and performance of, their respective functions during the preceding fiscal year” (p. 12). First 5 Kern Commission is the leading organization in Kern County to abide by the legal statute. Following the state requirement, this evaluation report is designed to summarize program performance and support service improvement in Kern County.

In accordance with California Health and Safety Code (Section 130140), “The county commission shall be appointed by the board of supervisors and shall consist of at least five but not more than nine members.”<sup>8</sup> The First 5 Kern Commission has nine commissioners and four alternate members to represent key stakeholders, including elected officials, service providers, program administrators, community volunteers, and First 5 Kern advocates. Exhibit 1 shows a list of community leaders who served on this commission in FY 2013-14.

<b>Exhibit 1: First 5 Kern Commission Members</b>	
<b>Commissioner</b>	<b>Affiliation</b>
Larry J. Rhoades (Chairman)	Retired Kern County Administrator
Al Sandrini (Vice Chairman)	Retired School District Superintendent
Emily Duran (Treasurer)	Director, Provider Relations of Kern Health Systems
Dena Murphy (Secretary)	Director, Kern County Department of Human Services
Sam Aunai	Director of Career Technical Education, Taft College
Mick Gleason	Supervisor, 1 <sup>st</sup> District
Claudia Jonah	Health Officer, County of Kern Public Health Services
Rick Robles	Superintendent, Lamont School District
William Walker	Director, Kern County Department of Mental Health
James Waterman <sup>9</sup>	Director, Kern County Department of Mental Health
<b>Alternate Members</b>	
Deanna Cloud	Administrator, Kern County Children’s System of Care
Michelle Curioso	Director of Nursing, County of Kern Public Health Services
Zack Scrivner	Supervisor, 2 <sup>nd</sup> District

The commission representation not only conforms to a principle of shared governance, but also optimizes the use of local expertise in early childhood services.

<sup>8</sup>P. 9 of <http://wwwstatic.kern.org/gems/first5kern/ccfcact.pdf>.

<sup>9</sup> Commissioner Waterman retired during FY 2013-14.

Over the years, support from key stakeholders has allowed First 5 Kern to focus on direct services for local children and their families. In contrast, one of the sister commissions decided to reduce the number of commission seats. Criticism has been raised by the news media for precluding experienced and competent professionals in the commission (Ellis, 2014).<sup>10</sup>

The commission leadership supported an important administrator transition this year. In January 2014, Mr. Jamie Henderson announced his plan to retire from the Executive Director (ED) position. During his tenure, First 5 Kern extended its current funding cycle to five years. Mr. Henderson also chaired a statewide committee to enhance alignment of report glossaries for 58 counties. It was reported that his retirement was to make way for an incoming ED to lead the Request for Proposals (RFP) in the next funding cycle (Burger, 2014).

On April 1, 2014, the commission appointed Mr. Roland Maier as the new ED to lead First 5 Kern. Mr. Maier served as a school district superintendent prior to the ED appointment. He also chaired the First 5 Kern Commission before. Under his leadership, three Bidders Conferences have been organized to disseminate information about the RFP process. Public presentations were made at eight collaborative meetings. The RFP advertisements were placed in 15 newspapers for three weeks. Three rounds of news releases occurred in eight TV channels, 14 newspapers, and 26 radio stations throughout Kern County. In addition, *Handprints Newsletter* was sent to 800 subscribers, distributed at 200 public locations, and e-mailed to 2,100 local stakeholders to describe criteria and timelines for the RFP process. To ensure a fair competition, it was clearly stated that "Agencies under a current contract with First 5 Kern will need to apply for new funding to continue their programs. Agencies not currently funded through First 5 Kern are invited to submit a proposal" (First 5 Kern, 2014a, p. 1).

### **Trend of First 5 Kern Investments**

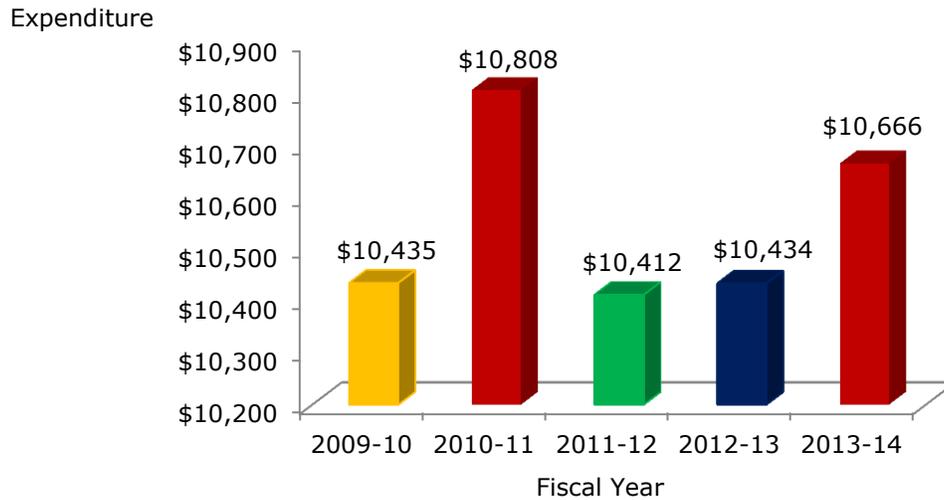
In recent years, tobacco use declined across the United States. In 2011, smoking rate in California was the second lowest among 50 states. As the state revenue dwindled down steadily for less tobacco consumption, First 5 Kern has been reducing its local reserve to maintain the funding stability for all programs. The effort was extended across this funding cycle when "the demands for First 5 funding has become more pressing because of a decline in other government funding for social services" (Branan, 2009, p. 1).

In FY 2013-14, Kern County has been maintaining the fifth highest rate of population growth in the state, and "experts say the birth rate is the biggest factor" (Ferguson, 2013, ¶. 2). As a result, First 5 Kern is expected to serve more children ages 0-5 and their families. Because the tobacco tax revenue is distributed according to the birth rate in each county (Proposition 10), Kern County's population growth helps maintain a fair share of the state investment to amend the impact of revenue decline, which allows First 5 Kern to fund over \$10 million across 40 programs this year. Figure 1 shows a pattern of the annual investment in this funding cycle.

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<sup>10</sup> <http://first5fresno.org/wp-content/uploads/2014/05/CONFLICT-OF-INTEREST-POLICY.pdf>.

**FIGURE 1: TOTAL FIRST 5 KERN INVESTMENT SINCE 2009 (IN \$1,000)**

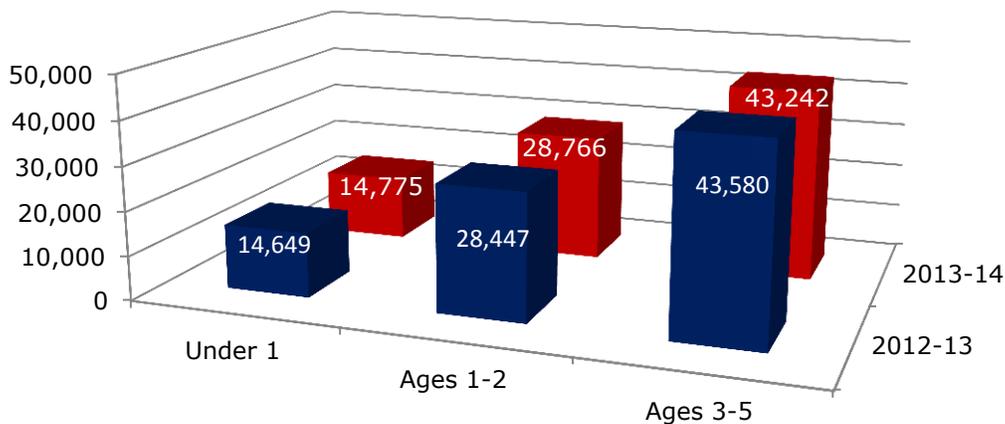


The trend data indicate that First 5 Kern’s support has reached the second highest level in FY 2013-14. In FY 2010-11, a special investment was made to purchase service equipment for Children’s Mobile Immunization Program of San Joaquin Community Hospital. The capacity building cost over \$300,000 and supported the program outreach in remote communities. Excluding that exception, First 5 Kern has channeled more Proposition 10 funding to support program delivery this year (Figure 1).

**Population of Kern County Children**

Besides the inflation factor, the funding adjustment also reflects service demands in local settings. In FY 2013-14, 86,783 children ages 0-5 lived in Kern County<sup>11</sup>, an increase from 86,676 in the previous year. Figure 2 shows the population distributions between the adjacent years.

**FIGURE 2: POPULATION DISTRIBUTIONS BETWEEN ADJACENT YEARS**



<sup>11</sup> <http://kern.org/kcnc/reportcard/>.

The results indicate that the population increase primarily occurs under age 3. As Liu (2014) pointed out,

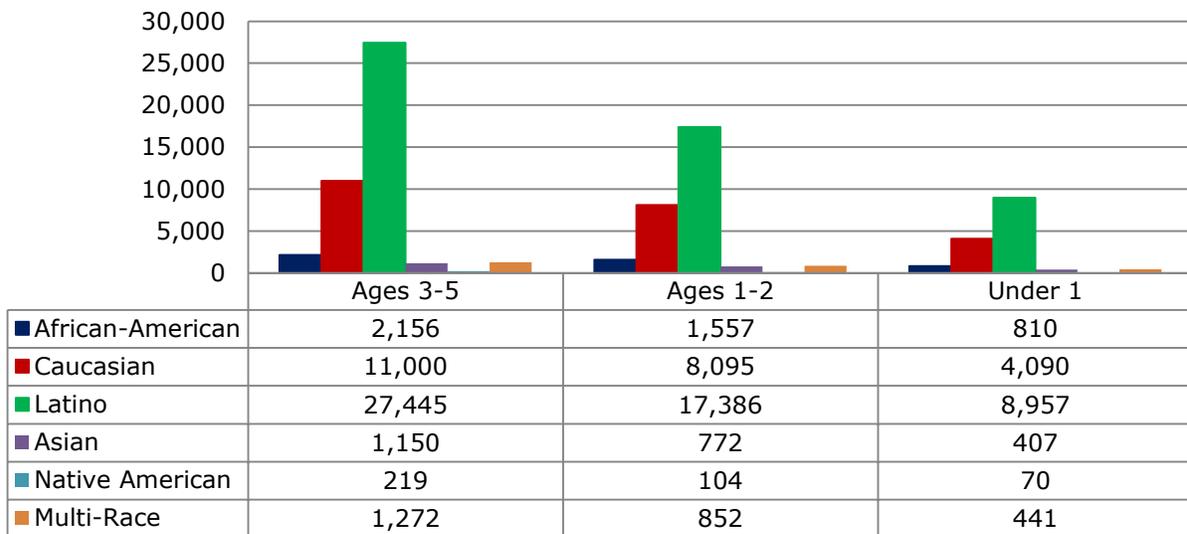
The first three years of life are a period of dynamic and unparalleled brain development in which children acquire the ability to think, speak, learn, and reason. During these first 36 months, children need good health, strong families, and positive early learning experiences to lay the foundation for later school success. (p. 3)

Hence, First 5 Kern’s support is much needed to meet the need of population growth and facilitate early childhood development in Kern County.

To a great extent, family resources play an important role in early childhood development (Berk, 2012). Chen (2012) elaborated that “Children from economically disadvantaged families tend to enter school with lower levels of academic, cognitive, and mathematical skills” (p. 4). For families raising children in Kern County, the median income was \$42,008. In contrast, the corresponding indices were \$60,435 in California and \$59,537 nationwide.<sup>12</sup> Therefore, additional program support is essential to help children from low income families.

In comparison to other ethnic groups, a recent report suggested that African-American and Latino children were more likely to live in poor families (Kern County Network for Children, 2013). In particular, Mateo and Gallardo (2001) projected that “Kern County’s ethnic population is increasing dramatically. Latinos are expected to increase by 67 percent over the next ten years” (p. 20). Figure 3 exhibits that the Latino ethnic group accounts for the majority of children ages 0-5 in Kern County.<sup>13</sup> Therefore, it is important to provide family-focused, culturally appropriate, and community-based services to support child development across the increasingly diversified communities.

**FIGURE 3: ETHNIC DIVERSITY AMONG KERN COUNTY CHILDREN AGES 0-5**



<sup>12</sup> <http://kern.org/kcnc/reportcard/>.

<sup>13</sup> See Note 12.

“A critical factor in buffering children from the effects of toxic stress and adverse childhood experiences is the existence of supportive, stable relationships between children and their families, caregivers, and other important adults in their lives” (Bocanegra, 2014, p. 3). Parent education can help reduce family stress for children (Przeworski, 2013). It was reported that “Among Kern County families whose householder had less than a high school diploma, 36.5% lived in poverty during 2012” (KCNC, 2014, p. 8). The poverty rate dropped to 21.6% and 3% when householders had a high school diploma and a bachelor’s degree, respectively. Therefore, additional attention is needed to enhance childrearing skills of parents from low education backgrounds.

In summary, it is predicted that “The child population will continue to grow for the foreseeable future [in Kern County]” (KCNC, 2014, p. 2). An examination of the population characteristics reveals strong demands for early childhood service in culturally diversified communities. While low socioeconomic status has an impact to hamper child health and development, population growth has expanded the need for First 5 Kern support. More importantly, Kern County spans across the southern part of the California Central Valley. Outreach efforts play a critical role to enhance family functioning and child development in remote communities.

**First 5 Kern**

First 5 Kern’s (2014b) strategic plan has prioritized the service needs to address accountability of state funding in three focus areas, *Child Health, Family Functioning,* and *Child Development*. A total of 40 programs received Proposition 10 funding in Kern County in FY 2013-14.

In describing an accountability model that was adopted by Proposition 10, Mark Friedman (2011) stressed that “OBA [Outcome Based Accountability] keeps population accountability separate from performance accountability. Population accountability belongs to partnerships” (p. 4). To expand the partnership capacity, *Integration of Services* has been identified as the fourth focus area to strengthen the systems of care in Kern County. Table 1 shows alignments of the four focus areas between First 5 Kern and the State Commission.

**TABLE 1: FOCUS AREA ALIGNMENTS AT LOCAL AND STATE LEVELS**

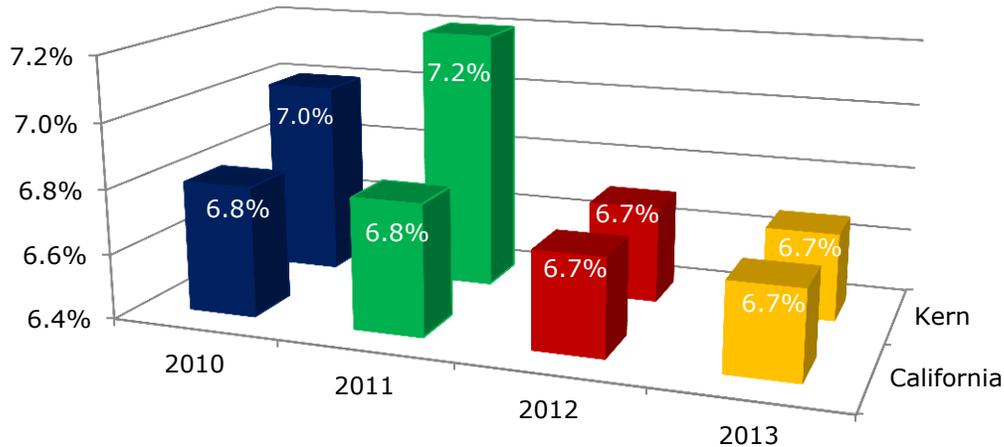
<b>State Focus Area</b>	<b>First 5 Kern Focus Area</b>
I. Child Health	Health and Wellness
II. Family Functioning	Parent Education and Support Services
III. Child Development	Early Childcare and Education
IV. Systems of Care	Integration of Services

**Vision Statement**

Since its inception in 1998, First 5 Kern has built a strong reputation in the community as experts and advocates for children ages 0-5 and their families. The

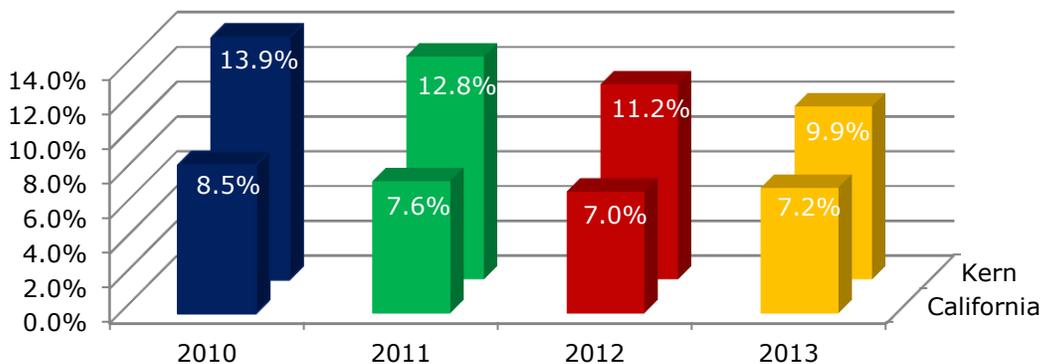
population impact is illustrated by reduction of low birth weight (LBW). As indicated in Figure 4, the LBW rate in Kern County was higher than the state average in 2010 and 2011. However, the gap diminished in 2012 and 2013 of this funding cycle.<sup>14</sup>

**FIGURE 4: PERCENT OF CHILDREN WITH LOW BIRTH WEIGHT DURING 2010-13**



In addition, a positive trend has been maintained to ensure more child births in families with matured parents. Although Kern County’s rate of teen pregnancy is still above the state average (Figure 5), the rate reduction has surpassed the corresponding state index.<sup>15</sup>

**FIGURE 5: REDUCTION OF TEEN PREGNANCY RATE DURING 2010-13**



In the *Guidelines for Implementing the California Children and Families Act*, vision is described as “A broad, general statement of the desired future” (First 5 California,

<sup>14</sup> <http://kern.org/kcnc/reportcard/>.

<sup>15</sup> See Note 14.

2010, p. 28). Following the state definition, First 5 Kern developed a vision statement through strategic planning:

### **Vision**

All Kern County children will be born into and thrive in supportive, safe, loving homes and neighborhoods and will enter school healthy and ready to learn. (First 5 Kern, 2014b, p. 2)

### **Mission Statement**

Public hearings are held annually to solicit community input for improvement of the existing strategic plan. The Technical Advisory Committee (TAC) is held multiple times in FY 2013-14 to address current issues of child wellbeing, family need, and program support in Kern County. The focus on early childhood services has led First 5 Kern to embrace the following mission statement:

### **Mission**

To strengthen and support the children of Kern County prenatal to five and their families by empowering our providers through the integration of services with an emphasis on health and wellness, parent education, and early childcare and education. (First 5 Kern, 2014b, p. 2)

This mission statement not only includes an emphasis on child and family needs, but also highlights an active role of service providers in service integration.

In combination, the vision and mission statements ensure compliance of First 5 Kern funding with the intent of Proposition 10, i.e., to “facilitate the creation and implementation of an integrated, comprehensive, and collaborative system of information and services to enhance optimal early childhood development” [Section 5(a)].

### **Partnership Building**

First 5 Association of California (2009) pointed out, “To fully appreciate the effect that First 5 has had, it is necessary to understand the many roles that are served by First 5 – roles that were not being addressed or not fulfilled sufficiently before First 5 was created” (p. 7). Prior to the passage of Proposition 10, no strategic plan was developed for early childhood services in Kern County, nor did the service integration become a focus area to support children ages 0-5 and their families.

The strengthening of community collaboration allows county commissions to serve “as the ‘glue’ to bring services together and fill critical gaps that no other funding source is able to address” (First 5 Association of California, 2009 p. 7). Table 2 lists 52 outreach services that are accomplished by First 5 Kern beyond administering the Children and Families First Trust Fund in Kern County. The service count increased 33% since last year.

**TABLE 2: FIRST 5 KERN’S OUTREACH EFFORT TO PROMOTE PUBLIC AWARENESS**

<b>Event</b>	<b>Initiator</b>	<b>Participant</b>	<b>Count</b>
Community	<ul style="list-style-type: none"> <li>• First 5 Kern Newsletter</li> <li>• First 5 Kern Strategic Plan</li> <li>• First 5 Kern Website</li> <li>• Ridgecrest City Council</li> <li>• Rotary Groups</li> </ul>	<ul style="list-style-type: none"> <li>• Community Fairs – Exhibit Booth (8)</li> <li>• Community Presentations (7)</li> <li>• 15-Year Anniversary Activities (9)</li> </ul>	29
County	<ul style="list-style-type: none"> <li>• Chamber of Commerce</li> <li>• Kern County Board of Supervisors Meetings</li> <li>• Kern County School Boards Association</li> <li>• News Conferences (3)</li> <li>• Nurturing Parenting – Best Practices Meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Kern Council for Social Emotional Learning Meetings</li> <li>• Kern County Tobacco Free Coalition</li> <li>• Kern County Network for Children Collaborative</li> <li>• Kern County Network for Children Board of Directors</li> <li>• Oildale Collaborative</li> <li>• Outreach, Enrollment, Retention Utilization Committee</li> <li>• Purple Ribbon Month Committee – Safety in and around vehicles</li> <li>• Safely Surrendered Baby Committee</li> <li>• Water Safety Coalition</li> </ul>	16
State		<ul style="list-style-type: none"> <li>• First 5 California Meetings</li> <li>• First 5 Association of California Meetings</li> <li>• First 5 Association of California Evaluation Committee Chair</li> <li>• First 5 California Statewide Communications Region Communications Teleconferences</li> <li>• First 5 Association of California 15<sup>th</sup> Anniversary Reception</li> <li>• Southern California Regional Communications Committee</li> <li>• Central Valley Regional Meeting</li> </ul>	7

\*Numbers inside the parentheses are the counts for reoccurring events.

Enhancement of the partnership building has reciprocally strengthened First 5 Kern’s leadership to promote public awareness of child needs and local supports across state, county, and community levels. In FY 2013-14, First 5 Kern provided \$19,812 to support nine community events and leveraged \$996,685 from local community partners. First 5 Kern staff led three local initiatives to support child health and school readiness. They also participated in 13 collaborative partnerships across Kern County (Table 3). The mutual support demonstrates First 5 Kern’s role as an active initiator and participant in the local capacity building.

**TABLE 3: FIRST 5 KERN’S LEADERSHIP ROLES IN LOCAL COMMUNITIES**

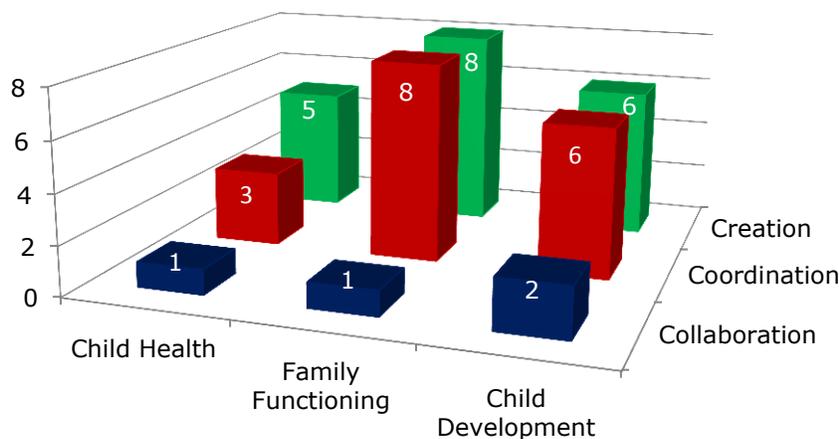
Initiator	Participant
<ul style="list-style-type: none"> <li>• Children's Health Initiative Outreach and Enrollment Committee</li> <li>• Children’s Health Initiative Outreach and Technical Advisory Committee</li> <li>• School Readiness Coordinators Meeting – Facilitator</li> </ul>	<ul style="list-style-type: none"> <li>• Bakersfield College Child Development Advisory Committee</li> <li>• Buttonwillow Collaborative</li> <li>• Childhood Council of Kern Meetings</li> <li>• East Kern Collaborative</li> <li>• Good Neighbor Festival Committee</li> <li>• Greenfield Collaborative</li> <li>• H.E.A.R.T.S Connection</li> <li>• Lost Hills Collaborative</li> <li>• Medically Vulnerable Care Coordination Committee</li> <li>• Richardson Collaborative</li> <li>• Shafter Collaborative</li> <li>• Southeast Neighborhood Collaborative</li> </ul>

Led by First 5 Kern’s efforts on community outreach, local programs receiving Proposition 10 funding have built professional networks with external agencies to support services in *Child Health, Family Functioning, and Child Development*. A 4C Model has been adopted to describe the partnership building at four levels:<sup>16</sup>

- Co-Existing : No partnership except for awareness of others' existence;
- Collaboration : Mutual partnership with roles of support seeker and provider;
- Coordination : Multilateral partnerships with structured-leadership building;
- Creation : Expansion of multilateral relationships beyond the existing partnership capacity.

Figure 6 illustrates the external partnerships above the *Co-Existing* level. Four of the inter-agency relations involve mutual support, 17 partners extend multilateral assistance, and 19 organizations create their networks beyond the existing capacity.

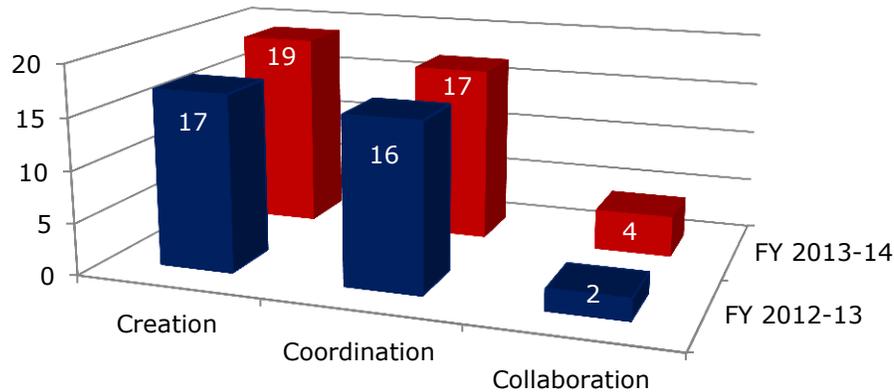
**FIGURE 6: PARTNERSHIP BUILDING WITH LOCAL AGENCIES**



<sup>16</sup> Collaboration is used in this report to replace Cooperation in last annual report.

Between adjacent years, Figure 7 shows an increase of the partnership building across *Collaboration*, *Coordination*, and *Creation* levels. While the scope of work remains stable for each program throughout this funding cycle, additional partnership buildings have occurred in FY 2013-14 to expand the community support across the different levels of service integration.

**FIGURE 7: COMPARISON OF EXTERNAL PARTNERSHIP BUILDINGS IN ADJACENT YEARS**



In summary, partnership building has been initiated at both *First 5 Kern* and *program* levels to sustain the quality of early childhood services in Kern County. As a result, nearly \$1 million was raised from external partners this year, a 38% increase from \$721,317 last year.

### Structure of this Report

In this report, Chapter 1 provides an overview of First 5 Kern’s vision, mission, and partnership building. Chapter 2 is devoted to description of the local impact in first three focus areas, *Child Health*, *Family Functioning*, and *Child Development*. It was indicated in the local strategic plan that “Integration of Services ensures collaboration with other agencies, organizations and entities with similar goals and objectives to enhance the overall efficiency of provider systems” (First 5 Kern, 2014b, p. 6). Chapter 3 provides a summary of interview data across 40 programs to evaluate effectiveness of partnership building in the fourth focus area, *Integration of Services*.

In combining the results across formative and summative evaluation, information from Core Data Element (CDE) surveys and Family Stability Rubric (FSR) assessments are analyzed in Chapter 4 to articulate sustainable progress on the time dimension. Following the RBA model, continuous improvement beyond the baseline trend is described in a “turning the curve” process. Therefore, this report ends with a *Conclusions and Future Directions* chapter to highlight exemplary programs and introduce new recommendations for ongoing service improvement.

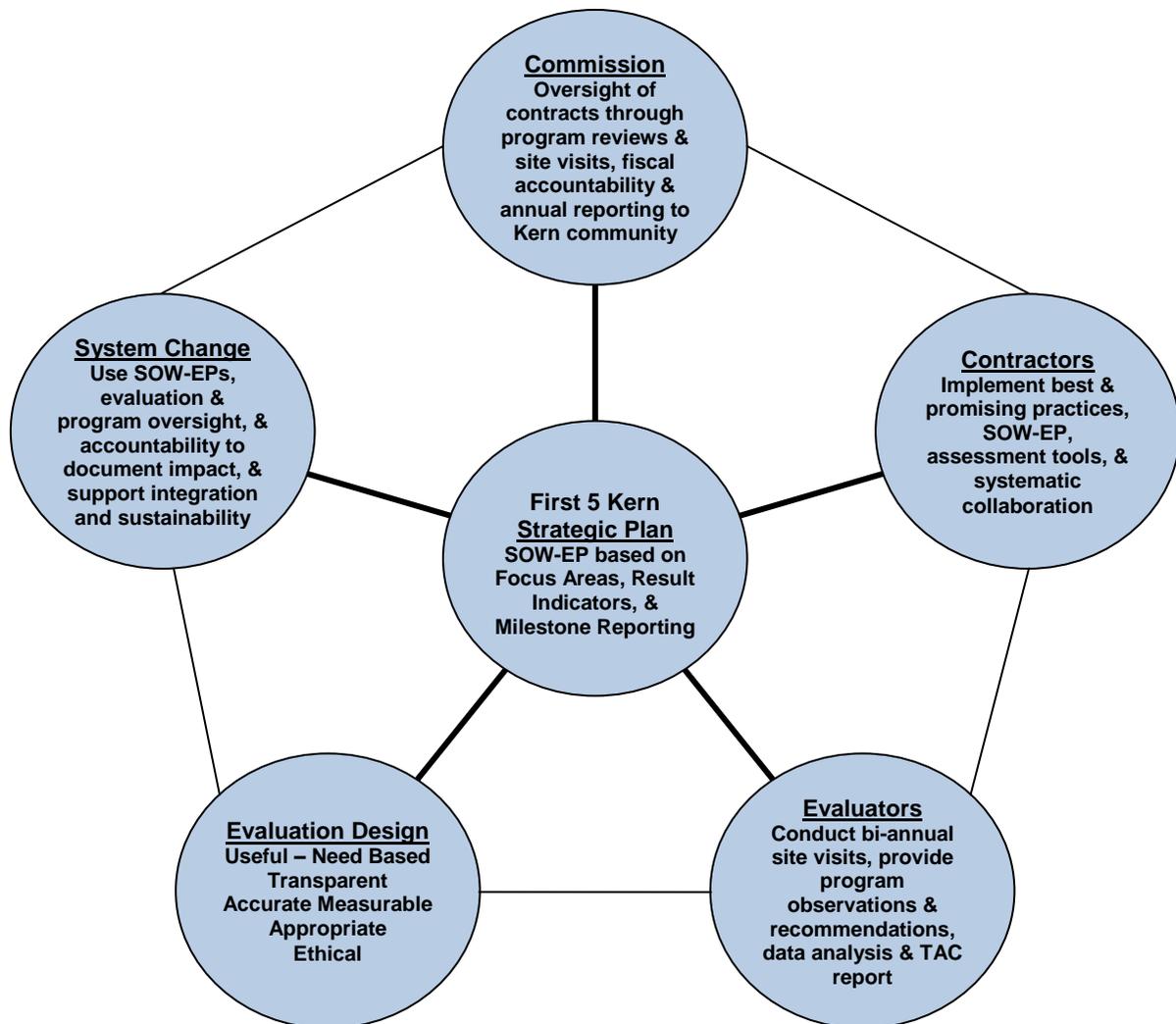
### Evaluation Framework

The report development follows state guidelines. In particular, First 5 California (2010) suggested inclusion of both *needs-based assessment* and *asset-based*

*assessment* in the evaluation framework. Under the leadership of First 5 Kern Commission, asset-based assessment is conducted quarterly to monitor state investment and service delivery at the program level. Guided by the local strategic plan, First 5 Kern has contractually required service providers to single out result statements and measurable objectives in a Scope of Work-Evaluation Plan (SOW-EP) that delineates resources, data collection tools, result indicators, performance milestones, and program targets. Meanwhile, the evaluation team attends TAC meetings regularly to support needs-based assessment. TAC is an advisory board to monitor local needs and suggest program changes for First 5 Kern.

First 5 Kern also gathers information from program reviews and site visits to identify service gaps across different communities. In collaboration with experts from the IRB panel, site visits are regulated professionally to support the *need-based*, *transparent*, and *accurate* data collection. Evaluation findings are employed to support new recommendations for program improvement. The entire Evaluation Framework is delineated in Exhibit 2 to address results-based accountability according to the state guidelines (First 5 California, 2010) and the local strategic plan (First 5 Kern, 2014b).

**EXHIBIT 2. FIRST 5 KERN EVALUATION FRAMEWORK**



## Chapter 2: Impact of First 5 Kern-Funded Programs

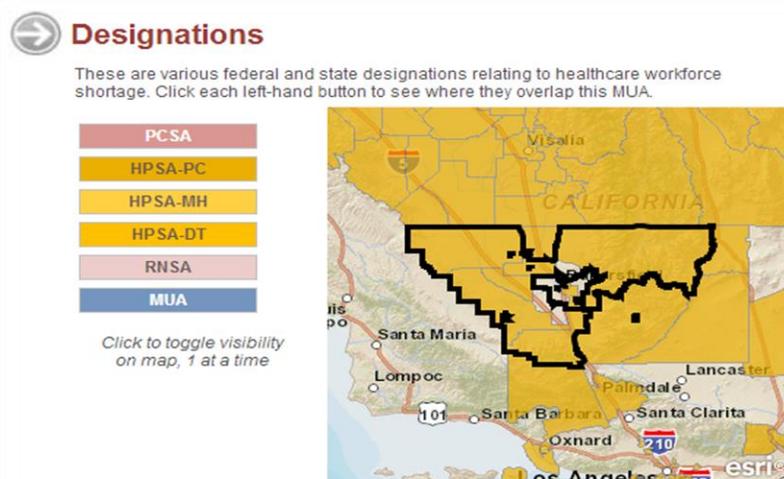
The state commission embraced a goal of “helping prepare all children to enter kindergarten ready to learn and succeed” (First 5 California, 2008, p. 4). To facilitate child development, researchers found that “healthy children are more likely to grow into healthy adults. Sound health also provides a foundation for the construction of sturdy brain architecture and the associated achievement of a broad range of abilities and learning capacities” (Center on the Developing Child at Harvard University, 2010, p. 2). In addition, early childhood growth depends on interaction between children and environments (Gauvain & Cole, 2005), which makes *Family Functioning* an indispensable component to sustain child support.

To deliver services for children and families, First 5 California (2011) stipulated, “While counties design their programs to fit their specific local needs, they must provide services in each of the following four focus areas: Family Functioning, Child Development, Child Health, [and] Systems of Care” (p. 15). In clarifying the relationship among focus areas, the state commission added that “One result area, Systems of Care, differs from the others. It consists of programs and initiatives that support program providers in the other three result areas” (First 5 California, 2013, p. 12). In this report, Chapter 2 is devoted to description of program-specific results in *Child Health*, *Family Functioning*, and *Child Development*. *Systems of Care* are addressed in Chapter 3 to summarize local capacity building in service integration.

### Improvement of Child Health

According to the Office of Statewide Health Planning and Development (OSHPD), a large portion of Kern County is classified as Medically Underserved Areas (MUA).<sup>17</sup> Although the southeastern region is outside of the MUA boundary, that part represents Mojave Desert and has a sparse population density (Figure 8). Hence, strong service needs are identified for most residents in Kern County.

**FIGURE 8: MUA AND HPSA-PC AREAS IN KERN COUNTY**



<sup>17</sup> <http://gis.oshpd.ca.gov/atlas/topics/shortage/mua>.

In comparison, “Approximately 17% of Californians live in a MUA”, much lower than the rate in Kern County.<sup>18</sup> While children in MUA needs more support, service facilities are not adequately developed to enhance child health in rural communities. In particular, yellow-colored areas in Figure 8 correspond to *Health Professional Shortage Areas for Primary Care* (HPSA-PC).<sup>19</sup> The shortage of health professionals directly impacts service access for local residents. Hence, capacity building is needed to improve child health in Kern County.

**Capacity of Child Health Services**

A total of 13 programs are funded in *Child Health* (Table 4). Similar to the division between general and special education, six programs offer child health services for general population. Six additional programs support children with special needs. Smith et al. (2009) noted that “While many entities purportedly provide care coordination, there is a lack of communication among the multiple agencies serving the same child” (p. 7). To fill this void, Medically Vulnerable Care Coordination Project (MVCCP) is funded to alleviate service backlogs that negatively delay the provision of healthcare for medically vulnerable children.

**TABLE 4: FEATURES OF CHILD HEALTH PROGRAMS FUNDED BY FIRST 5 KERN**

Domain	Program	Primary Services	Age
General Services for All Children	CHI	Health Insurance Enrollment and Training	0-5
	SAS	Health Insurance Enrollment	0-5
	KC_Dental*	Mobile Program for Oral Healthcare	0-5
	CMIP	Mobile Program for Immunizations	0-5
	HLP	Health Education	0-5
	MAS	Safety Education	0-5
Services for Children with Special Needs	MVIP	Targeted Intensive Intervention	0-2
	EIP	Intensive Intervention	0-5
	SSEC	Targeted Intensive Intervention	0-5
	BIH	Maternal/Child Healthcare	0-2
	NFP	Maternal/Child Healthcare	0-2
	RSNC	Targeted Intensive Intervention	3-5
Coordination	MVCCP	Quality Health Systems Improvement	0-5

\*Serve children up to 7 years old

In FY 2013-14, 140 children were connected to medical homes by Medically Vulnerable Infant Program (MVIP) and Children's Health Initiative of Kern County (CHI). To address critical child needs, 73% of the medical homes accommodated medically vulnerable infants across Kern County. In addition, 245 dental homes were established by Kern County Children’s Dental Health Network (KC\_Dental). The service outcome was represented by completion of 4,757 oral health examinations, 3,429 dental cleanings, 1,978 fluoride treatments, 1,855 dental indices, and 306 fissure sealants.

Wilson and Durbin (2013) observed, “The parent-child relationship has long been seen as a critical source of influence on child health and adjustment across multiple developmental domains” (p. 249). Both CHI and MVIP incorporated a parent education

<sup>18</sup> <http://gis.oshpd.ca.gov/atlas/topics/shortage/mua>.

<sup>19</sup> See Note 18.

component. MVIP services were *home-based*, and impacted 50 parents this year. CHI parent education was offered on a *group-based* platform, including thematic classes and workshops on various topics of child health protection. Altogether the CHI program has organized 16 training sessions to prepare 853 Certified Enrollment Counselors. With support from 27 agencies, CHI helped 2,231 parents complete health insurance applications to gain healthcare service access.

Besides the countywide support, First 5 Kern funded special programs to offer community-based services. In general, "Racial/ethnic disparities in health status prevent many young children in California from the optimal developmental trajectories that First 5 hopes to help achieve" (Inkelas et al., 2003, p. viii). Early childhood protection began with prenatal care. "Black women were more likely to report not receiving advice from their prenatal care providers about smoking cessation and alcohol use" (Kogan, Kotelchuck, Alexander, & Johnson, 1994, p. 82). Black Infant Health (BIH) received funding from First 5 Kern to case-manage 132 families. The service has enhanced parent education and addressed smoking cessation, alcohol abuse, and substance consumption. As a result, the number of newborns with low birth weight reached zero within the BIH service region.

According to Kern County Public Health Services Department (2012), African-American children were 1.5 to 2 times as likely as their White peers to have low birth weights (LBW) and more than twice as likely to die before their first birthday. To reduce the mortality rate, BIH made 240 referrals to merge service gaps among programs. Bells (2009) further noted, "Universal prevention systems include early detection strategies as essential to supporting healthy developmental outcomes in young children" (p. iv). To maintain disease prevention, BIH conducted development assessments for 38 children and confirmed up-to-date immunization for 69 children.

Similar to BIH, Nurse Family Partnership (NFP) program was funded to monitor pregnancy outcomes in traditionally underserved families. Nurses were sent to visit high-risk, low-income, and first-time mothers. In FY 2013-14, case management services included support for smoking cessation and alcohol control in 91 families. NFP also conducted development assessments for 83 children and ensured up-to-date immunizations for 217 children.

Because "Health, developmental, and mental health services are more likely to be located in urban areas than in rural areas" (Smith et al., 2009, p. 6), NFP services were particularly helpful in eliminating transportation barriers across widespread *valley*, *mountain*, and *desert* communities. The Children's Mobile Immunization Program (CMIP) of San Joaquin Community Hospital also made extensive efforts on community outreach. In this year, CMIP provided 16,259 vaccines to support immunization services for 3,486 children ages 0-5 at 178 clinics throughout Kern County.

In summary, First 5 Kern funded 13 programs to support child health in various service capacities. In addition to medical and dental homes, household visits and community clinics were offered to address special needs of different stakeholders, including medically vulnerable infants, first-time mothers, and minority families. The service delivery was coordinated by both *countywide* and *community-based* programs to support children in hard-to-reach communities.

**Priority on Child Health Support**

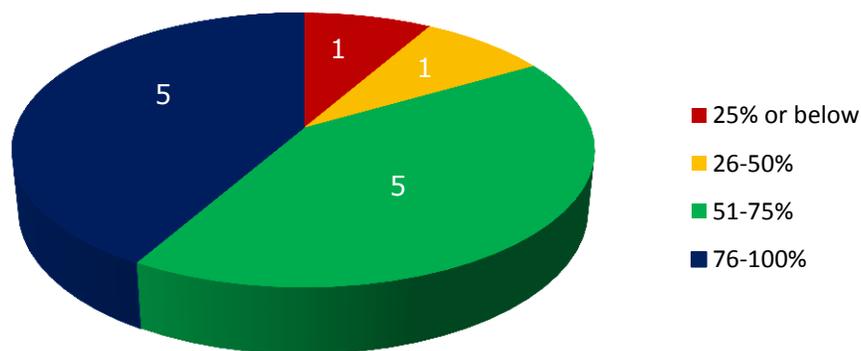
This funding cycle coincides with the most recent economic recession, and thus, “Health and human services programs that serve children are among the most seriously affected by this lack of funding” (California Assembly Committee on Budget, 2011, p. 1). Consequently, First 5 Kern has channeled more state investment in *Child Health* (Table 5). Although more programs are funded in *Family Functioning*, the total spending in that focus area is almost 10% less than the funding in *Child Health*. At the program level, the average program funding in *Child Health* is 57% more than the program funding in *Child Development*. The fund allocation also reflects First 5 Kern’s (2014b) priority to ensure that “All children will have an early start toward good health” (p. 5).

**TABLE 5: COMPARISON OF FUNDING STRUCTURE ACROSS FOCUS AREAS**

Indices of Comparison	Child Health	Family Functioning	Child Development
Total Investment	\$4,113,176	\$3,743,530	\$2,009,237
Number of Programs	13	17	10
Average Funding per Program	\$316,398	\$220,208	\$200,924

The support from First 5 Kern plays an essential role in local service delivery. Figure 9 shows that Proposition 10 investment covers more than half of the annual budget for most programs that provide direct services in *Child Health*. Meanwhile, it is anticipated that “Funded organizations will leverage resources as a result of capacity building and sustainability efforts” (First 5 Kern, 2014b, p. 14). In FY 2013-14, Make a Splash (MAS) program received \$35,000 from the Kaiser Permanente Operations Splash Grant and \$4,995 from USA Swimming Grant. The external funding was used to establish five information booths during *Family Fun Nights* at the McMurtrey Aquatic Center and *Movies in the Parks* in the 2014 summer season.

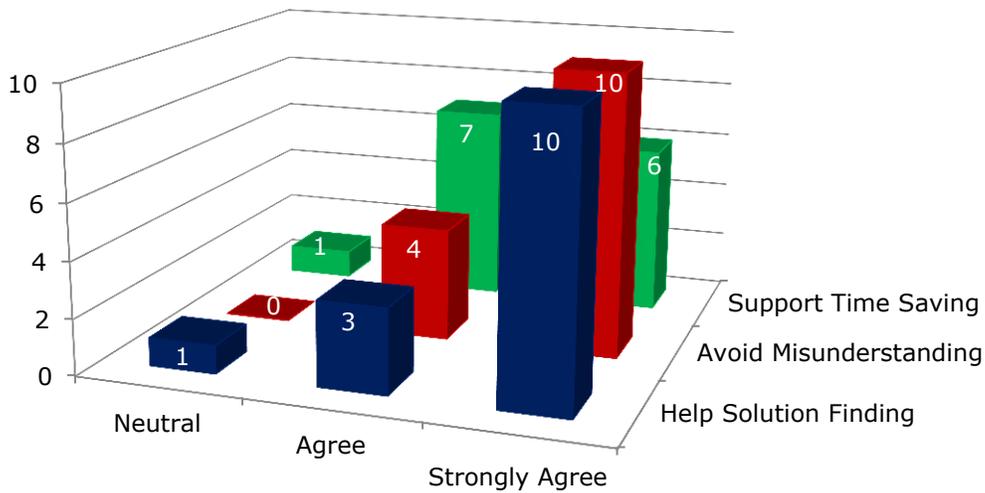
**FIGURE 9: NUMBER OF PROGRAM WITH PERCENT OF BUDGET FUNDED BY FIRST 5 KERN**



Fund leverage has demonstrated mutual benefits for both service partners and local children in need of medical service. In particular, MVCCP received funding from First 5 Kern to help families and service providers make appropriate health decisions for medically vulnerable children based on health prognosis, developmental track, support

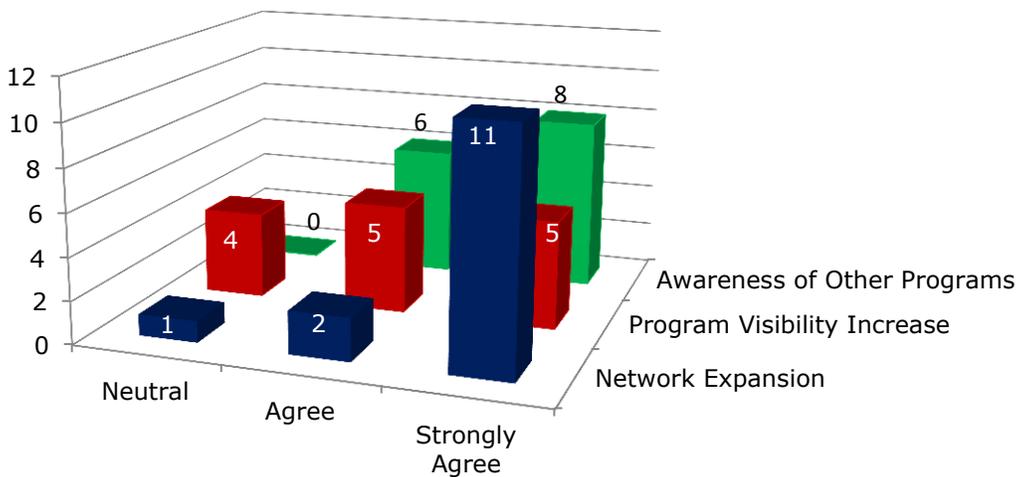
system, and other needs. In FY 2013-14, MVCCP leveraged \$37,000 from Health Net, Kaiser Permanente, San Joaquin Hospital, and Lucile Packard Foundation to strengthen service coordination among health, education, and social service partners in multiple counties. Most partners indicated that MVCCP services helped them save time, find solutions, and eliminate case misunderstanding (Figure 10).

**FIGURE 10: PROVIDER FEEDBACK ON MVCCP SUPPORT**



MVCCP partners further acknowledged benefits from the care coordination. In a satisfaction survey, most partners *agreed* or *strongly agreed* that MVCCP has assisted them in increasing program visibility, expanding professional network, and strengthening awareness of other programs (Figure 11). The mutual support through MVCCP has served 701 medical cases pertaining to (1) preterm infants, (2) infants with special healthcare needs, (3) infants at risk for socioeconomic or medical reasons, and/or (4) infants with high morbidity rates.

**FIGURE 11: BENEFIT OF MVCCP FOR LOCAL PARTNERS**



In summary, First 5 Kern has allocated more funding in *Child Health* to support direct services and partnership buildings across healthcare professionals, social workers, insurers, case managers, foster parents, therapists, clinicians, parent educators, child care staff, and community service providers. The joint effort recruited \$1,194,218 from 16 external agencies for enhancement of *Child Health* service in Kern County (Table 6).

**TABLE 6: FUND LEVERAGE IN CHILD HEALTH FOCUS AREA**

<b>Program</b>	<b>Additional Sources of Funding</b>	<b>Amount</b>
BIH	California Department of Public Health and Child Death Review	\$2,373
CHI	California Endowment and Dignity Health	\$613,994
HLP	Bakersfield Californian Foundation/Kern Adult Literacy	\$18,329
KC_Dental	Denti-Cal	\$19,644
MAS	Kaiser Permanente Operations Splash Grant and Donation	\$39,995
MVCCP	Health Net, Kaiser Permanente, Lucile Packard Replication Grant, and San Joaquin Hospital	\$37,000
MVIP	Kern Regional Center	\$191,383
NFP	Community Wellness Foundation and Targeted Case Management	\$182,440
RSNC	Donation (Cooperate and Individual)	\$21,900
SAS	California Coverage & Health Initiative and Medical Administrative Activities	\$67,160

### Improvement of Program Effectiveness

To document the impact of state investment, service providers are expected to “Build program accountability that incorporates best practices and continuous improvement” (Results-Based Accountability, 2012, p. 2). In FY 2013-14, improvement of program effectiveness is reflected in eight aspects:

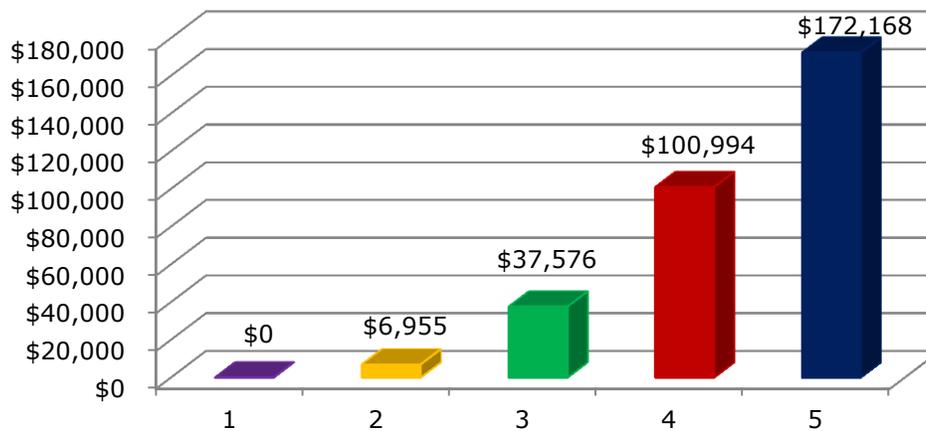
1. Given the extensive needs to support child health in African-American communities, BIH has extended its referral services to 240 children and families, a 74% increase over 138 referrals last year. To expand services for medically vulnerable infants, MVIP also increased its referral count from 443 last year to 495 this year.
2. Richardson Special Needs Collaborative (RSNC) increased the number of case managed families from 66 last year to 73 this year. One hundred seventy-nine parents participated in education workshops, a sharp increase from 94 parents last year. Access to RSNC Resource Library increased from 75 parents last year to 84 parents this year. Additional referral services were provided to 159 families, more than doubling the count from last year.
3. MAS received funding from First 5 Kern to support Cardiopulmonary Resuscitation (CPR) classes, swimming instruction, and other protective strategies for local families. Five new booths were created this year to disseminate knowledge on *water safety* and *drowning prevention*. The service expansion also included program-specific education for 75 parents, an over 70% increase from last year.
4. Special Start for Exceptional Children (SSEC) offered center-based services to support early development of 48 children, an increase from 43 children last year. SSEC also provided its services beyond normal business hours, and the number of children in that program increased from 28 last year to 30 this year. Referral services are extended to 43 children, an increase from 37 children last year.

5. Successful Application Stipend (SAS) program assisted health insurance enrollment at 24 Census Designated Places, making the service available for any children within a 10-mile radius of their home location. SAS renewed health insurance enrollments for 985 children and completed new enrollments for 987 children.
6. The number of LBW cases in NFP dropped from 5 in last year to 3 this year. The program confirmed up-to-date immunization for 217 children, an increase from 213 cases last year.
7. Children’s Health Initiative of Kern County (CHI) hosted 16 training sessions for parents, guardians, and service providers. The number of participants increased from 487 last year to 3,048 this year.
8. Kern County’s Children Dental Health Network (KC\_Dental) increased the number of dental homes from 234 last year to 245 this year. An expansion of the client coverage is demonstrated by service counts in dental examination, cleaning, sealant, index, fluoride, and parent education between adjacent years (Table 7). The number of referrals also increased from 1,193 last year to 1,266 this year. Figure 12 shows increase in oral health investment for children near age 5. Thus, persistent commitment is needed to enhance dental care during the period of early growth.

**TABLE 7: EXPANSION OF DENTAL SERVICES IN KERN COUNTY**

Period	Examination	Cleaning	Sealant	Index	Fluoride	Education
FY 2012-13	4,335	2,861	263	1,562	1,519	242
FY 2013-14	4,757	3,429	306	1,855	1,978	245

**FIGURE 12: ORAL HEALTH INVESTMENT FOR CHILDREN AGES 0-5**



**Sustainable Impact in Kern County**

Besides the trend of service expansion, longitudinal data have been tracked through pretest and posttest surveys to assess the sustainable impact of *Child Health* programs in Kern County. The pattern of improvement across time is reflected in five aspects:

### 1. Improvement of Health Literacy

Bakersfield Adult School’s Health Literacy Program (HLP) offered health literacy training to 120 parents and developmental assessment for 68 children. Based on the “Be Choosy Be Healthy” data, consistent improvement of health literacy has been observed among 40 parents across *health, activity, eating, and prevention* categories within six months of HLP service. Desired Results Developmental Profile-Preschool (DRDP-PS) data indicated significant improvements across different domains of child growth, including Self and Social Development [t(33)=10.79, p<.0001], Language and Literacy Development [t(33)=10.25, p<.0001], English Language Development [t(17)=6.37, p<.0001], Cognitive Development [t(33)=6.34, p<.0001], Mathematical Development [t(33)=11.11, p<.0001], Physical Development [t(33)=8.24, p<.0001], and Health [t(33)=11.49, p<.0001]. The corresponding Cohen’s d indices were larger than 2.20, which represented a strong program impact on child development.

### 2. Nurturing Skills Competency Scale Results

The Nurturing Skills Competency Scale (NSCS) is a criterion-referenced inventory aligned with the Nurturing Parenting Curriculum (NPC). “The Nurturing Parenting Program is an internationally recognized, group-based approach for working with parents and their children in reducing dysfunction and building healthy, positive interactions” (Edwards, Landry, & Slone, 2012, p. 1). Outcomes of the NSCS assessment include two subscales: Part A assesses knowledge of the nurturing parenting attitudes and skills and Part B evaluates application of nurturing parenting concepts, practices, and strategies. Bavolek (2009) recommended that “The NSCS is ideally utilized as a pre and post-test” (p. 1). In this report, NSCS data were employed to determine effectiveness of parent education in RSNC. Statistical testing revealed significant improvement of parenting knowledge [t(45)=10.13, p<.0001] and skills [t(45)=4.20, p=.0001]. The corresponding effect sizes were 2.99 and 1.24, which suggested a strong practical impact of RSNC on parent education results.

### 3. Child Development Outcomes

Researchers found a clear link between child health and child development (see Mattheus, 2013). BIH, MVIP, and NFP employed Ages and Stages Questionnaire-3 (ASQ-3) to assess child development. The results showed the average performance of infants significantly above the corresponding thresholds in *Communication, Gross Motor, Fine Motor, Problem Solving, and Personal-Social* domains (Table 8). The effect sizes were larger than 2.17. Thus, these programs had strong and significant impacts on child growth across the ASQ-3 domains.

**TABLE 8: ASQ-3 RESULTS FROM BIH, MVIP, AND NFP**

Domain	BIH	MVIP	NFP
Communication	t(13)=15.23, p<.0001	t(119)=17.67, p<.0001	t(81)=22.42, p<.0001
Gross Motor	t(13)=10.92, p<.0001	t(119)=11.98, p<.0001	t(81)=17.27, p<.0001
Fine Motor	t(13)=38.79, p<.0001	t(119)=11.87, p<.0001	t(81)=20.39, p<.0001
Problem Solving	t(13)=12.22, p<.0001	t(119)=12.79, p<.0001	t(81)=21.56, p<.0001
Personal-Social	t(13)=15.11, p<.0001	t(119)=14.18, p<.0001	t(81)=25.07, p<.0001

**4. Enhancement of Mental Health Conditions**

Early Intervention Program (EIP) was established in Delano to offer mental health services near the northern border of Kern County where 71.5% of the population had Latino origin. EIP offered child therapy services and parent education classes in its behavioral or mental health program. The program effectiveness has been assessed by several instruments, including Adult-Adolescent Parenting Inventory-2 (AAPI-2), Comprehensive Needs Assessment (CNA), Eyberg Child Behavior Inventory (ECBI), Sutter-Eyberg Student Behavior Inventory-Revised (SESBI) and Incredible Years Parenting Scale (IYPS). Because IYPS only tracked two children at program entry, the sample size was too small for statistical reporting. Therefore, mental health improvement for children and parents was represented by pretest and posttest data from the other four instruments:

**(1) AAPI-2 Outcomes**

As “the role of parents is paramount in the development of healthy children” (BC Council for Families, 2011, ¶. 3), court-mandated parent education has been incorporated in EIP. AAPI-2 data were gathered from 17 parents under a pretest and posttest setting. The results indicated significant improvement of the *Nurturing Parenting* constructs in four domains:

- Construct A: Inappropriate Expectations of Children [t(16)=5.58, p<.0001];
- Construct B: Lack of Empathy towards Child Needs [t(16)=6.11, p<.0001];
- Construct C: Belief in the Use of Corporal Punishment [t(16)=4.14, p=.0008];
- Construct D: Reversing Parent-Child Family Roles [t(16)=7.83, p<.0001].

The effect size for construct enhancement was no less than 2.01, which indicated a strong practical impact from EIP. AAPI-2 assessment also included *Construct E: Oppressing Children’s Power/Independence*. During ages 0-5, children seemed too young to exercise their power. Thus, no significant impact was found from the EIP parent education on this construct.

**TABLE 9: SIGNIFICANT IMPROVEMENT OF CNA INDICATORS IN EIP**

Indicator	N	t	p
My child is able to handle problems without suggestion	17	2.83	.0121
My child follows rules and directions most of the time	17	2.78	.0134
My child is able to focus on a task until it is completed	17	3.25	.0050
My child is able to regulate his/her emotions	17	3.85	.0014
My child appears to be angry most of the time	17	-2.16	.0460
My child has experienced a trauma within the last 6 months	17	-2.22	.0413
My child shows signs of anxiety	17	-3.39	.0037

**(2) CNA Indicators**

Through mental health services at EIP, improvement of child behaviors was reflected by seven CNA indicators (Table 9). Seventeen parents responded to the CNA survey *before* and *after* EIP intervention. The first four indicators were worded positively and the next three indicators were reversely coded. Regardless of the scale difference, the results showed significant improvement of child behaviors through EIP

services. The effect size was above 1.05. According to Cohen (1969), an effect size of 0.8 is “grossly perceptible and therefore large” (p. 23). Hence, the CNA indicators reconfirmed the strong practical impact from EIP services.

**(3) ECBI Results**

ECBI results were derived from parent assessment of child performance. Responses from 37 parents were tracked under a pretest and posttest setting. The parent reports indicated significant reduction of child *behavior problem* [t(36)=6.88, p=.0017] and its *intensity* [t(36)=6.19, p<.0001] during EIP intervention. The strong practical impacts were reconfirmed by the corresponding effect sizes of 2.26 and 2.04. More specifically, significant improvements were illustrated by 22 indicators in Table 10.

**TABLE 10: IMPROVEMENT OF CHILD BEHAVIOR INDICATORS IN ECBI ASSESSMENT**

<b>Eyberg Indicator</b>	<b>Statistical Testing</b>
Dawdles in getting dressed	t(36)=2.53, p=.0158
Refuses to do chores when asked	t(36)=3.04, p=.0044
Does not obey house rules on own	t(36)=2.79, p=.0084
Refuses to obey until threatened with punishment	t(36)=3.34, p=.0020
Acts defiant when asked to do something	t(36)=3.64, p=.0008
Argues with parents about rules	t(36)=3.12, p=.0035
Gets angry when does not get own way	t(36)=3.53, p=.0012
Has temper tantrums	t(36)=4.13, p=.0002
Sassess adults	t(36)=3.10, p=.0037
Whines	t(36)=3.08, p=.0040
Cries easily	t(36)=3.50, p=.0013
Yells or screams	t(36)=4.13, p=.0002
Hits parents	t(36)=3.88, p=.0004
Destroys toys and other objects	t(36)=3.56, p=.0011
Is careless with toys and other objects	t(36)=4.45, p<.0001
Teases or provokes other children	t(36)=3.45, p=.0015
Verbally fights with friends own age	t(36)=3.12, p=.0035
Physically fights with friends own age	t(36)=3.40, p=.0017
Physically fights with sisters and brothers	t(36)=3.11, p=.0036
Interrupts	t(36)=3.36, p=.0019
Fails to finish tasks or projects	t(36)=2.14, p=.0394
Has difficulty entertaining self alone	t(36)=2.19, p=.0347

Cronbach’s alpha index has been employed to assess consistency of the ECBI outcomes. According to Kirk and Martens (2014), “By convention and agreement among psychometric researchers and scale developers, Cronbach’s alphas above 0.7 are considered to be adequate for use in practice, alphas above 0.8 are considered to be strong” (p. 5). The results showed Cronbach’s alpha equal to 0.88. Thus, the ECBI results demonstrated high consistency in assessing child behavior improvements.

**(4) SESBIR Outcomes**

SESBIR is a teacher rating scale to evaluate disruptive behaviors of preschool children (Querido & Eyberg, 2003). Preschool teachers provided performance assessment for 74 children *before* and *after* EIP services. The results indicated a significant decrease in *behavior problems* [t(73)=4.91, p<.0001] and *intensity*

[t(73)=4.98, p<.0001] scores between pretest and posttest. The SESBIR results also exhibited strong consistency with a Cronbach’s alpha index above 0.94. Specific improvements were illustrated by 24 SESBIR indicators (Table 11).

**TABLE 11: IMPROVEMENT OF CHILD BEHAVIOR INDICATORS IN SESBIR ASSESSMENT**

Sutter Eyberg Indicator	Statistical Testing
Has temper tantrums	t(73)=2.53, p=.0136
Pouts	t(73)=3.53, p=.0007
Teases or provokes other students	t(73)=3.31, p=.0014
Does not obey school rules on his/her own	t(73)=3.77, p=.0003
Dawdles in obeying rules or instructions	t(73)=4.23, p<.0001
Gets angry when doesn't get his/her own way	t(73)=2.14, p=.0356
Impulsive, acts before thinking	t(73)=3.42, p=.0010
Refuses to obey until threatened with punishment	t(73)=4.88, p<.0001
Had difficulty staying on task	t(73)=3.15, p=.0023
Has difficulty entering groups	t(73)=2.72, p=.0081
Is easily distracted	t(73)=2.29, p=.0246
Has difficulty accepting criticism or correction	t(73)=4.62, p<.0001
Fails to finish tasks or projects	t(73)=3.39, p=.0011
Whines	t(73)=4.49, p<.0001
Is overactive or restless	t(73)=3.14, p=.0024
Physically fights with other students	t(73)=4.11, p=.0001
Makes noises in class	t(73)=3.52, p=.0008
Acts defiant when told to do something	t(73)=2.96, p=.0041
Argues with teacher about rules and instructions	t(73)=2.50, p=.0148
Interrupts other students	t(73)=2.07, p=.0420
Has trouble awaiting turn	t(73)=3.32, p=.0014
Fails to listen to instructions	t(73)=2.25, p=.0274
Is touchy or easily annoyed	t(73)=2.18, p=.0327
Bothers others on purpose	t(36)=4.11, p=.0001

Besides mental health services from EIP, First 5 Kern funded *Special Start for Exceptional Children* (SSEC) to provide early intervention services to children with disabilities and other special needs. The Desired Results Developmental Profile-Access (DRDP-Access) instrument was designed to assess all children, birth to five, who receive special education services. Like the IYPS data from EIP, only four cases were tracked in SSEC across all categories of the DRDP-Access assessment. Although the small sample was typical in special education, findings in this report were derived for these programs with adequate data tracking in a pretest and posttest setting (Tables 9-11).

In summary, evidences of service delivery have been gathered in this section from all 13 programs in *Focus Area I: Child Health*. *Program capacity and support leverage* are described to recap service deliveries in FY 2013-14. Program effectiveness is delineated by improvement of child health support across service providers. This section concludes with an analysis of multilevel data from children (ASQ-3 & DRDP-PS), parents (AAPI-2, CNA, ECBI, & NSCS), service providers (KC\_Dental & HLP), and preschool teachers (SESBIR) to evaluate the sustainable impact in Kern County. Both descriptive and assessment findings consistently indicate enhancement of the *Quality Health Systems* to support children ages 0-5 and their families.

## Improvement of Family Functioning

Children are immature and vulnerable during early development stages. Family functioning plays dual roles to facilitate child growth and protection. In FY 2013-14, First 5 Kern funded 17 programs in *Focus Area II: Family Functioning*. Sixteen of the programs offered direct services and one program provided exclusive referral support. In enhancing program capacity, 16 service providers leveraged \$2,022,242 from 20 partners to address various local needs in this focus area (Table 12).

**TABLE 12: FUND LEVERAGE IN FAMILY FUNCTIONING FOCUS AREA**

<b>Program</b>	<b>Additional Sources of Funding</b>	<b>Amount</b>
2-1-1 Kern County	County of Kern, Corporate Donation, USDA-California Association of Food Banks, U.S. Department of Health and Human Services, SoCal Gas, and United Way	\$314,144
AFRC	Donation and SAS	\$1,260
BCRC	County of Kern, Covered California and SAS	\$3,634
DR	County of Kern	\$560,000
EKFRC	Corporate Donation	\$6,500
GCP	Kern County Aging & Adult Services	\$40,654
GSR	Corporate Donation and SAS	\$10,576
IWVFC	Donation, Fees/Tuition, and Targeted Case Management	\$64,987
KRVFC	California Department of Education, Kern Community Foundation, Medical Administrative Activities, and USDA California Nutrition Network	\$263,670
LVSFP	California Department of Education, California Endowment, and Donation	\$342,924
MCFRC	County of Kern, Covered California, Donation, Emergency Food and Shelter Program, Fundraiser, Kern Community Foundation, and Southwest Healthcare District	\$80,813
MFRC	California Department of Education, Donation, Medical Administrative Activities, SAS, and United Way	\$149,586
SENP	Fees/Tuition, Nurturing Infant Awareness, and Targeted Case Management	\$133,613
SHS	SAS and Target Foundation	\$2,980
WSCRC	Dignity Health, Donation, and Salvation Army	\$46,900

It was reported that “Over the last decade, the share of Kern County children living in married-couple homes has declined to 62%” (KCNC, 2013, p. 1), which made child protection a critical task to support *Family Functioning*. In this context, 13 programs included education components to enhance effective parenting. First 5 Kern also funded three programs to strengthen protection of children from divorce and/or unstable families. On balance, Proposition 10 funding has been invested in Kern County to “provide parental education and family support services relevant to effective childhood development” [Proposition 10, Sec. 2(I)].

Enhancement of family functioning represented collaborative efforts across focus areas. More specifically, development of health literacy was supported by a program in *Child Health*. The outcomes in child health have been addressed in the previous section. In addition, “The most effective way to help babies and toddlers is to promote positive

parent-child relationships” (Liu, 2014, p. 3). Therefore, more parent education services were offered by programs in focus areas of *Child Development* and *Child Health*. This section is focused on the results of parent education in Kern County.

Samuelson (2010) pointed out, “Effective parent education programs have been linked with decreased rates of child abuse and neglect, better physical, cognitive and emotional development in children, increased parental knowledge of child development and parenting skills” (p. 1). To tackle these service outcomes, parent education is delivered on multiple platforms, including professional workshops, group-based classes, home-based programs, and court-mandated instructions (Table 13).

**TABLE 13: PARENT EDUCATION IN FAMILY FUNCTIONING & CHILD DEVELOPMENT**

Type	Program*
Court-mandated education	EKFRC(21), IWFVRC(41), KRVFRC(12), SHS(62), SENP(58), NOR(60)
Group-based education	GSR(92), LVSRP(31), MFRC(55), WSCRC(20), BCDC(36), BCSD(509), DSR(47), DDLCCC(47), SSCDC(31)
Home-based education	AFRC(49), BCRC(5), EKFRC(22), KRVFRC(82), LVSRP(44), MFRC(40), MCFRC(27), WSCDC(15), DSR(43)
Workshop	MCFRC(41), WSCDC(275), BCDC(166), BCSD(482), DDLCCC(59), SFP(29)

\*Program acronyms are listed in Appendix A. Client counts are in parentheses.

Altogether six programs provided education workshops for 1,052 parents and guardians, an 11% increase over the baseline count of 948 parents from last year. Along with the service expansion, six programs offered court-mandated parent education. The number of participants increased from 245 last year to 254 this year. In addition, nine programs provided home-based education for 327 families this year. The service count increased from 223 families last year. While home-based instruction included more individualized attention, group-based classes have attracted more parents. As a result, 12 programs offered group-based classes for 1,145 parents.

**Effectiveness of Group-Based and Home-Based Parent Education**

The Nurturing Skills Competency Scale (NSCS) has been employed to assess effectiveness of *group-based* and *home-based* parent education under a pretest and posttest setting. This criterion-reference assessment was based on Nurturing Parenting Curriculum (NPC) that has been adopted by at least six other First 5 county commissions for nine years.<sup>20</sup> To evaluate program effectiveness in Kern County, NSCS data have been tracked between adjacent years to avoid information attrition in the value-added assessment. Following the NSCS structure, assessment results are divided into Parts A and B to differentiate developments of nurturing parenting *knowledge* and *application*, respectively.

When NSCS was adopted by 16 programs in this funding cycle, service providers already finalized their Scope of Work-Evaluation Plan. Despite the lack of initial blueprint for program alignment, strong and significant improvements have been demonstrated in the assessment findings from four programs (AFRC, DSR, GSR, & WSCDC) (Tables 14 & 15). A total of 116 parents enhanced their nurturing parenting

<sup>20</sup> These counties are Butte, Lake, Madera, San Mateo, Tehama, and Tuolumne.

*knowledge* and *application* through these programs. Meanwhile, significant improvement of nurturing parenting *knowledge* occurred across 511 parents in 10 programs (Table 14). Six programs showed significant enhancement of *application* skills among 169 parents (Table 15).

**TABLE 14: IMPROVEMENT OF NPC KNOWLEDGE IN FOCUS AREAS 2 & 3**

Focus Area	Program*	Result	
Family Functioning	AFRC	t(19)= 8.62, p<.0001;	Effect Size=3.86
	BCRC	t(24)=2.79, p=.0102;	Effect Size=1.12
	GSR	t(39)=5.79, p<.0001;	Effect Size=1.83
	MCFRC	t(16)=2.32, p=.0339;	Effect Size=1.13
	MFRC	t(33)=6.95, p<.0001;	Effect Size=2.38
	WSCRC	t(21)=9.63, p<.0001;	Effect Size=4.11
Child Development	BCSD	t(271)=3.97, p<.0001;	Effect Size=0.36
	DSR	t(33)=4.15, p=.0002;	Effect Size=1.44
	LHFRC	t(34)=3.79, p=.0006;	Effect Size=1.28
	SSCDC	t(11)=5.06, p=.0004;	Effect Size=2.92

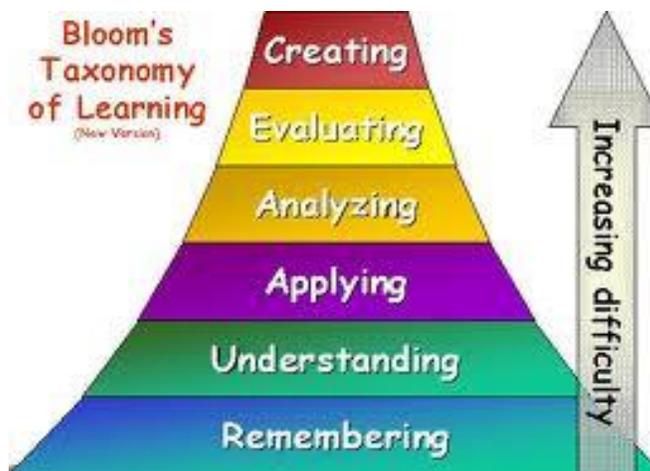
\*Program acronyms are listed in Appendix A.

**TABLE 15: IMPROVEMENT OF NPC APPLICATION IN FOCUS AREAS 2 & 3**

Focus Area	Program*	Result	
Family Functioning	AFRC	t(19)=2.49, p=.0224;	Effect Size=1.11
	GSR	t(39)=5.79, p<.0001;	Effect Size=1.83
	KRVFRC	t(13)=2.95, p=.0112;	Effect Size=1.58
	WSCRC	t(21)=10.90, p<.0001;	Effect Size=4.65
Child Development	DSR	t(33)=2.35, p=.0250;	Effect Size=0.81
	NOR	t(38)=2.18, p=.0356;	Effect Size=0.70

\*Program acronyms are listed in Appendix A.

**EXHIBIT 3: UPDATED BLOOM’S TAXONOMY**



Education outcomes are typically classified by Bloom's taxonomy to support construct measurement (Exhibit 3). Levels at bottom are less advanced, and thus, easier to attain. Because *knowledge* belongs to the level of remembering, Table 14 displayed significant improvement in more programs. In contrast, fewer programs were listed in Table 15 for improvement of *application* skills, which reconfirmed the hierarchical structure of learning outcomes according to Bloom's taxonomy.

It should be noted that statistical significance does not always imply practical significance (Wilkinson, 1999). For instance, NSCS results from Kern River Valley Family Resource Center (KRVFRC) did not show significant improvement between pretest and posttest [ $t(13)=2.11$ ,  $p=.0549$ ]. But the effect size has reached 1.13, suggesting a strong practical impact on the improvement of parenting knowledge this year.

To avoid statistical artifact, effect sizes were reported in Tables 14 and 15. This practice followed a recommendation from American Psychological Association (2001), i.e., "For the reader to fully understand the importance of your findings, it is almost always necessary to include some index of effect size or strength of relationship in your Results section" (p. 25).

In retrospect, multiple confounding variables were identified behind ineffective programs in parent education. As the NPC developers pointed out:

The ineffectiveness of the parenting education being offered to the parents, which includes: a) the dosage (number of total lessons offered are inadequate to the level of parental need); b) the intensity of the dosage (classes are condensed into a short period of time not allowing the information time to incubate into normal parenting patterns); or c) parenting lessons that do not meet the needs of the parents. That is, program focused lessons not parent focused lessons. (Assessing Parenting, 2012, p. 1)

Therefore, ongoing effort is needed to monitor effectiveness of parent education and staff preparation. In these counties that adopted NSCS for nine years, "agencies countywide have received 3-days of training on the Nurturing Parenting curriculum [NPC] to be able to utilize the program in their service delivery with families through groups, home visits, or individual counseling" (Ferron & Jordan, 2012, p. 3). In FY 2013-14, First 5 Kern staff attended the Training of Trainers workshop from the NPC developers to become certified Nurturing Parenting trainers. A plan has been developed to institute the three-day training for local programs in the next funding cycle.

### **Effectiveness of Court-Mandated Parent Education**

The Adult-Adolescent Parenting Inventory-2 (AAPI-2) is a norm referenced inventory for assessing five parent beliefs related to child maltreatment:

- A. Inappropriate developmental expectations of children
- B. Lack of parental empathy toward children's needs
- C. Strong parental belief in the use of physical punishment
- D. Reversing parent-child family roles
- E. Oppressing children's power and independence.

The instrument was recommended by California Evidence-Based Clearinghouse for Child Welfare (2014). Besides First 5 Kern, at least nine other First 5 county commissions employed AAPI-2 to evaluate effectiveness of parent education.<sup>21</sup>

In Kern County, the AAPI-2 results for two programs were reported in *Child Health*. Six additional programs adopted AAPI-2 to evaluate the effectiveness of court-mandated parent education in Focus Areas II and III. East Kern Family Resource Center (EKFRC) and Shafter Healthy Start (SHS) tracked 3 and 4 cases, respectively. Due to the small samples, no statistical analysis was conducted for these two programs. Table 16 contains AAPI-2 results for the remaining four programs in FY 2013-14.

**TABLE 16: IMPACT OF COURT-MANDATED PARENT EDUCATION IN FOCUS AREAS 2 & 3**

Construct	Focus Area	Program	Result
A. Expectations of Children	II	IWVFRC	t(23)=14.93, p<.0001; Effect Size=6.10
		KRVFRC	t(6)=1.57, p=.1671; Effect Size=1.19
		SENP	t(45)=7.56, p<.0001; Effect Size=2.23
	III	NOR	t(43)=6.77, p<.0001; Effect Size=2.04
B. Parental Empathy	II	IWVFRC	t(23)=9.52, p<.0001; Effect Size=3.89
		KRVFRC	t(6)=10.29, p<.0001; Effect Size=7.78
		SENP	t(45)=12.41, p<.0001; Effect Size=3.66
	III	NOR	t(43)=9.92, p<.0001; Effect Size=2.99
C. Physical Punishment	II	IWVFRC	t(23)=8.00, p<.0001; Effect Size=3.27
		KRVFRC	t(6)=0.79, p=.4581; Effect Size=0.60
		SENP	t(45)=13.07, p<.0001; Effect Size=3.85
	III	NOR	t(43)=8.19, p<.0001; Effect Size=2.47
D. Parent-Child Roles	II	IWVFRC	t(23)=8.53, p<.0001; Effect Size=3.48
		KRVFRC	t(6)=0.90, p=.4022; Effect Size=0.68
		SENP	t(45)=11.41, p<.0001; Effect Size=3.36
	III	NOR	t(43)=8.39, p<.0001; Effect Size=2.53
E. Child Power and Independence	II	IWVFRC	t(23)=8.11, p<.0001; Effect Size=3.31
		KRVFRC	t(6)=2.19, p=.0707; Effect Size=1.66
		SENP	t(45)=5.87, p<.0001; Effect Size=1.73
	III	NOR	t(43)=5.63, p<.0001; Effect Size=1.70

In comparison to NSCS results in Tables 14 and 15, court-mandated parent education indicated more consistent improvements across programs (Table 16). As a result, the *significant* and *strong* impact has been found from parent education programs at Indian Wells Valley Family Resource Center (IWVFRC), Southeast Neighborhood Partnership Family Resource Center (SENP), and Neighborhood Place Parent Community Learning Center (NOR). One hundred twenty-four parents benefited from the improvement of parenting practice through these programs.

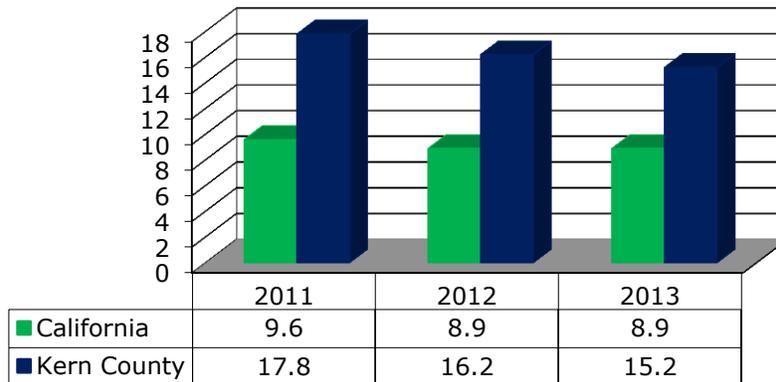
<sup>21</sup> These nine other counties are Los Angeles, Madera, Sacramento, San Bernardino, Santa Barbara, Santa Cruz, Solano, Shasta, and Tuolumne.

Meanwhile, Kern River Valley Family Resource Center (KRVFRC) only tracked seven cases in pretest and posttest. Despite the small sample, strong and significant improvement has been observed on *Construct B: Parental Empathy* (Table 16). The results also illustrated large effect sizes on *Construct A: Expectations of Children* and *Construct E: Respect for Child Power and Independence*. For *Construct C: Physical Punishment* and *Construct D: Parent-Child Roles*, effect sizes were no less than 0.60. As Cohen (1969) pointed out, an effect size of 0.5 is considered to have “medium” practical impact and is “large enough to be visible to the naked eye” (p. 23). Hence, all programs in Table 16 have made practical impacts to improve parenting constructs on the AAPI-2 scale.

**Outcomes of Family-Focused Support**

Proposition 10 stipulates that First 5 commissions address “Parental education and support services in all areas required for, and relevant to, informed and healthy parenting” (p. 7). The family-focused support is especially important to help children in adverse circumstances. Figure 13 shows the rate of *substantiated child abuse* in Kern County and across the state. The local rate was consistently higher over the past three years.

**FIGURE 13: SUBSTANTIATED CHILD ABUSE RATES PER 1,000 CHILDREN\***



\*Data source: 2013 & 2014 KCNC Report Cards.

Nonetheless, the state and county gap was not as large for teenage children. In 2013, the *substantiated abuse rate* per thousand 16-17 year olds was 5.2 in Kern County and 4.9 in California. The gap of 0.3 was much smaller than the overall difference between 15.2 and 8.9 in Figure 14.

In contrast, Figure 14 showed the 2013 rates of substantiated abuse per 1,000 children ages 0-5. Both state and county indices revealed the highest rates for children under 1. Furthermore, the Kern County figure of 45.1 was much larger than the state result of 21.8. To address the demand on local child protection, First 5 Kern funded three programs, *Differential Response (DR)*, *Domestic Violence Reduction Program (DVRP)*, and *Guardianship Caregiver Project (GCP)*, to case-manage a total of 3,442 families this year.

**FIGURE 14: DISTRIBUTION OF CHILD ABUSE CASES BY AGE GROUPING IN 2013**



**(1) DR Service to Enhance Family Functioning**

DR was funded to support protective services for children ages 0-5 and their siblings under abusive environments. Case managers met weekly with DR supervisors to discuss family assessments, care plans, service delivery strategies, as well as positive and negative factors behind case development. Supervisor approval is required for case closure to ensure mitigation of risk factors.

DR adopted the North Carolina Family Assessment Scale for General Services (NCFAS-G) to evaluate improvement of family functioning on eight dimensions, *Environment, Parental Capabilities, Family Interactions, Family Safety, Child Wellbeing, Social/Community Life, Self-Sufficiency, and Family Health*. The program effectiveness was tracked by pretest and posttest results. To avoid data attrition, baseline measures have been followed since program entry to monitor the outcome improvement at program exit this year. After data cleaning, the longitudinal records contained over 500 observations of NCFAS-G outcomes.

**TABLE 17: IMPACT OF DR SERVICE ON THE NCFAS-G SCALES**

Scale Domain	Results
Environment	t(517)=15.54, p<.0001; Effect Size=1.37
Parental Capabilities	t(515)=13.95, p<.0001; Effect Size=1.23
Family Interactions	t(516)=13.11, p<.0001; Effect Size=1.15
Family Safety	t(514)=12.25, p<.0001; Effect Size=1.08
Child Wellbeing	t(509)=13.88, p<.0001; Effect Size=1.23
Social/Community Life	t(516)=14.91, p<.0001; Effect Size=1.31
Self-Sufficiency	t(511)=16.24, p<.0001; Effect Size=1.44
Family Health	t(512)=11.56, p<.0001; Effect Size=1.02

Due to the large sample size, statistical testing has been conducted to examine significance of the DR impact. Table 17 showed significant enhancement of family functioning across all eight domains of NCFAS-G assessment. All effect size values were

larger than 0.8 (Table 17). According to Cohen’s (1969) criterion, these indices reconfirmed a strong practical impact of DR case management services.

Under the DR leadership, “Many communities have brought together health and social service agencies to offer locally based family-centered services.”<sup>22</sup> The household support involved nine county agencies and 14 community-based organizations to improve child protection in at-risk families (Table 18). The capacity building also connected 21 family resource centers. Eighteen of them were accredited by Kern County Network for Children.<sup>23</sup>

**TABLE 18: DR PARTNERS FOR STRENGTHENING FAMILY FUNCTIONING**

<b>County Agencies</b>	<b>Community-Based Organizations</b>
Child Support Services	Alliance Against Family Violence and Sexual Assault
County Library	American Red Cross of Kern County
Economic Development	Aspira Foster and Family Services
Housing Authority	Clinica Sierra Vista
Human Services	Community Action Partnership of Kern
Mental Health	Court Appointed Special Advocates of Kern County
Planning and Community Development	Covenant Community Service Inc.
Parks and Recreation	Domestic Violence Advisory Council – DVAC
Public Health	Garden Pathways
Superintendent of Schools	Greater Bakersfield Legal Assistance
	H.E.A.R.T.S. Connection
	Henrietta Weill Memorial Child Guidance Clinic
	Kern Stop Meth Now
	Reach 4 Greatness and Stay Focused Ministries

In summary, effectiveness of DR services has been comprehensively reflected in the enhancement of family functioning on eight dimensions of NCFAS-G assessment. The service was extensive, involving more than 500 families and 20 partners. With First 5 Kern funding, DR leveraged over 70% of its annual budget from seven federal, state, and local agencies to sustain Child Protective Services (CPS). The community engagement allowed DR to address issues of child abuse and neglect pertinent to specific circumstances, such as different types of alleged maltreatment, credibility of previous reports, and family willingness to participate in services.<sup>24</sup>

**(2) DVRP Support to Reduce Domestic Violence**

Based on the state law, witnessing domestic violence by children is considered as child abuse (California Penal Code §1170.76).<sup>25</sup> More importantly, research indicated that “the development of a child’s brain can literally be altered by domestic violence

<sup>22</sup> ¶. 1 of [http://www.kcnc.org/Local\\_Collaboratives](http://www.kcnc.org/Local_Collaboratives).

<sup>23</sup> [http://www.kcnc.org/Local\\_Collaboratives](http://www.kcnc.org/Local_Collaboratives).

<sup>24</sup> <http://kern.org/kcnc/regionaldr/>.

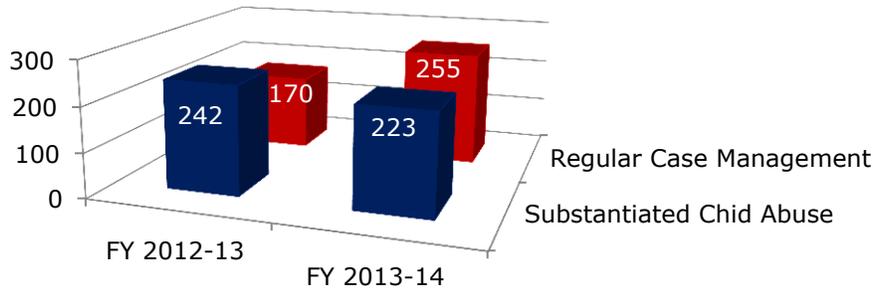
<sup>25</sup> <http://law.onecle.com/california/penal/1170.76.html>.

experiences, resulting in negative impacts on the child’s physical, cognitive, emotional, and social growth” (¶. 2).<sup>26</sup>

To control the victimization, First 5 Kern funded Domestic Violence Reduction Project (DVRP) to provide a full range of legal assistance for child protection. Upon a case identification, DVRP assigned a supervising attorney and two paralegals to examine the issue of child exposure to domestic violence. Feasible plans were developed to protect children and other victims with *substantiated abuse* experiences. Weekly meetings were held to monitor case developments.

DVRP services were delivered by Greater Bakersfield Legal Assistance (GBLA), a non-profit organization that provided legal services in Kern County since 1968. Because court cases were generally expensive, GBLA offered free legal support for low-income residents.<sup>27</sup> For children ages 0-5, GBLA expanded DVRP case management services from a total of 412 families last year to 478 families this year. The service delivery has reduced severity of the local cases. In FY 2012-13, most cases were characterized as *substantiated abuses*. In FY 2013-14, the mode was switched to a category of “Regular Case Management” (Figure 15). Therefore, the percent of *substantiated abuse cases* decreased from 59% last year to 47% this year.

**FIGURE 15: DVRP CASE COUNT BETWEEN ADJACENT YEARS**



**(3) GCP Services for Child Protection**

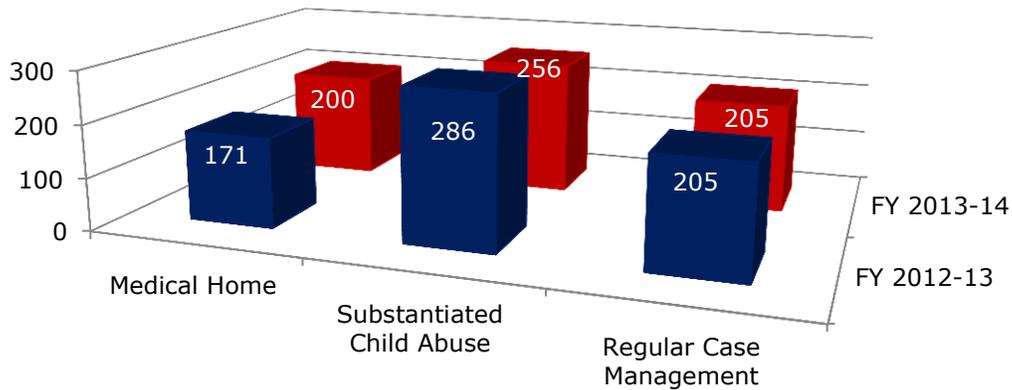
Guardianship Caregiver Project (GCP) is another program of GBLA to help eligible grandparents and other caregivers seek a legal guardianship over children ages 0 – 5. GCP assigned a case manager to link children to medical homes. Meanwhile, legal services were provided by a supervising attorney and two paralegals to address guardianship requirements and prepare court petitions. Cases remained open until all legal issues were settled and children received continuity of care in a protective environment.

In FY 2013-14, GCP established 200 medical homes, an increase from 171 medical homes last year. In *Child Health*, CHI provided 38 medical homes and MVIP offered 102 medical homes. The portion of medical homes from GCP accounted for 59% of all medical homes from First 5 Kern-funded programs. While the number of cases managed by GCP has been 205 between the adjacent years, the number of *substantiated child abuse* cases dropped from 286 last year to 256 this year (Figure 16).

<sup>26</sup> <http://gbla.org/services/domestic-violence/domestic-violence-reduction-project>.

<sup>27</sup> <http://gbla.org/>.

**FIGURE 16: GCP SERVICE COUNTS BETWEEN ADJACENT YEARS**



In summary, DVSP and GCP service counts indicated reduction of *substantiated child abuse* cases since last year. The improvement was also confirmed by DR outcomes. In FY 2012-13, DR served 3,097 case of *substantiated child abuse*. This year the number declined to 2,588. While all three programs offered child protection, DVSP and GCP also provided regular case management services to strengthen family stability. Referrals from DR’s Child Protective Services often led to removal of children from neglect or abuse environments. DVRP and GCP further extended legal support to retain violence-free settings for children and/or place them with familiar guardians. The complementary roles allowed DR to handle more cases of *substantiated child abuse*. Meanwhile, DVRP and GCP services went beyond family interventions to ensure legal protection of children in Kern County.

**Program Referrals for Service Access**

Outreach effort is needed in Kern County to expand service access across different communities. DR used seven Referral Contact Supervisors (RCS) to disseminate information about its service coverage.<sup>28</sup> GBLA offered workshops in outlying areas to increase public awareness of DVRP and GCP supports. First 5 Kern also funded 2-1-1 Kern County to provide comprehensive referral support through phone calls to Helpline 2-1-1 and/or online queries. The center-based services can be accessed by local residents 24 hours a day, 7 days a week, and in 150 different languages.

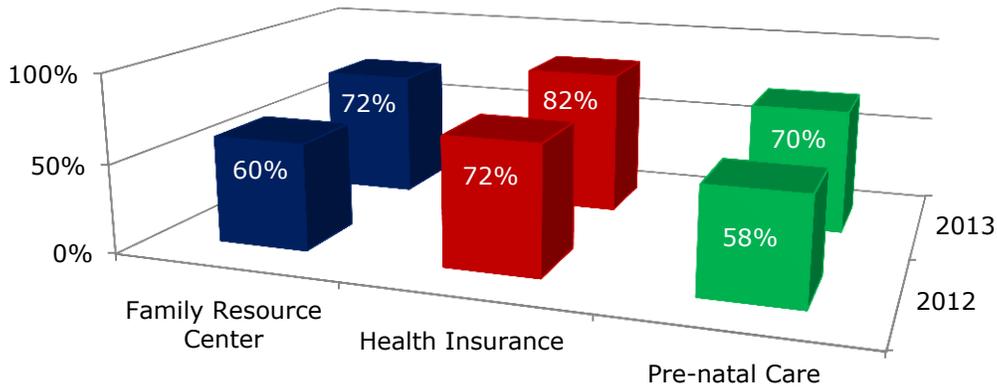
In 2013, 53,272 Kern county residents solicited assistance from 2-1-1 Kern County. An extensive database was employed to provide over 75,000 referrals for local residents. The information has been updated regularly to ensure its accuracy about 652 agencies and 1,566 programs. When five percent of the callers were surveyed in 2013, 85.5% of them acknowledged timely support from 2-1-1 Kern County and 63% of the callers received successful referrals.

Sponsored by funding from First 5 Kern, 2-1-1 Kern County made 1,381 referral services for children ages 0-5. Four hundred eighty-seven referrals were directed to health insurance enrollment, 141 referrals were made for expectant mothers, and 753 referrals were connected to family resource centers. As a result, 82% of callers enrolled

<sup>28</sup> <http://kern.org/kcnc/regionaldr/>.

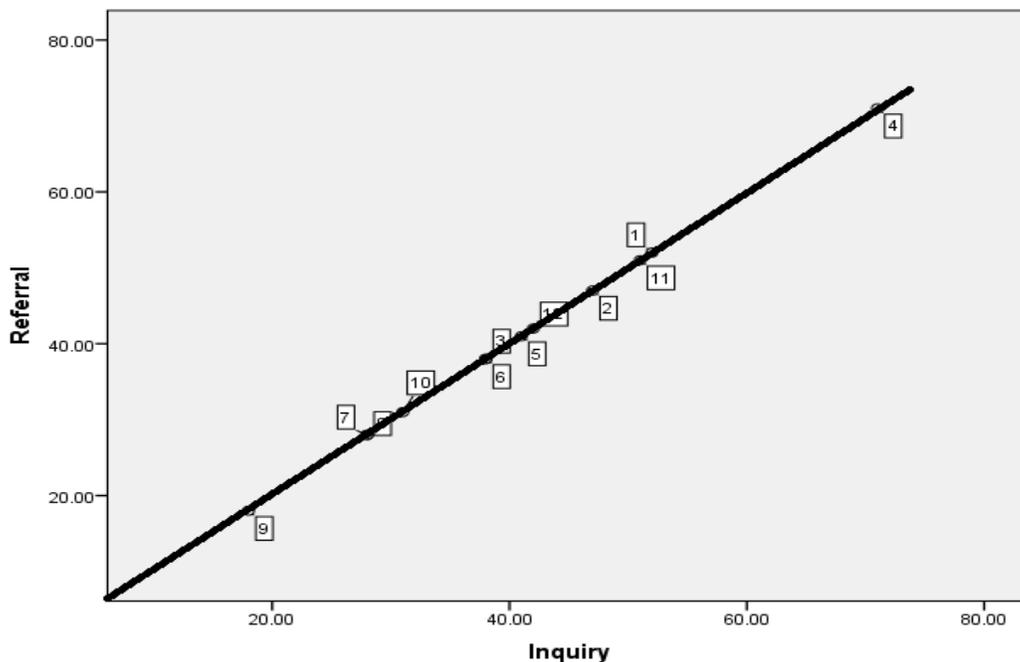
their children in a health insurance program, 70% of expectant mothers accessed health services for prenatal care, and 72% of expectant mothers enrolled in family resource centers. In comparison to 2012, these referral rates increased consistently in 2013 (see Figure 17).

**FIGURE 17: PERCENT OF SUCCESSFUL REFERRALS FROM 2-1-1 KERN COUNTY**



As the nation pulls out of the recent recession, poverty remains as a profound factor in Kern County to hinder family functioning. Golich (2013) noted that “36% of Kern County children were being raised by a single parent” (p. i). The poverty rate for children ages 0-5 is 71.7% in single-mother households. In comparison, the poverty rate for married couples is 22.3% (KCNC, 2014). Given the shortage of family resources, three programs offered transportation support for 767 families in remote communities, up from 559 families last year. Another program provided 2,041 transportation services for families in a poverty-stricken area of Bakersfield to address basic family needs.

**FIGURE 18: SATISFACTORY FRC REFERRALS ACROSS 12 MONTHS OF FY 2013-14**



The community support was also reflected by service referrals for Family Resource Centers (FRC) across 12 months of FY 2013-14. Figure 18 showed a perfect correlation ( $r=1.00$ ) between inquiry and referral counts for a total of 485 callers in need of FRC access. The result reconfirmed the assistance of 2-1-1 Kern County in handling queries from local clients.

Led by the center-based service from 2-1-1 Kern County, referral support has been broadened at the program level to link children and families with service providers. As a result, a total of 14 programs made 10,650 referrals in *Focus Area II: Family Functioning* this year, an increase from 10,305 referrals last year (Table 19). Meanwhile, 2-1-1 Kern County assisted 13,626 callers, up from 10,976 callers last year.

**TABLE 19: PEER REFERRALS FROM PROGRAMS IN FAMILY FUNCTIONING<sup>29</sup>**

Program	Referral Count
Arvin Family Resource Center (AFRC)	534
Buttonwillow Community Resource Center (BCRC)	607
Differential Response Services (DR)	1,063
East Kern Family Resource Center (EKFRC)	776
Greenfield School Readiness (GSR)	1,247
Indian Wells Valley Family Resource Center (IWFVFC)	425
Kern River Valley Family Resource Center (KRVFRC)	325
Lamont Vineland School Readiness Program (LVSRRP)	701
McFarland Family Resource Center (MFRC)	1,343
Mountain Communities Family Resource Center (MCFRC)	174
Shafter Healthy Start (SHS)	388
Southeast Neighborhood Partnership Family Resource Center (SENP)	2,557
West Side Community Resource Center (WSCRC)	442
Women's Shelter Network (WSN)	68

In combination, service access has been supported by a referral network. While 2-1-1 Kern County provided center-based services for the general public, peer referrals at the program level were deeply grounded on accurate understanding of client needs. The collaboration has made the referral system more reliable when local families can allocate the support from multiple sources. According to Kumar, Izui, Masataka, and Nishiwaki (2008), "Multilevel redundancy allocation is an especially powerful approach for improving the system reliability" (p. 650).

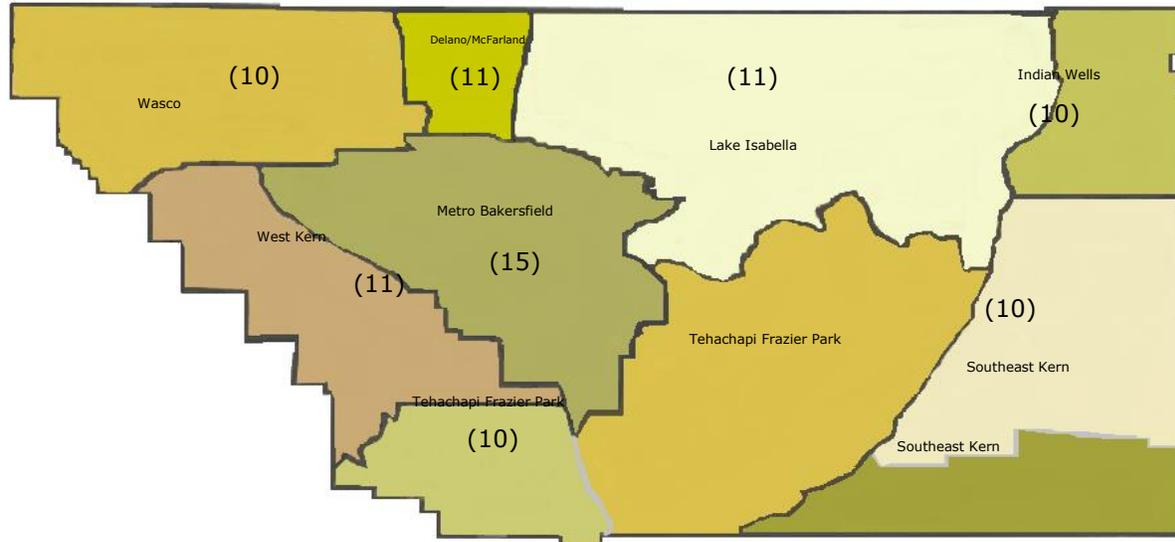
**Descriptive Evidences for Population Accountability**

According to Friedman (2009), "RBA [Results-Based Accountability] makes a fundamental distinction between Population Accountability and Performance Accountability" (p. 2). In comparison, performance accountability is demonstrated by program effectiveness and population accountability relies on partnership building (Friedman, 2011). The county population was divided into nine subareas by Kern

<sup>29</sup> <http://kern.org/kcnc/wp-content/uploads/sites/43/2013/09/DRServiceAreasMapUpdated03.11.pdf>.

Council of Governments (KCOG) based on local housing development.<sup>30</sup> Figure 19 shows distribution of parent education programs from Focus Areas II and III to support family functioning in Kern County.

**FIGURE 19: DISTRIBUTION OF PARENT EDUCATION PROGRAMS IN KERN COUNTY\***



\*Numbers are aggregated across countywide and local programs inside the parentheses

The balanced regional coverage reflects collaborative efforts of multiple programs across focus areas. Similar to a summary of parent education services in Tables 14-16, below is an aggregated count of service deliveries from programs of *Family Functioning* to support child development:

1. Nine programs provided center-based child development activities for 386 children;
2. Five programs offered home-based child development services for 129 children;
3. Nine programs sponsored Summer Bridge to enhance school readiness for 247 children;
4. Five programs offered developmental assessments for 480 children;
5. Women's Shelter Network (WSN) provided social emotional assessment for 58 children.

In summary, the state focus area of *Family Functioning* is aligned with a local focus area of *Parent Education and Support Services* (First 5 Kern, 2014b). The component of *Parent Education* has been addressed by different services, including professional workshops, group-based instruction, home-based teaching, and court-mandated classes. In addition, *Support Services* were offered to families for child protection and program referrals. The service delivery not only assisted leverage of over \$2 million from 30 partners, but also enhanced collaboration on parent education across focus areas. The evaluation outcomes consistently indicated First 5 Kern's progress to ensure that "All parents and caregivers will be knowledgeable about early childhood development, effective parenting and community services" (First 5 Kern, 2014b, p. 5).

<sup>30</sup> [http://www.co.kern.ca.us/planning/pdfs/he/HE2008\\_Ch1.pdf](http://www.co.kern.ca.us/planning/pdfs/he/HE2008_Ch1.pdf).

## Enhancement of Early Childhood Education

It was projected in Proposition 10 that “There is a further compelling need in California to ensure that early childhood development programs and services are universally and continuously available for children until the beginning of kindergarten” (p. 1). To address this need in Kern County, First 5 Kern (2014b) has identified a funding priority in its strategic plan to ensure that “Quality early childcare and education services will be accessible” (p. 5). Accordingly, 10 programs received funding in *Focus Area III: Child Development* to prepare children toward kindergarten entry (Table 20).

**TABLE 20: SERVICE CAPACITY OF PROGRAMS IN FOCUS AREA 3**

Service	Capacity	Program*
Early education program for children	Childcare support for all children, including addressing early literacy and special needs for homeless children and children from at-risk families.	BCDC DDLCCC SSCDC
Preschool for 3 & 4 years old	Preschool services and Child Signature Programs 1 & 3 for 3 & 4 years old.	SFP WIW
Kindergarten transition	Education classes, home visits, summer bridge programs to support kindergarten transition for children and families.	BCSD DSR LHFRC NOR R2S

\*Program acronyms are listed in Appendix A.

To enhance program accessibility, First 5 Kern (2014b) collaborated with service providers to “Encourage the delivery of services at preschools, childcare facilities, kindergarten classrooms, homes and other appropriate venues” (p. 9). Consistent with the service coverage, seven programs in Table 20 supported preschoolers for kindergarten transition. The remaining three programs offered services for childcare and early literacy development. Altogether these programs collaboratively delivered early education services for diversified child populations, including those living in homeless shelters and at-risk families.

In handling service referrals, 2-1-1 Kern County staff answered phone calls for 10,393 unduplicated children ages 0-5, a 14% increase over 9,104 children last year. While figures typically convey quantifiable information, Albert Einstein cautioned that “not everything that counts can be counted”.<sup>31</sup> To track improvement of child development constructs, pretest and posttest data have been gathered from several instruments, including Ages and Stages Questionnaire-3 (ASQ-3), Ages and Stages Questionnaire-Social Emotional (ASQ-SE), Child Assessment-Summer Bridge (CASB), Desired Results Developmental Profile–Infant/Toddler (DRDP-IT), and Desired Results Developmental Profile–Preschool (DRDP-PS). Therefore, results in this section not only reflect the scope of work across service providers, but also indicate effectiveness of First 5 Kern funding in early childhood development.

### Services Deliveries in Child Development

Proposition 10 declared its intent to “facilitate the creation and implementation of

<sup>31</sup> [www.quotationspage.com/quote/26950.html](http://www.quotationspage.com/quote/26950.html).

an integrated, comprehensive, and collaborative system of information and services to enhance optimal early childhood development” (p. 4). Because child development depended on family support, the collaborative system included programs across focus areas. In *Focus Area II: Family Functioning*, social emotional assessment was conducted by Women’s Shelter Network (WSN). WSN increased its service coverage from 24 cases last year to 58 cases this year. Other services in Table 21 were supported by 10 programs in Focus Area II and 14 programs in Focus Area III to facilitate early childhood development. Parentheses were included in Table 21 to indicate the number of children for each service.

**TABLE 21: SERVICES IN CHILD DEVELOPMENT ACROSS FOCUS AREAS II AND III\***

Service	Focus Area II	Focus Area III
Summer Bridge	AFRC (25), BCRC (25), EKFC (18), GSR (33), IWFRC (19), LVSRP (50), MFRC (11), SHS (25), WSCRC (41)	BCSD (144), DSR (28), LHFRC (9), R2S (742)
Center-Based Child Development	AFRC (25), BCRC (19), EKFC (29), GSR (125), LVSRP (44), MFRC (46), MCFRC (15), SHS (51), WSCRC (32)	BCSD (147), BCDC (37), DSR (32), DDLCCC (40), LHFRC (22), NOR (287), SSCDC (45), SFP (28), WIW (37)
Home-Based Child Development	AFRC (15), BCRC (25), EKFC (60), SHS (15), WSCRC (14)	BCSD (31), DSR (20), LHFRC (21)

\*Program acronyms are listed in Appendix A.

Similar to the result reporting in *Family Functioning*, program classifications in Table 21 were based on the primary funding emphases for each service provider. For instance, nine programs in Focus Area II offered Summer Bridge education for 247 children. In contrast, 923 children were accommodated by four Summer Bridge programs in Focus Area III. Likewise, Focus Area II included nine centered-based programs to support early development services for 386 children. The same number of programs in Focus Area III benefited 675 children in early childhood development (Table 21).

**TABLE 22: INCREASE OF NUTRITION SERVICES AT CHILDCARE CENTERS**

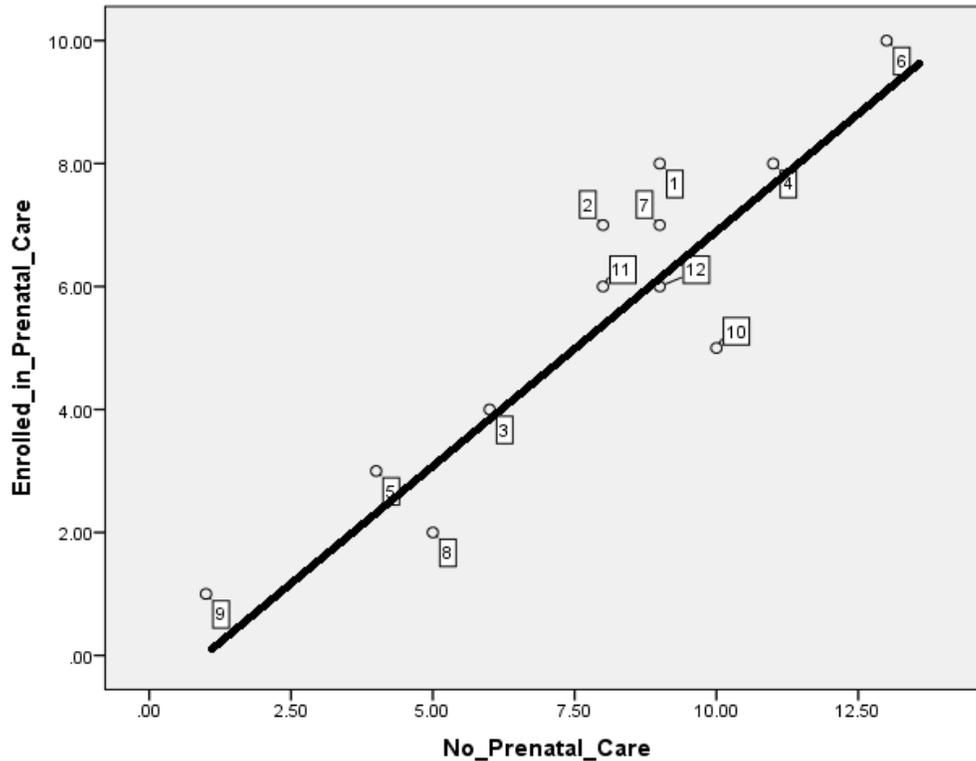
Program	FY 2012-13	FY 2013-14
DDLCCC	6,046	11,942
SSCDC	9,030	12,310

At the program level, First 5 Kern funded services to address special needs of homeless children and/or children from at-risk families. More specifically, Discovery Depot Licensed Child Care Center (DDLCCC) offered quality daycare for children whose parents resided at Bakersfield Homeless Center. This support allowed parents to re-establish stable homes through education and community support. Modeling after DDLCCC, Small Steps Child Development Center (SSCDC) served infants and preschoolers whose parents were case-managed for domestic violence. The daycare services from DDLCCC and SSCDC included breakfast, lunch, and two snacks each day. The number of nutritional meals increased from a total of 15,076 last year to 24,252 this year (Table 22), a 38% expansion of the service capacity under the same budget allocation. Blanton Child Development Center (BCDC) also served a special group of children whose parents were teenage dropouts attending alternative schools. The support allowed teen parents to attend Court, Community and Charter Schools.

Therefore, First 5 Kern funding has been strategically employed to “Establish community-based programs to provide parental education and family support services relevant to effective childhood development” (First 5 Kern, 2014b, p. 2).

To strengthen support for prenatal care, 2-1-1 Kern County offered center-based referral services for 602 expectant mothers. The number of callers without prenatal care was tracked monthly to correlate with the number of expectant mothers enrolled in prenatal care. The correlation coefficient reached 0.92, illustrating a high rate of referral success to support the early service access (Figure 20).

**FIGURE 20: PRENATAL CARE REFERRALS ACROSS 12 MONTHS OF FY 2013-14**



Given the difficulty to find quality childcare (Quart, 2013), it was promised by Proposition 10 to support “the informed selection of child care” (p. 5). In FY 2013-14, 2-1-1 Kern County responded to 6,629 unduplicated callers with children ages 0-5, a 17% increase from 5,667 callers last year. Meanwhile, 231 mutual referrals occurred at the program level within *Focus Area 3: Child Development*. The multilevel referral system allowed local families to triangulate the referral information from Helpline 2-1-1 and local service providers, and thus, make an informed decision to support early childhood development.

In conclusion, First 5 Kern has created “a seamless system of integrated and comprehensive programs and services” (Proposition 10, p. 2). Nine programs were focused on Summer-Bridge (R2S & IVWFRC) or center-based child development (BCDC, DDLCCC, MFRC, NOR, SFP, SSCDC, & WWP). Other programs were engaged in multiple services for children in different settings. Local programs like SFP adopted a systematic approach to offer preschool education, referral, and transportation services. Based on the result aggregation, evidence of service delivery has been substantiated to “ensure

that children enter kindergarten physically, mentally, emotionally and cognitively ready to learn” (First 5 Kern, 2014b, p. 2).

**Assessment Outcomes from Early Childhood Education**

Following the model of Results-Based Accountability (RBA), service outcomes are analyzed in this section to examine the quality of early childhood education. Table 23 lists instruments for data collection to support value-added assessments across different stages of child development.

**TABLE 23: INSTRUMENTS FOR DATA COLLECTIONS IN FOCUS AREAS II AND III**

<b>Instrument</b>	<b>Feature</b>	<b>Population</b>
Ages and Stages Questionnaire-3 (ASQ-3)	Age-appropriate measures to assess child development in <i>Communication, Gross Motor, Fine Motor, Personal-Social, and Problem Solving</i> domains.	Ages 0-5
Child Assessment-Summer Bridge (CASB)	Value-added assessment child <i>Communication, Cognitive, Self-Help, Social Emotional and Motor Skills</i> .	Ages 4-5
Desired Results Developmental Profile – Infant/Toddler (DRDP-IT)	Indicators of <i>Self and Social Development, Language and Literacy Development, Cognitive Development, Motor and Perceptual Development, and Health</i> .	Infant or Toddler
Desired Results Developmental Profile – Preschool (DRDP-PS)	Indicators of <i>Self and Social Development, Language and Literacy Development, English Language/Cognitive/Math/Physical Development, and Health</i> .	Preschooler
School Readiness Articulation Survey (SRAS)	Survey of indirect responses from adults on quality of early childhood education for kindergarten entry.	Education Stakeholders

**TABLE 24: SCOPE OF ASQ-3 DATA COLLECTION IN FOCUS AREAS II AND III**

<b>Focus Area</b>	<b>Program*</b>	<b>Months</b>	<b>Sample Size</b>
II	AFRC	2-60	64
	BCRC	24-60	65
	EKFRC	2-60	104
	GSR	2-60	127
	IWVFRC	2-60	123
	KRVFRC	2-60	111
	LVS RP	36-60	18
	MCFRC	2-60	71
	MFRC	33-60	77
	SENP	2-60	164
	SHS	36-60	63
	WSCRC	2-60	53
	WSN	2-60	58
III	BCSD	2-60	397
	DSR	36-60	21
	LHFRC	36-60	46
	NOR	2-60	233

\*Program acronyms are listed in Appendix A.

**1. Findings from Ages and Stages Questionnaire (ASQ-3 & ASQ-SE)**

Ages and Stages Questionnaire-3 (ASQ-3) was employed to track whether child growth has surpassed age-specific thresholds during Months 2-60. The instrument was adopted by 20 programs to monitor child development. Three of the programs (BIH, MVIP, & NSF) were reported in the first section of this chapter (see Table 8). The scope of ASQ-3 data collection is listed in Table 24 for the remaining 17 programs in Focus Areas II and III.

In the past, ASQ-3 data were analyzed at Months 36 and 48 to assess differences of child performance in 12 months. Table 24 indicated that all 17 programs gathered assessment data at Months 36 and 48. Thus, the month choice was based on the scope of data collection for adequate statistical computing.

In this year, tracking effort has been strengthened across all age groups to examine the gaps between child performance and assessment threshold at the program level. As a result, 15 programs showed child performance significantly above the corresponding thresholds in *Communication (COM)*, *Gross Motor (GM)*, *Fine Motor (FM)*, *Personal-Social (PerS)*, and *Problem Solving (ProS)* domains ( $p < .0001$ ). The test statistic ( $t$ ) is listed in Table 25 to support probabilistic inference. Effect sizes for all programs in Table 25 are above 2.01, suggesting strong impacts of program support for early childhood development.

**TABLE 25: TEST STATISTIC (t) FOR SIGNIFICANT RESULTS IN FIFTEEN PROGRAMS\***

Program	COM	GM	FM	PerS	ProS
AFRC	12.35	15.80	20.54	13.30	23.31
BCRC	15.63	25.34	20.86	13.26	21.02
EKFRC	17.85	19.66	13.79	16.47	17.08
GSR	22.60	19.29	25.71	23.09	25.17
IWVFRC	23.32	31.05	21.41	29.75	26.32
KRVFRC	19.51	16.22	18.73	21.96	21.49
MCFRC	11.74	17.73	15.05	15.42	19.52
MFRC	9.69	20.37	13.26	8.81	16.61
SENP	38.12	26.53	29.04	33.68	39.16
SHS	13.97	12.95	8.33	7.47	13.38
WSCRC	19.03	18.99	15.12	19.32	24.76
WSN	12.46	8.55	8.50	9.50	9.88
BCSD	43.08	54.10	44.35	47.96	51.79
LHFRC	9.75	16.64	17.61	10.74	16.71
NOR	27.63	34.03	22.56	26.19	33.29

\*Program acronyms are listed in Appendix A.

Table 24 also indicated small samples ( $N < 30$ ) from the two other programs, Lamont Vineland School Readiness Program (LVSRP) and Delano School Readiness (DSR). The ASQ-3 results from LVSRP and DSR are presented in Table 26.

Despite the relatively small sample sizes, LVSRP demonstrated child performance significantly above the corresponding thresholds at  $\alpha = .01$ . At  $\alpha = .0001$ , DSR services supported outperformance of children above the corresponding thresholds in *Gross Motor*, *Fine Motor*, *Personal-Social*, and *Problem Solving* domains (Table 26). In

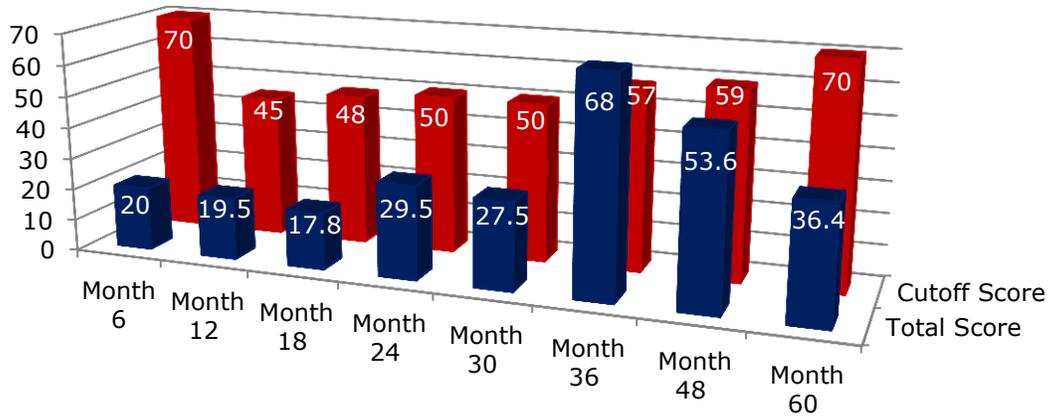
*Communication*, the effect size has reached 0.56, indicating a moderate program impact on child performance.

**TABLE 26: ASQ-3 RESULTS FROM DSR AND LVSRP**

ASQ-3 Domain	DSR	LVSRP
Communication	t(20)= 1.26, p=.2232	t(17)=3.57, p=.0024
Gross Motor	t(20)=10.44, p<.0001	t(17)=3.67, p=.0019
Fine Motor	t(20)= 7.74, p<.0001	t(17)=4.24, p=.0005
Personal-Social	t(20)= 3.00, p<.0001	t(17)=3.10, p=.0065
Problem Solving	t(20)= 7.51, p<.0001	t(17)=4.53, p=.0003

Women's Shelter Network (WSN) also adopted ASQ-Social Emotional (ASQ-SE) to screen children for emotional disorders. The ASQ-SE scores were below the at-risk threshold in most months (Figure 21). The only discordant result occurred with five children at 36<sup>th</sup> month. Although the sample was too small to test statistical difference in each month, Figure 21 showed that 54 out of 59 subjects in WSN were not at risk for emotional issues.

**FIGURE 21: ASQ-SE SCORES OF SOCIAL EMOTIONAL ISSUE**



In summary, child developments in *Communication*, *Gross Motor*, *Fine Motor*, *Personal-Social*, and *Problem Solving* categories are important outcomes from ASQ-3 assessments. In Focus Areas II and III, a total of 17 programs received First 5 Kern funding to support child development. The results confirmed the positive program impact on 1,795 children in Kern County.

**2. Child Assessment-Summer Bridge Results**

Summer Bridge (SB) is a general term to describe school-readiness programs for preschool-aged children. Thirteen programs employed Child Assessment-Summer Bridge (CASB) to assess the *Communication*, *Cognitive*, *Self-Help*, *Social Emotional*, and *Motor Skills* of children ages 4-5. Except for East Kern Family Resource Center (EKFRC), the remaining 12 programs showed significant improvement of cognitive skills among 345 children between pretest and posttest (Table 27). Effect size indices also suggested practical impact of these SB programs on improvement of *Cognitive Skills*.

**TABLE 27: TEST OF AVERAGE SCORE DIFFERENCE ON CASB COGNITIVE SKILLS**

Program	N	Pretest	Posttest	t	P	Effect Size
AFRC	16	19.08	50.22	9.11	.0001	4.56
BCRC	17	58.00	66.30	4.11	.0008	1.99
BCSD	107	47.41	56.83	5.80	.0001	1.12
DSR	20	65.35	78.91	2.34	.0306	1.05
GSR	31	46.15	76.39	8.15	.0001	2.93
IWVFRC	17	77.55	84.06	2.71	.0156	1.31
LVS RP	49	41.30	45.26	2.59	.0126	0.74
LHFRC	5	44.78	53.89	4.02	.0159	3.60
MFRC	8	39.70	42.56	2.79	.0269	1.97
MCFRC	11	50.76	89.36	8.10	.0001	4.88
SHS	25	53.40	92.52	13.63	.0001	5.45
WSCRC	39	35.72	67.85	16.30	.0001	5.22

SB programs were designed to prepare for kindergarten entry. For that reason, less emphasis might have been placed in non-cognitive domains. The CASB instrument has designated fewer items for assessing *Communication*, *Fine Motor*, *Self-help*, and *Social Emotional* skills. Thus, results on these dimensions were less confirmatory. Table 28 included the programs with significant improvements on non-cognitive dimensions.

**TABLE 28: DEVELOPMENT OF NON-COGNITIVE SKILLS IN SB PROGRAMS**

Domains	Program*
Communication	AFRC (16), BCRC (17), BCSD (107), DSR (20), GSR (31), IWVFRC (17), LVS RP (49), MCFRC (11), SHS (25), WSCRC (39)
Fine Motor	AFRC (16), BCRC (17), BCSD (107), GSR (31), IWVFRC (17), LVS RP (49), MCFRC (11), SHS (25), WSCRC (39)
Self-Help	AFRC (16), BCRC (17), BCSD (107), IWVFRC (17), SHS (25), WSCRC (39)
Social Emotional	BCSD (107), GSR (31), IWVFRC (17), LVS RP (49), SHS (25), WSCRC (39)

\*Program acronyms are listed in Appendix A. Parentheses include the number of children who were tracked in both pretest and posttest.

It should be noted that both BCSD and WSCRC showed highly significant improvement of kindergarten preparation in all CASB categories. These well-rounded programs have benefited 146 children in Bakersfield and Taft. In the non-cognitive domains, four results were aggregated from Table 28:

1. Ten SB programs improved *Communication* skills for 332 children;
2. Nine SB programs enhanced *Fine Motor* skills for 312 children;
3. Six programs strengthened *Self-Help* skills for 221 children;
4. Six programs improved *Social Emotional* skills for 268 children.

In combination with the results from Table 27, significant improvement of kindergarten readiness has been demonstrated by the majority of SB participants in both *cognitive* and *non-cognitive* domains.

### 3. Ready to Start Findings

Ready to Start (R2S) is another SB program that lasts five weeks each summer. In FY 2013-14, R2S served 742 children in four school districts. Pretest and posttest data were gathered from 730 children using a R2S Standard Test that designated a maximum of 22 points in the areas of *Reading Readiness* (0-8 points), *Math Readiness* (0-10 points), and *Supportive Skills* (0-4 points). Based on the value-added assessment, the mean score across three areas showed an increase from 13.62 in pretest to 20.15 in posttest. Table 29 delineates average scores for each district.

**TABLE 29: COMPARISON OF AVERAGE SCORES FROM R2S PRETEST AND POSTTEST**

District	n	Math		Reading		Social Skills	
		Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
Greenfield	336	5.97	8.73	5.08	7.23	1.93	3.54
PBVUSD	226	5.85	9.25	5.14	7.65	1.96	3.51
Rosedale	116	6.94	9.61	6.14	7.77	3.15	3.66
Standard	64	6.38	9.48	6.06	7.86	2.17	3.73

Although the program sizes vary from 64 to 336, Table 30 indicates significant improvements in math, reading, and social skills among R2S participants in each district. With effect sizes larger than 0.8, results in Table 30 illustrate a strong impact of the R2S program on early childhood development. In comparison to other SB programs, R2S was more standardized, requiring “All classrooms throughout the program [to] follow the same structured curriculum each day” (Ready to Start, 2012, p. 1). Thus, the results were more homogeneous in Table 30.

**TABLE 30: R2S t TEST AND EFFECT SIZE RESULTS**

District	df	Math		Reading		Social Skills	
		t*	Effect Size	t*	Effect Size	t*	Effect Size
Greenfield	323	23.09	2.57	21.34	2.37	22.24	2.47
PBVUSD	225	22.87	3.04	18.07	2.40	15.76	2.10
Rosedale	115	15.72	2.92	11.88	2.21	6.56	1.22
Standard	63	13.37	3.34	11.62	2.91	7.62	1.91

\*The t values were all highly significant for  $p < .0001$ .

### 4. Desired Results Developmental Profile-Infant/Toddler Indicators

Desired Results Developmental Profile-Infant/Toddler (DRDP-IT) was designed for teachers to observe, document, and reflect on learning and development of all infants and toddlers in *early care and education* programs. The focus on infant and toddler development has addressed a key national interest. According to the United Nations Children's Fund (2011), “A country’s position in the global economy depends on the competencies of its people and those competencies are set early in life — before the child is three years old” (¶. 7).

In FY 2013-14, First 5 Kern funded three programs that employed DRDP-IT to assess the service impact on child development. Table 31 lists sample sizes and average scores across five DRDP-IT domains at the program level.

**TABLE 31: CROSS-SECTIONAL DESCRIPTION OF DRDP-IT DATA IN THREE PROGRAMS**

Program*	Initial Assessment		Follow-up Assessment	
	n	Mean	n	Mean
BCDC	11	12.31	8	17.12
DDLCCC	9	20.76	9	21.46
SSCDC	13	15.75	12	18.71

\*Program acronyms are listed in Appendix A.

Despite the small sample sizes in each program, significant differences have been found across three programs in important domains of *Self and Social Development (SSD)*, *Language and Literacy Development (LLD)*, *Cognitive Development (COG)*, and *Health (HLTH)* (Table 32). Because effect sizes are less impacted by the sample size, results in Table 32 support a conclusion of strong practical impact from these programs.

**TABLE 32: RESULTS FROM DRDP-IT MATCHED CASES ACROSS THREE PROGRAMS**

Domain	df	t	p	Effect Size
SSD	26	8.29	.0001	3.19
LLD	26	8.22	.0001	3.16
COG	26	8.53	.0001	3.28
MPD	24	5.37	.0001	2.15
HLTH	8	4.40	.0023	2.93

## 5. Desired Results Developmental Profile-Preschool Summary

The Desired Results Developmental Profile–Preschool (DRDP-PS) assesses program effectiveness according to enhancement of child competency in seven domains: *Self and Social Development (SSD)*, *Language and Literacy Development (LLD)*, *English Language Development (ELD)*, *Cognitive Development (COG)*, *Mathematical Development (MATH)*, *Physical Development (PD)*, and *Health (HLTH)*.

In FY 2013-14, six programs gathered DRDP-PS data in a pretest and posttest setting. The results for HLP were presented in the *Child Health* section of this chapter. For the remaining programs, Small Steps Child Development Center (SSCDC) showed enhancement of child *Math* performance close to  $\alpha=.05$  significant level [ $t(8)=2.27$ ,  $p=.0531$ ]. Nonetheless, the effect size has reached 1.51, much larger than 0.8. Hence, SSCDC had a strong practical impact on development of math skills. The remaining four programs exhibited significant child development in five or more DRDP-PS domains, including math skills (Table 33). Effect sizes were computed to reconfirm strong practical impacts from these programs.

Excluded from Table 33 was an English Language Development (ELD) domain. Due to lack of ELD population, no ELD results were computed for three programs, South Fork Preschool (SFP), Small Steps Child Development Center (SSCDC), and Wind in the Willows Preschool (WIW). Despite the program delimitation, DDLCCC showed the significant impact in the ELD domain [ $t(5)=6.32$ ,  $p=.0015$ ]. In summary, the DRDP-PS results illustrated effectiveness of the four programs on DRDP-PS indicators (Table 33).

**TABLE 33: RESULTS FROM DRDP-PS MATCHED CASES IN FOUR PROGRAMS**

Domain	Program*	df	t	p	Effect Size
SSD	DSR	31	7.64	.0001	2.70
	DDLCCC	5	6.77	.0011	5.52
	SFP	9	9.94	.0001	6.89
	WIW	44	4.05	.0002	1.21
LLD	DSR	31	6.05	.0001	2.14
	DDLCCC	5	6.03	.0018	4.92
	SFP	9	6.03	.0002	3.81
	WIW	44	5.57	.0001	1.66
COG	DDLCCC	5	5.66	.0024	4.62
	SFP	9	3.12	.0123	1.32
	WIW	44	4.35	.0001	2.30
MATH	DSR	31	4.63	.0001	1.64
	DDLCCC	5	2.98	.0307	2.43
	SFP	9	3.26	.0099	2.06
	WIW	44	7.86	.0001	2.34
PD	DSR	31	5.95	.0001	2.10
	DDLCCC	5	4.44	.0067	3.63
	SFP	9	7.65	.0001	4.84
	WIW	43	3.07	.0037	0.93
HLTH	DSR	31	9.74	.0001	3.44
	DDLCCC	5	10.13	.0002	8.27
	SFP	9	4.15	.0025	2.98
	WIW	43	6.14	.0001	1.85

\*Program acronyms are listed in Appendix A.

## 6. School Readiness Articulation Survey Results

School Readiness Articulation Survey (SRAS) data have been gathered annually from classroom teachers, school administrators, and community members to assess the impact of local services on child development in Kern County. To facilitate value-added assessment, Table 34 shows a comparison of SRAS findings between this year (n=128) and last year (n=188).

**TABLE 34: PERCENT OF "AGREE" OR "STRONGLY AGREE" RESPONSES TO SRAS ITEMS**

SRAS Items	2012-13	2013-14
Children have an early start toward good health	53	54
Early education programs do a good job teaching children	90	90
Early education programs do a good job taking care of children	87	90
Programs do a good job of mixing services for children and families	76	78

In *Early Childcare*, Table 34 indicated an increase of approval ratings on two fronts: (1) More stakeholders believed that "Programs do a good job of mixing services

for children and families” in FY 2013-14; (2) More respondents agreed that “Children have an early start toward good health” this year.

In *Early Education*, 90% of the respondents concurred that “Early education programs do a good job teaching children” in adjacent years. Meanwhile, the focus on child service has been strengthened, and more stakeholders agreed that “Early education programs do a good job taking care of children” in FY 2013-14.

In combination, First 5 Kern (2014b) designated *Early Childcare and Education* as a local focus area to match the state focus area of *Improved Child Development*. The positive feedback from SRAS supported community engagement across service providers. Among 10 programs in Focus Area III, eight programs leveraged \$573,037 from the local community to support services in early childhood development (Table 35).

**TABLE 35: FUND LEVERAGE IN CHILD DEVELOPMENT FOCUS AREA**

<b>Program</b>	<b>Additional Sources of Funding</b>	<b>Amount</b>
BCDC	Kern County Educators Association	\$400
DSR	Donation	\$201
DDLCCC	Donation	\$568
LHFRC	Corporate Donation and SAS	\$3,100
NOR	Corporate Donation, Fundraiser, and Tuition/Fee	\$30,155
R2S	Bakersfield Californian Foundation, Donation (Corporate and Individual), and Kern Community Foundation	\$47,500
SSCDC	Donation (Corporate and Individual), TJX Foundation Inc., and Tuition/Fee	\$23,755
SFP	Fundraiser and Tuition/Fee	\$7,489
WIW	Borax Visitor Center, Desert Lake Community Services, Fees/Tuition, Fundraiser, and United Way	\$33,611
WSN	California Emergency Management Agency, County of Kern, Donation (Corporate and Individual), Department of Defense, Fundraiser, and United Way	\$426,258

In summary, this chapter is divided into three sections to aggregate program results in the focus areas of ***Child Health, Family Functioning, and Child Development***. As California’s third-largest county by land area, “Kern is also one of the State’s youngest counties with children constituting almost one in three of the people living within the County during 2013” (KCNC, 2014, p. 1). Service outcomes for young children are presented in this chapter to address (1) Quality Health Systems Improvement, (2) Quality Family Functioning Systems Improvement, and (3) Quality Early Childhood Education Investments. Each segment includes direct services and referral supports to facilitate program access. Enhancement of program quality has been documented by consistent increases of service deliveries and sustainable improvements of assessment outcomes. Built on these program-specific findings, more information is presented in Chapter 3 to address the fourth component of the state report glossary, i.e., network building for improving service integration.

## Chapter 3: Effectiveness of Service Integration

Early childhood development needs seamless support through strategic planning (Health Resources and Services Administration, 2014). According to Proposition 10, “No county strategic plan shall be deemed adequate or complete until and unless the plan describes how programs, services, and projects relating to early childhood development within the county will be integrated into a consumer-oriented and easily accessible system” (p. 10). Nonetheless, “Too often child health is viewed as separate and distinct from early childhood care and learning” (Bruner, 2009, p. 1). To address this issue, *Systems of Care* were highlighted by the state commission to strengthen service integration across focus areas (First 5 California, 2010).

Meanwhile, “Evaluating interagency collaboration is notoriously challenging because of the complexity of collaborative efforts and the inadequacy of existing methods” (Cross, Dickman, Newman-Gonchar, & Fagen, 2009, p. 310). To disentangle the complexity, the evaluation team developed a *Co-Existing, Collaboration, Coordination, and Creation* (4C) model for evaluating partnership enhancement. In November 2013, the 4C model was included in a presentation, “An Examination of Partnership Building in Early Childhood Education”, at the annual meeting of National Association for the Education of Young Children (NAEYC) in Washington, D.C. (Wang, Ortiz, & Schreiner, 2013).

Guided by the 4C model, interview sessions have been arranged to collect data on service integration among 40 programs. Multilevel analyses were conducted to describe the hierarchical data structure in which networks were grouped by programs and programs were clustered within focus areas. A computer software package, *Netdraw*, was employed to summarize the results of service integration from social network analyses (SNA). Cross et al. (2009) pointed out, “Existing research has demonstrated that two primary features of networks, network structure and the strength of ties, have distinct effects on outcomes of interest” (p. 311). Accordingly, both network ties and partnership structures are examined in this chapter to assess the capacity of service integration led by First 5 Kern.

### Service Capacity in Partnership Building

#### Collaborative Service Structure across Focus Areas

Early childhood support has been identified in four focus areas of the local strategic plan, *Health and Wellness, Parent Education and Support Services, Early Childcare and Education, and Integration of Services* (First 5 Kern, 2014b). Clark (1992) observed that “there has been a growing interest in the development of health concepts, beliefs, and behaviors in young children. This interest stems largely from educators concerned with the provision of optimal healthcare services and health education to children” (p. 1). The common interest across different fields guided three-fold partnership buildings among service providers:

#### (1) Teamwork on Child Health Service

Child health has been recognized as an indispensable foundation for early childhood development (Mattheus, 2013). In this year, Delano School Readiness (DSR)

not only offered education services for preschoolers, but also confirmed up-to-date immunizations for 120 children. R2S completed 513 cases of health screenings and 136 cases of dental screenings during the 2014 summer session. BCSD handled health screenings for 179 children and provided health insurance assistances for 30 children. Although these programs were funded in *Child Development*, their support for *Child Health* illustrated the teamwork on service integration.

Smith et al. (2009) noted that “Many families may qualify for insurance but because of a lack of information, they do not access it” (p. 6). To overcome the information barrier, 2-1-1 Kern County and Guardianship Caregiver Project (GCP) made a total of 414 health insurance referrals. In addition, eight programs in both *Family Functioning* (AFRC, BCRC, GSR, LVSRP, SHS, & WSCRC) and *Child Development* (BCSD & DSR) assisted health insurance enrollments for 636 children. The multilateral collaboration addressed a priority of First 5 Kern (2014b) in promoting “Enrollment, access, retention and utilization of health insurance, and oral, physical and mental health care” (p. 5).

## **(2) Partnership for Parent Education Provision**

To strengthen family support for early childhood development, mutual partnerships have been established across programs to deliver parent education services in each focus area. In *Child Health*, health literacy enhancement was tackled by a parent education program at Bakersfield Adult School. Meanwhile, two programs (MCFRC & WSCRC) in *Family Functioning* offered parenting workshops for 316 parents and four programs (BCDC, BCSD, DDLCCC, & SFP) in *Child Development* provided in-service trainings for 736 parents. The comprehensive services for both children and families fit the spirit of “California Children and Families Act” (aka, Proposition 10).

“The family context is thought to play a particularly important role in the cognitive and socio-emotional development of young children ... This is because the family is at times a child’s entire social and interactive world” (Loutzenhiser, 2001, p. 31-32). With the state funding from Proposition 10, Family Resource Centers were established in local communities, and a total of 12 programs offered group-based parent education this year. Half of the programs were in *Family Functioning* and served 243 parents. The other half were in *Child Development* and served 902 parents. Therefore, programs from different focus areas teamed up to amend service gaps in parent education across Kern County.

## **(3) Assessment of Early Childhood Development**

According to the State Commission, Proposition 10 funding is expected to “Assure that programs provide access to information, resources and support regarding a child’s development” (First 5 California, 2014b, p. 3). In FY 2013-14, First 5 Kern adopted ASQ-3 to evaluate child development in *Communication, Gross Motor, Fine Motor, Personal-Social, and Problem Solving* domains. In *Child Health*, 216 children participated in ASQ-3 assessment across three programs (see Table 8). In addition, four programs in *Child Development* offered ASQ-3 assessments for 697 children and 13 programs in *Family Functioning* conducted ASQ-3 assessments for 1,098 children (see Table 24). These programs in *Child Health* also incorporated developmental assessment for the same number of children. Six additional programs in *Family Functioning* offered

developmental assessments for 563 children. As a result, 779 children had developmental assessments and 2,011 children had ASQ-3 assessments during Months 2-60.

Beyond the program collaboration, MVCCP and 2-1-1 Kern County provided service referrals to strengthen network coordination. Medically vulnerable children were assisted by MVCCP partners to cope with various medical issues. The network building was reconfirmed by six programs in *Child Health* (BIH, CHI, EIP, MVIP, NFP, & RSNC), three programs in *Family Functioning* (2-1-1 Kern County, SHS, & WSCRC), and four programs in *Child Development* (BCDC, BCSD, LHFRC, & SSEC) at a level above *Co-Existence*. Likewise, 2-1-1 Kern County extended its referral network to facilitate service integration, and the partnership was acknowledged by 10 programs in *Child Health*, 15 programs in *Family Functioning*, and nine programs in *Child Development*.<sup>32</sup>

While quantitative measures were aggregated to describe the multilevel connections, Albert Einstein made another note to caution that "not everything that can be counted counts".<sup>33</sup> In FY 2013-14, 34 programs named 2-1-1 Kern County as their partners. However, 2-1-1 Kern County only acknowledged six service providers (CMIP, DVRP, MVCCP, NFP, SAS, & SHS) for mutual collaboration and/or multilateral coordination. In part, this was because 2-1-1 Kern County made referrals to various programs, regardless of their focus area affiliation. Therefore, reciprocal links should be examined to reconfirm mutual partnerships in local capacity building.

### Classification of Partnership Building

Among 40 programs funded by First 5 Kern, each program may collaborate with 39 partners. Thus, the network could contain a total of 1,560 (or 40x39) links. In this report, network strength is treated as an outcome of institutional learning. As Tom Angelo (1999), former director of the national assessment forum, maintained, "Though accountability matters, learning still matters most" (§. 1).

Project Safety Net of Palo Alto (2011) synthesized past literature and suggested a five-level model for partnership categorization. Nevertheless, Wang (2014) examined these categories and found them not mutually exclusive. In that model, "formal communication" was featured as a characteristic for the *Cooperation* category. Because communications could be described as *frequent*, *prioritized*, and/or *trustworthy*, it remained unclear whether a partnership should be included in the categories of *Coordination*, *Coalition*, or *Collaboration* according to the definition from Project Safety Net of Palo Alto (2011). The ambiguity undermined feasibility of using the existing model to assess network capacity.

Opposite to the lack of mutual exclusiveness was an issue of incomprehensiveness. For example, an annual evaluation report of First 5 Fresno (2013) indicated decrease of program coordination and collaboration (highest levels of interaction) from 42% to 38%. It was speculated that reduction in direct funding, staff

<sup>32</sup> These 2-1-1 Kern County partners are – Child Health: BIH, CHI, CMIP, EIP, HLP, MVCCP, MVIP, NFP, RSNC, SAS; Family Functioning: AFRC, BCRC, DR, DVRP, EKFR, GCP, GSR, IWVFR, KRVR, LVSR, MCFR, MFR, SENP, SHS, WSCRC; Child Development: BCDC, BCSD, DDLCC, DSR, LHFRC, NOR, R2S, SSCDC, SSEC.

<sup>33</sup> [www.quotationspage.com/quote/26950.html](http://www.quotationspage.com/quote/26950.html)

turn-over, and other economic pressures made organizations more insular thus decreased their collaboration with other organizations.

Treating *coordination* and *collaboration* as the *highest* levels of interaction might have inadvertently left no room for partnership improvement beyond the current level. Incomprehensiveness in the Fresno model imposed two problems for program evaluation: (1) It did not conform to Bloom’s taxonomy that placed *creation* above *integration* (Airasian & Krathwohl, 2000), and (2) It downplayed adequacy of *Co-Existing* partnerships for program referrals. Consequently, Fresno’s model seemed too simplistic to speculate the quality of service integration in local communities.

To enrich the existing knowledge, the evaluation team of First 5 Kern developed a 4C model to conceive service integration in the context of institutional learning. Extensive literature support has been identified from a well-established SOLO [Structure of the Observed Learning Outcome] taxonomy (Atherton, 2013; Biggs & Collis, 1982). The taxonomy was employed in a validity study of national board certification (see Smith, Gorden, Colby, & Wang, 2005). According to the SOLO taxonomy, there were four levels of learning outcomes beyond the initial *pre-structural* category. Each level has been clearly defined with specific benchmarks (Table 36).

**TABLE 36: ALIGNMENT BETWEEN SOLO TAXONOMY AND THE 4C MODEL**

<b>SOLO</b>	<b>The 4C Model</b>
Uni-Structural: Limited to one relevant aspect	Co-Existing: Confined in a simple awareness of co-existence
Multi-Structural: Added more aspects independently	Collaboration: Added mutual links for partnership support
Relational: United multiple parts as a whole	Coordination: United multiple links with structural leadership
Extended Abstract: Generalized the whole to new areas	Creation: Expanded capacity beyond existing partnership

The one-to one match in Table 36 illustrated a clear alignment between the SOLO taxonomy and the 4C model for assessing service integration. Following the SOLO template, the 4C model was both comprehensive and mutually exclusive. Thus, the taxonomy can be employed to support evaluation of network strength among multiple organizations.

In summary, both confirmatory and exploratory approaches have been taken to develop the 4C model. In the confirmatory examination, the 4C model responded to a strong need of Proposition 10 to justify program improvement in service integration. The taxonomy also filled a void of the research literature for considering partnership building as outcomes of institutional learning. With clear categorizations for service integration, the new paradigm added a useful tool in program evaluation: (1) it classified different kinds of partnership building to delineate program accountability, and (2) it differentiated the strength of network connection to support service improvement.

## Network Enhancement for Service Integration

### Multilateral Support for Service Integration

Following the 4C model, interview data have been gathered to describe service integration at four levels, *Co-Existing*, *Collaboration*, *Coordination*, and *Creation*. At the initial level, First 5 Kern hosted contractor gatherings in last two years to enhance awareness of program features among service providers. As a result, Table 37 shows the majority partnerships at the *Co-Existing* level.

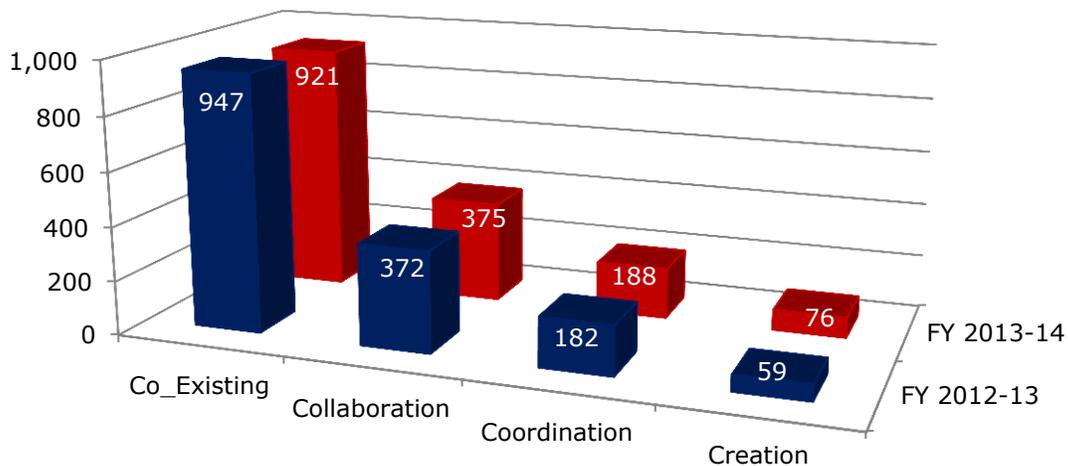
**TABLE 37: NETWORK CAPACITY ACROSS DIFFERENT LEVELS**

YEAR	NETWORK CAPACITY ACROSS FOCUS AREAS																						
2012-13	<p>A 3D bar chart showing network capacity for 2012-13. The x-axis lists integration levels: Co-Existing, Collaboration, Coordination, and Creation. The y-axis shows capacity from 0 to 400. The z-axis lists focus areas: Child Health (blue), Family Functioning (red), and Child Development (green). Data values are: Co-Existing (197, 375, 375), Collaboration (69, 213, 90), Coordination (55, 95, 32), and Creation (30, 19, 10).</p> <table border="1"> <thead> <tr> <th>Integration Level</th> <th>Child Health</th> <th>Family Functioning</th> <th>Child Development</th> </tr> </thead> <tbody> <tr> <td>Co-Existing</td> <td>197</td> <td>375</td> <td>375</td> </tr> <tr> <td>Collaboration</td> <td>69</td> <td>213</td> <td>90</td> </tr> <tr> <td>Coordination</td> <td>55</td> <td>95</td> <td>32</td> </tr> <tr> <td>Creation</td> <td>30</td> <td>19</td> <td>10</td> </tr> </tbody> </table>			Integration Level	Child Health	Family Functioning	Child Development	Co-Existing	197	375	375	Collaboration	69	213	90	Coordination	55	95	32	Creation	30	19	10
Integration Level	Child Health	Family Functioning	Child Development																				
Co-Existing	197	375	375																				
Collaboration	69	213	90																				
Coordination	55	95	32																				
Creation	30	19	10																				
2013-14	<p>A 3D bar chart showing network capacity for 2013-14. The x-axis lists integration levels: Co-Existing, Collaboration, Coordination, and Creation. The y-axis shows capacity from 0 to 500. The z-axis lists focus areas: Child Health (blue), Family Functioning (red), and Child Development (green). Data values are: Co-Existing (192, 486, 243), Collaboration (52, 207, 116), Coordination (27, 126, 35), and Creation (2, 39, 35).</p> <table border="1"> <thead> <tr> <th>Integration Level</th> <th>Child Health</th> <th>Family Functioning</th> <th>Child Development</th> </tr> </thead> <tbody> <tr> <td>Co-Existing</td> <td>192</td> <td>486</td> <td>243</td> </tr> <tr> <td>Collaboration</td> <td>52</td> <td>207</td> <td>116</td> </tr> <tr> <td>Coordination</td> <td>27</td> <td>126</td> <td>35</td> </tr> <tr> <td>Creation</td> <td>2</td> <td>39</td> <td>35</td> </tr> </tbody> </table>			Integration Level	Child Health	Family Functioning	Child Development	Co-Existing	192	486	243	Collaboration	52	207	116	Coordination	27	126	35	Creation	2	39	35
Integration Level	Child Health	Family Functioning	Child Development																				
Co-Existing	192	486	243																				
Collaboration	52	207	116																				
Coordination	27	126	35																				
Creation	2	39	35																				

While program awareness was needed for service referrals, the number of collaborative links increased from 372 last year to 375 this year (Figure 22). During the same period, the network counts for service coordination increased from 182 to 188. Table 36 also showed an increase of creative partnerships from 59 to 76 between two adjacent years. These progresses demonstrated active program involvement and indicated network enhancement beyond the *Co-Existing* level.

Along with the increase of network complexity, the number of *Co-Existing* partnerships dropped from 947 last year to 921 this year. The pattern of capacity improvement was reflected by more partnership buildings across more advanced levels of *Collaboration*, *Coordination*, and *Creation* this year (Figure 22).

**FIGURE 22: IMPROVEMENT OF NETWORK CAPACITY BETWEEN ADJACENT YEARS**



In summary, First 5 Kern channeled over 92.5% of its spending to deliver services in *Child Health*, *Family Functioning*, and *Child Development*. While programs were characterized by their specialty areas, First 5 Kern has led service providers to “Demonstrate [service] integration through identifiable measures”<sup>34</sup> that can be tracked longitudinally on the time dimension (Figure 22). Therefore, the partnership enhancement was not only illustrated by the network expansion, but also reflected by the improvement of service integration across the 4C levels.

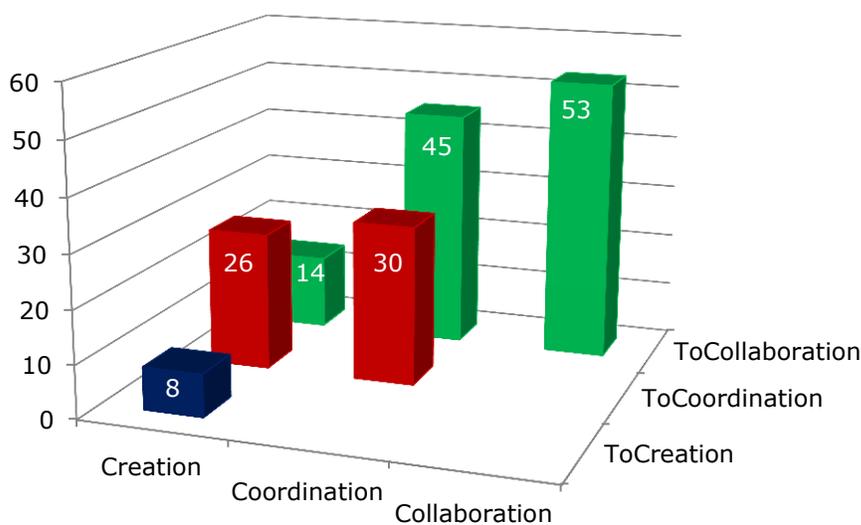
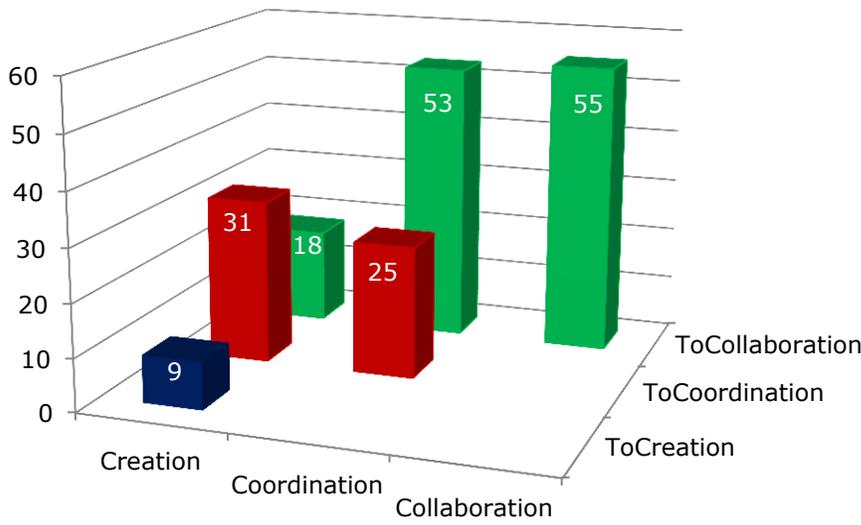
**Confirmation of Network Capacity Across Focus Areas**

As a unit of service delivery, a program may actively link to other programs as a collaborator, or passively become a partner of other organizations. Thus, program identities can be portrayed as a *doer* (i.e., the “I” perspective) or an *object* (the “me” perspective) during partnership building (Wang, 2007; Wang, Oliver, & Staver, 2008). The partnership initiation may lead to development of reciprocal relationships to enhance mutual network support. According to Provan et al. (2005), confirmation occurred when “the relationships reported by an organization confirmed by its link partner” (p. 605).

<sup>34</sup> page 5 of <http://wwwstatic.kern.org/gems/first5kern/StratPlan201415.pdf>.

Beyond the *Co-Existing* level, 191 pairs of links were confirmed as mutual partnerships this year, an increase from 176 links last year (Table 38). A total of 112 links involved mutual *collaboration*. As service integrations progressed to a high level, the number of reciprocal partnerships dropped consistently. Hence, the network data supported the hierarchical structure of 4C classification.

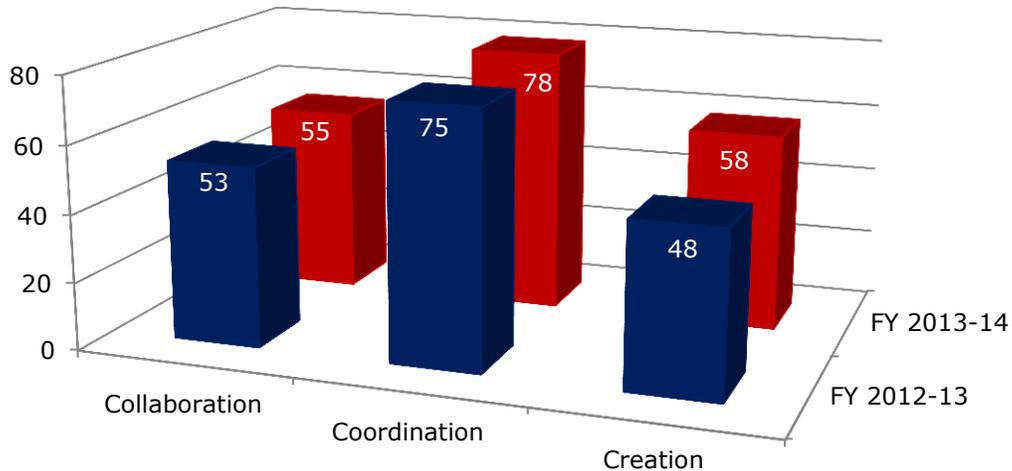
**TABLE 38: CONFIRMED MUTUAL PARTNERSHIPS BETWEEN ADJACENT YEARS**

Year	Mutual Partnership														
2012-13 (176 mutual links)	 <table border="1"> <caption>Data for 2012-13 Mutual Partnerships</caption> <thead> <tr> <th>Category</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Creation</td> <td>8</td> </tr> <tr> <td>Coordination</td> <td>26</td> </tr> <tr> <td>Collaboration</td> <td>30</td> </tr> <tr> <td>ToCoordination</td> <td>14</td> </tr> <tr> <td>ToCreation</td> <td>45</td> </tr> <tr> <td>ToCollaboration</td> <td>53</td> </tr> </tbody> </table>	Category	Value	Creation	8	Coordination	26	Collaboration	30	ToCoordination	14	ToCreation	45	ToCollaboration	53
Category	Value														
Creation	8														
Coordination	26														
Collaboration	30														
ToCoordination	14														
ToCreation	45														
ToCollaboration	53														
2013-14 (191 mutual links)	 <table border="1"> <caption>Data for 2013-14 Mutual Partnerships</caption> <thead> <tr> <th>Category</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Creation</td> <td>9</td> </tr> <tr> <td>Coordination</td> <td>31</td> </tr> <tr> <td>Collaboration</td> <td>25</td> </tr> <tr> <td>ToCoordination</td> <td>18</td> </tr> <tr> <td>ToCreation</td> <td>53</td> </tr> <tr> <td>ToCollaboration</td> <td>55</td> </tr> </tbody> </table>	Category	Value	Creation	9	Coordination	31	Collaboration	25	ToCoordination	18	ToCreation	53	ToCollaboration	55
Category	Value														
Creation	9														
Coordination	31														
Collaboration	25														
ToCoordination	18														
ToCreation	53														
ToCollaboration	55														

The State Commission pointed out, "Systems of Care addresses system-wide structural supports which allow county commissions to effectively work towards achievement in the other three result areas of Family Functioning, Child Health and

Development” (First 5 California, 2013, p. 40). Thus, enhancement of the network capacity is an ongoing process. In last year, 85 of the mutual partnerships merged at different C levels. The count increased to 102 this year (Table 37). Figure 23 illustrated more mutual partnerships at each C level this year. Although the existing funding is about to end in a year, service providers have sustained the network expansion in Kern County.

**FIGURE 23: INCREASE OF CONFIRMED PARTNERSHIPS BEYOND CO-EXISTING LEVEL**



For these links mutually confirmed at the same C level, Table 39 indicated more *collaboration* partners among programs in *Family Functioning*. In part, this was because First 5 Kern funded Family Resource Centers as a common platform to support service integration. Thompson and Uyeda (2004) pointed out,

Family resource centers have also emerged as a key platform for delivering family support services in an integrated fashion. They serve as “one-stop” community-based hubs that are designed to improve access to integrated information and to provide direct and referral services on site or through community outreach and home visitation. (p. 14)<sup>35</sup>

In contrast, services in *Child Health* were less self-contained. Due to the need for service integration across focus areas, the mode was switched to a category between *Child Health* and *Family Functioning* at the *Coordination* level (Table 39). At the *Creation* level, nine partnerships were mutually confirmed by service providers, and two thirds of the links involved programs in *Child Health*. The well-rounded service networking reflected “the Commission’s efforts to better the health and wellbeing of children and families throughout Kern County” (First 5 Kern, 2014b, p. 16).

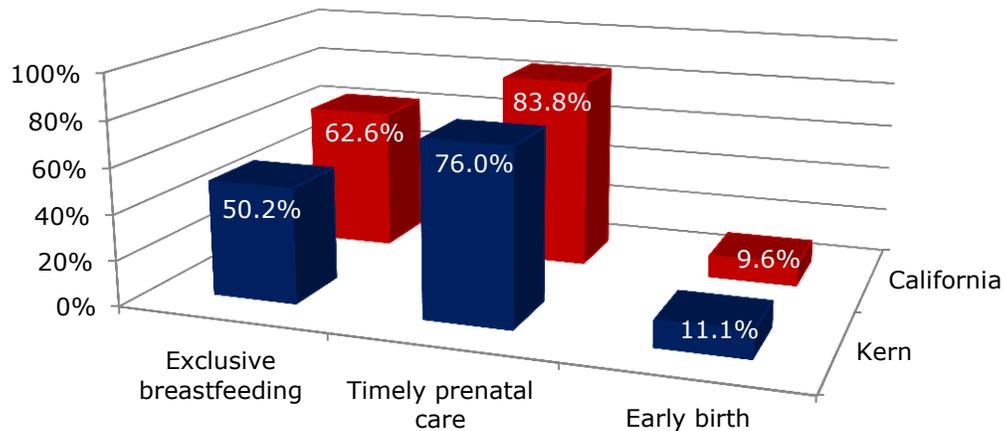
<sup>35</sup> Data source: <http://kern.org/kcnc/reportcard/>.

**TABLE 39: MUTUAL PARTNERSHIPS BY C LEVELS**

<p>Collaboration (55 mutual links)</p>	<p>A 3D bar chart showing the number of mutual links for Collaboration across three levels: Child Health, Family Functioning, and Child Development. The y-axis ranges from 0 to 30. The bars are colored blue, red, and green respectively. The values are 4 for Child Health, 29 for Family Functioning, and 11 for Child Development.</p> <table border="1"> <thead> <tr> <th>Level</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Child Health</td> <td>4</td> </tr> <tr> <td>Family Functioning</td> <td>29</td> </tr> <tr> <td>Child Development</td> <td>11</td> </tr> </tbody> </table>	Level	Value	Child Health	4	Family Functioning	29	Child Development	11
Level	Value								
Child Health	4								
Family Functioning	29								
Child Development	11								
<p>Coordination (25 mutual links)</p>	<p>A 3D bar chart showing the number of mutual links for Coordination across three levels: Child Health, Family Functioning, and Child Development. The y-axis ranges from 0 to 9. The bars are colored blue, red, and green respectively. The values are 4 for Child Health, 6 for Family Functioning, and 3 for Child Development.</p> <table border="1"> <thead> <tr> <th>Level</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Child Health</td> <td>4</td> </tr> <tr> <td>Family Functioning</td> <td>6</td> </tr> <tr> <td>Child Development</td> <td>3</td> </tr> </tbody> </table>	Level	Value	Child Health	4	Family Functioning	6	Child Development	3
Level	Value								
Child Health	4								
Family Functioning	6								
Child Development	3								
<p>Creation (9 mutual links)</p>	<p>A 3D bar chart showing the number of mutual links for Creation across three levels: Child Health, Family Functioning, and Child Development. The y-axis ranges from 0 to 2. The bars are colored blue, red, and green respectively. The values are 2 for Child Health, 2 for Family Functioning, and 1 for Child Development.</p> <table border="1"> <thead> <tr> <th>Level</th> <th>Value</th> </tr> </thead> <tbody> <tr> <td>Child Health</td> <td>2</td> </tr> <tr> <td>Family Functioning</td> <td>2</td> </tr> <tr> <td>Child Development</td> <td>1</td> </tr> </tbody> </table>	Level	Value	Child Health	2	Family Functioning	2	Child Development	1
Level	Value								
Child Health	2								
Family Functioning	2								
Child Development	1								

First 5 Kern’s support for service integration also addressed population accountability. In comparison to state indices, expectant mothers were less likely to receive timely prenatal care and provide exclusive breastfeeding in Kern County (Figure 24). In addition, Kern County children had a higher rate of early birth than the state average.<sup>36</sup> Hence, the partnership creation in *Child Health* represented program responsiveness to these critical needs in Kern County.

**FIGURE 24: KEY HEALTH INDICATOR RATES IN KERN COUNTY AND CALIFORNIA**



### Sustainable Improvement of Network Ties

In supporting service integration, not all programs played the same role. To disentangle the network complexity, Provan, Veazie, Staten, and Teufel-Shone (2005) observed,

In the academic literature, network analysis has been used to analyze and understand the structure of the relationships that make up multiorganizational partnerships. But this tool is not well-known outside the small group of researchers who study networks, and it is seldom used as a method of assisting communities. (p. 603)

In First 5 Kern’s annual reports, social network analysis (SNA) was adopted in from past two years to evaluate partnership buildings in local communities. First 5 Kern (2014b) updated its strategic plan this year and kept “Replicable” service integrations as a priority (p. 5). Accordingly, partnership buildings are examined in this section to support sustainable improvement of network ties in *Child Health*, *Family Functioning*, and *Child Development*.

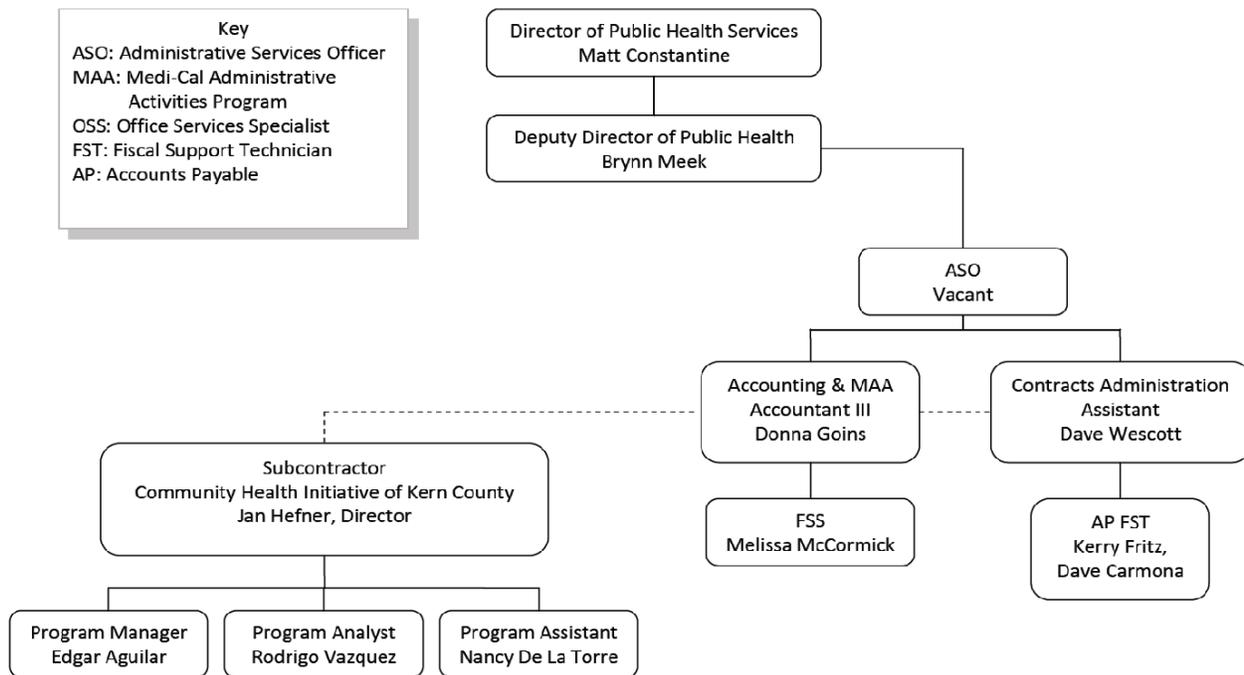
### Partnership Building to Enhance Public Health Service

First 5 Kern partnered with County of Kern Public Health Services Department (KCDPHS) to enroll and retain children ages 0-5 in healthcare systems. Child health and school readiness are two indispensable outcomes identified by the vision statement of

<sup>36</sup> [http://kern.org/kcnc/wp-content/uploads/sites/43/2014/06/2014ReportCard\\_WEB1.pdf](http://kern.org/kcnc/wp-content/uploads/sites/43/2014/06/2014ReportCard_WEB1.pdf).

First 5 Kern (2014b). In support of child health, “the need [is] not just to enroll children in health insurance but to retain them once enrolled” (Inkelas et al., 2003, p. x). During this funding cycle, KCDPHS maintained a systematic structure to support partnership building with Certified Enrollment Counselors. The program administration included a permanent department to handle subcontractors in the Community Health Initiative (CHI) division (Figure 25).

**FIGURE 25: ORGANIZATION CHART FOR KCDPHS’ CONTRACT ADMINISTRATION**



CHI and SAS supported child access to medical services, which was aligned with a legislative conviction on “The provision of child health care services that emphasize prevention, diagnostic screenings, and treatment not covered by other programs” (Proposition 10, p. 8). In FY 2013-14, 72 ties were established in the CHI/SAS network across 25 agencies (Figure 26). In the network plot, brown nodes indicated seven partners in *Child Health*, blue nodes represented four programs in *Child Development*, and pink nodes denoted 12 service providers in *Family Functioning*. The network across focus areas reconfirmed central roles of CHI and SAS in the partnership building.

While nearly all partners worked with both CHI and SAS, two exceptions were revealed by Blanton Child Development Center (BCDC) and Early Intervention Program (EIP). Unlike other programs, BCDC served children with teenage mothers and EIP assisted children with mental health issues. According to Figure 25, CHI directly worked with subcontractors, which supported its partnership recognition by BCDC and EIP for service integration. Although these links were not confirmed as mutual partnerships (Figure 26), Provan et al. (2005) noted that “when links among organizations are not confirmed, this does not necessarily reflect the absence of a link” (p. 607). On the contrary, BCDC and EIP served special populations in Kern County, and thus, delimited their opportunities to collaborate with others. The singular ties could play pivotal roles of service integration in special contexts (Kogut, 2000; Ruef, 2002).

**FIGURE 26: PARTNERSHIP OF HEALTHCARE ACCESS AT THE CREATION LEVEL**

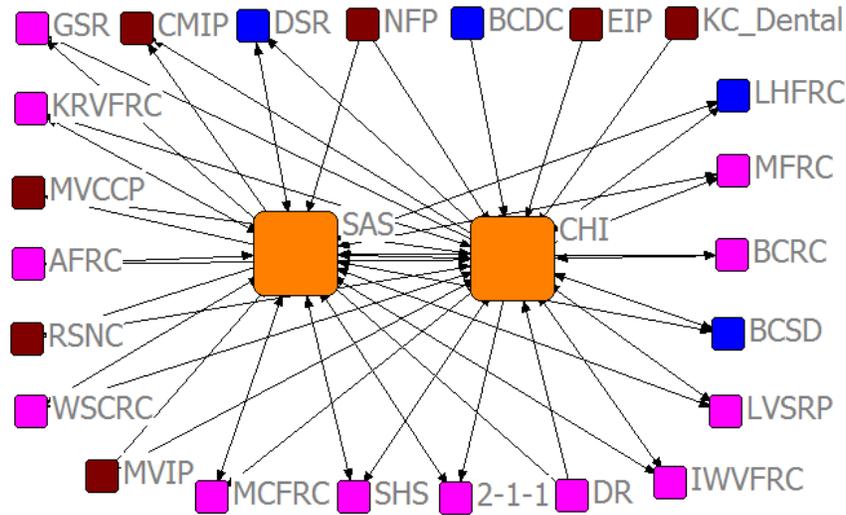
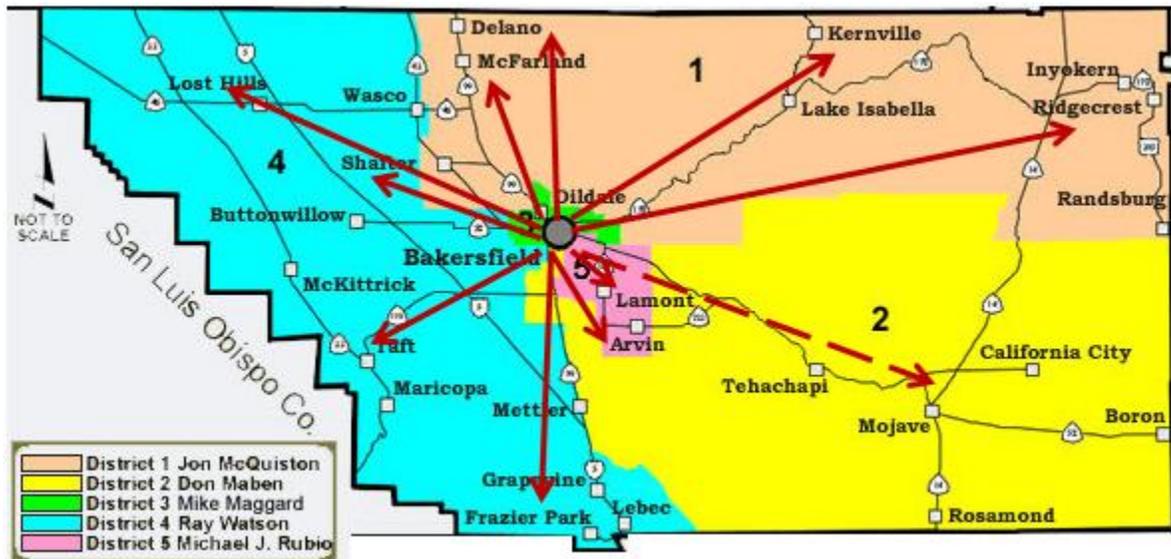


Figure 27 shows the coverage of CHI and SAS network across all five districts of Kern County. The partnership density also reflected population demands in each community to make the services available within a 10-mile radius of child home location.

**FIGURE 27: CHI AND SAS PARTNERSHIPS IN KERN COUNTY**



\*Dash line indicates partnership at the Co-Existing level.

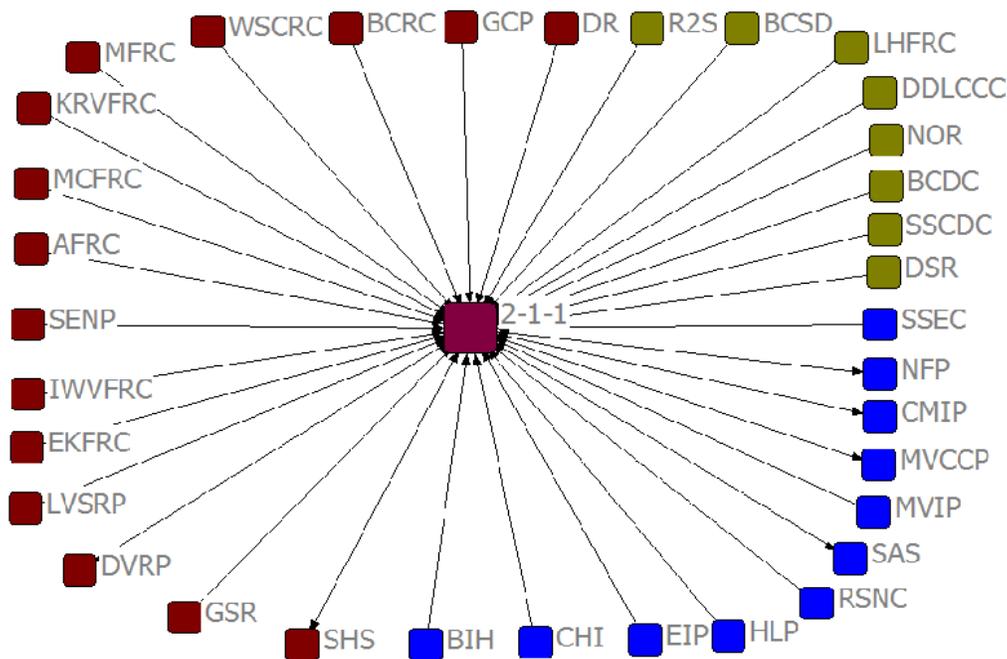
**Network Support for 2-1-1 Kern County Referrals**

2-1-1 Kern County was funded to offer referral support for the entire county. Although the program did not deliver direct services, 32 service providers identified 2-1-1 Kern County as a partner above the *Co-Existing* level last year. The network stability

was maintained this year. In addition, CHI and LHFRC added 2-1-1 Kern County as a new collaborative partner (see Figure 28).

Ramanadhan et al. (2012) pointed out, “Networks that are highly centralized can spread information and resources effectively from the influential members” (p. 3). Figure 28 shows a central position of 2-1-1 Kern County to support efficient dissemination of service information. While 2-1-1 Kern County was funded in *Family Functioning*, its impact has been expanded to *Child Health* (e.g., CHI) and *Child Development* (e.g., LHFRC). Color coding was added to the network for program differentiation across focus areas.

**FIGURE 28: NETWORK FOR SERVICE ACCESS BY LOCAL FAMILIES AND CHILDREN**



Notes: Brown color indicates programs in *Family Functioning*, blue color represents *Child Health* programs, and olive color specifies *Child Development* programs.

2-1-1 Kern County also went beyond the focus area boundary to strengthen reciprocal partnerships in FY 2013-14. As a result, 11 programs identified their partnerships with 2-1-1 Kern County at a *Coordination* level, including four programs in *Child Development* (BCSD, DDLCCC, LHFRC, & SSCDC), six programs in *Family Functioning* (BCDC, EKFRC, GSR, LVSRP, MCFRC, & SHS), and one program in *Child Health* (NFP). Above all, BCSD and 2-1-1 Kern County were involved as community partners at the *Coordination* level in California Connects.<sup>37</sup> Hence, 2-1-1 Kern County not only collaborated on information dissemination *to* and *from* its partners, but also supported service deliveries through multilateral coordination. The entire service network through 2-1-1 Kern County involved more than 87% of the programs funded by First 5 Kern.

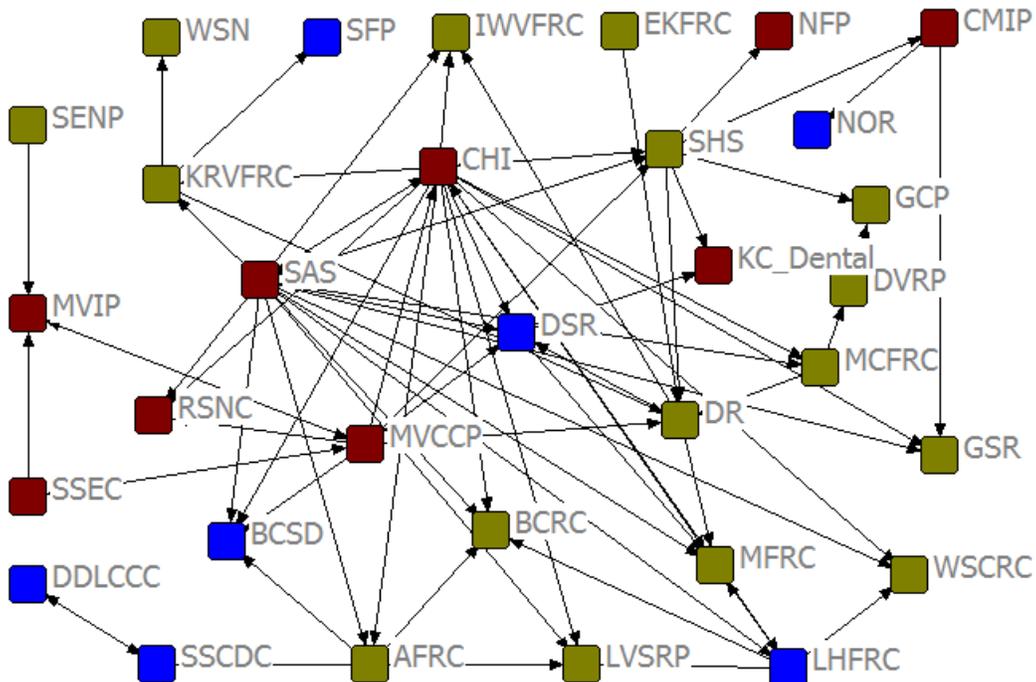
<sup>37</sup> <http://www.greatvalley.org/work/caconnects/community-partners>.

**Partnership Creation for Service Integration**

Network counts were often used as a sole indicator in the past. For instance, it was indicated in First 5 Fresno’s (2013) annual report that “less than a quarter of all interactions are occurring at the coordination and collaboration level (highest levels of interaction)” (p. 102). The connection numbers were employed to suggest a need “to improve the level and nature of interactions among funded service providers” (First 5 Fresno, 2013, p. 102).

In examining network quality, Krebs (2011) challenged the traditional wisdom on network connections. He argued, “What really matters is where those connections lead to -- and how they connect the otherwise unconnected!” (Krebs, 2011, ¶. 4). Hence, network ties at the *Creation* level played an important role to sustain improvement of service integration. In FY 2013-14, 32 programs established 74 ties at the *Creation* level (Figure 29), an increase from 61 ties last year.

**FIGURE 29: NETWORK TIES AT THE CREATION LEVEL OF THE 4C MODEL**



Notes: Brown color indicates programs in *Child Health*, blue color represents *Child Development* programs, and olive color specifies *Family Functioning* programs.

It should be noted that 2-1-1 Kern County did not appear in Figure 29. As a referral agency to guide service access across focus areas, 2-1-1 Kern County did not have the authority to alter the support from service providers, which precluded its participation in service creation.

Similar to 2-1-1 Kern County, MVCCP made healthcare referrals for medically vulnerable children. In addition, it adopted an Acuity Scale Form to evaluate client conditions and create case links with service providers. As a result, the top three reasons for expedited referrals were prematurity, congenital anomalies, and neurological

issues, all demanding creative supports between MVCCP and its partners across focus areas. MVCCP also incorporated case tracking in an Insight Data Entry and Electronic Health Record (IDEHR) system to facilitate monitoring of child health conditions. In Figure 29, MVCCP was recognized by several partners at the *Creation* level.

All the remaining programs in Figure 29 delivered direct services for children and families in Kern County. In particular, DSR provided services in Delano, the second largest city in Kern County. Hence, more ties were built for that program to address the population demands. In the same vein, EKFC and SFP were located in isolated communities. Links were sparse and pivotal to connect services in these desert and mountain regions.

Also illustrated in Figure 29 were infrequent links to programs in special fields. For instance, WSN, DDLCCC, and SSCDC served children with family stability issues. NFP supported a special population of high-risk, low-income, and first-time mothers. Despite the lack of extensive connections, these programs played an indispensable role to sustain the systems of care for traditionally underserved populations.

In summary, this chapter included both *external literature review* and *internal data tracking* to examine effectiveness of service integration across *Child Health, Family Functioning, and Child Development*. The external approach supported development of the 4C model, a useful taxonomy for classification of service integration. The model accommodated partnership levels that were both *comprehensive* and *mutually exclusive*. Therefore, the 4C model not only filled a void in the research literature, but also addressed evaluation needs in *Focus Area IV: Integration of Services* of First 5 Kern strategic plan.

The internal data tracking demonstrated improvement of the network capacity between adjacent years. More specifically, the evaluation findings indicated that 80% of First 5 Kern-funded programs took part in service networking at the *Creation* level. Meanwhile, the total number of reciprocal links increased from 177 last year to 194 this year across 40 programs (Table 40). Pivotal ties were identified among service providers to support populations with special needs and in remote regions (Figure 29).

**TABLE 40: CONFIRMED PARTNERSHIP COUNTS IN TWO ADJACENT YEARS**

<b>Category</b>	<b>FY 2012-13</b>	<b>FY 2013-14</b>
Child Health (CH)	22	11
Family Functioning (FF)	38	62
Child Development (CD)	7	9
Between CH and FF	63	62
Between FF and CD	20	19
Between CH and CD	27	31
<b>Total Links</b>	<b>177</b>	<b>194</b>

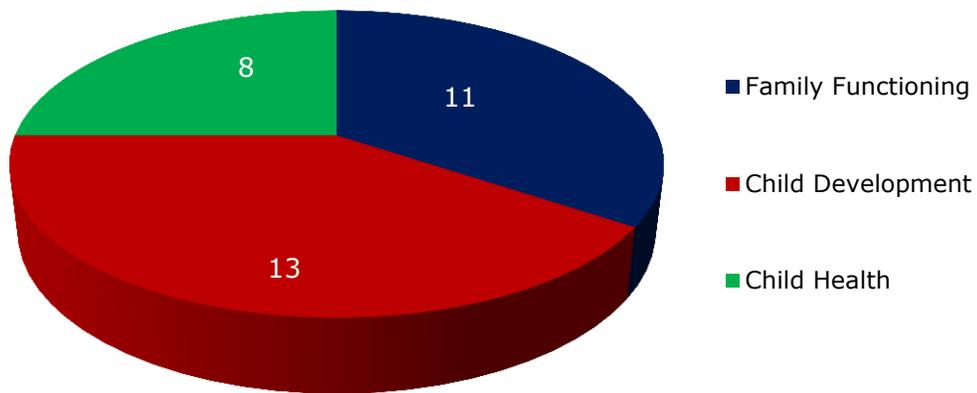
While the partnership building occurred among service providers, First 5 Kern played a critical role to support the capacity building. According to Resnick (2012),

An important goal of First 5 funding is to act as a catalyst for change in each county’s systems of care. ... Increases in coordination and cooperation would

indicate that agencies are better able to share resources and clients, reduce redundancies and service gaps, and increase efficiency (p. 1).

In comparison to last year, First 5 Kern increased funding from \$661,652 to \$799,821 in *Integration of Services*. First 5 Kern also funded over 50% of program budgets for 32 service providers in *Child Health*, *Family Functioning*, and *Child Development* (Figure 30). "A local fiscal impact report shows that every \$1 of First 5 Kern monies spent produces a \$17.49 return to Kern County's economy" (Henderson, 2013, ¶. 8). Built on an axiom that *the whole could be larger than the sum of its parts*, First 5 Kern's leadership has effectively strengthened the partnership building across 40 programs to support children ages 0-5 and their families in Kern County.

**FIGURE 30: NUMBER OF PROGRAMS WITH OVER 50% OF BUDGET FROM FIRST 5 KERN**



## Chapter 4: Turning the Curve

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“Turning the Curve” was emphasized in the Results-Based Accountability (RBA) model to describe improvement of service outcomes beyond a baseline expectation (Friedman, 2005). The RBA (aka “Outcome-Based Accountability”) model was required by Proposition 10 to support justification of state investment across local communities. In tracking the service impact among focus areas, Core Data Element (CDE) survey was conducted across 29 programs to monitor indicators of service enhancement for children ages 0-5. In addition, Family Stability Rubric (FSR) was employed to collect data on home conditions at 19 program sites. Because the same instruments have been employed throughout this funding cycle, value-added assessments are adopted in this chapter to analyze FSR and CDE results at both family and individual levels.

Allen (2004) pointed out, “Value-added assessment generally involves comparing two measurements that establish baseline and final performance” (p. 9). The mechanism of data tracking was supported by the Institution Review Board (IRB) of California State University, Bakersfield (CSUB). As a result, quarterly reports were required from First 5 Kern to ensure human subject protection during data gathering. Following the same timeline, FSR information was collected on a quarterly basis. Because many programs attained the top level of FSR indicators, the strengthening of family functioning is examined at multiple points prior to the surfacing of ceiling effect. Meanwhile, permanent health records, such as full-term pregnancy and low birth weight, did not change at the individual level. Thus, CDE data are compared between adjacent years to evaluate the improvement of baseline conditions for Kern County children ages 0-5.

### Strengthening of Family Functioning

Henderson (2013) pointed out, “With one in four California children living in poverty, there is still much work to do, but First 5 Kern is steadily improving family stability in Kern County” (¶. 8). In support of the value-added assessment, household conditions are monitored by multiple indicators to address *food, childcare, transportation, job security, healthcare, and housing* needs at the family level. Cherry (2013) reviewed Maslow’s *Hierarchy of Needs*, and noted that “Needs at the bottom of the pyramid are basic physical requirements including the need for food, ... Once these lower-level needs have been met, people can move on to the next level of needs, which are for safety and security” (¶. 2). In this section, program effectiveness is tracked over time to reflect the strengthening of family functioning across multiple levels of Maslow (1954) hierarchy.

#### Food Needs

Researchers suggested that family functioning should start with daily food coverage for all family members (Devine, 2005; Vermeir & Verbeke, 2006). This indicator was particularly pertinent for families with young children because “The birth of a child might also result in the family eating healthier if the goal is to feed their children a proper diet” (Wethington & Johnson-Askew, 2009, p. S75). 2-1-1 Kern County’s annual report suggested that food was most needed among its callers in 2013 (CAPK, 2014).

Table 41 shows consistent improvement of family food support across 14 programs. Based on the quarterly tracking of FSR indicators in 558 households, an average number of families with *unmet food needs* was 5.29 per program at the initial stage of program entry. This index dropped to 1.43 in third month and 0.43 in sixth month. First 5 Kern funding supported childcare needs for families with children ages 0-5, which allowed family resources to be redirected for improvement of food supplies. By midyear, 10 programs already demonstrated a ceiling effect to show no families with the unmet need (Table 41).

**TABLE 41: NUMBER OF FAMILIES WITH UNMET FOOD NEEDS**

<b>Program*</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
BCRC	5	4	2
DSR	8	4	2
DVRP	10	2	0
EKFRC	9	0	0
GSR	6	1	0
KRVFRC	5	1	0
LHFRC	0	0	0
LVS RP	8	1	1
MFRC	2	1	0
MCFRC	1	1	0
RSNC	5	1	1
SHS	1	1	0
WSCRC	10	3	0
WSN	4	0	0

\*Program acronyms are listed in Appendix A.

### Unmet Childcare Needs

Twenty programs received First 5 Kern funding to offer center-based childcare. Eight of the programs also provided home-based childcare services. While childcare centers were needed by some families, “For many working parents, hiring a caregiver to work in their home is the best solution for their child care and household needs” (Child Care Inc., 2012, p. 1). Depending on the support structure, program effectiveness is reflected by reducing the number of households with unmet childcare needs (Table 42).

**TABLE 42: NUMBER OF FAMILIES WITH UNMET CHILDCARE NEEDS**

<b>Program</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
AFRC	2	0	0
BCRC	5	2	0
DSR	18	10	5
DVRP	9	0	0
GSR	2	1	0
GCP	4	3	2
KRVFRC	5	2	0
LVS RP	11	5	3
RSNC	17	13	13
SHS	3	3	0
WSCRC	9	3	1
WSN	18	0	0

In Table 42, 12 programs indicated improvement of the service outcome for 602 families. The average number of families *in need of caregivers* dropped from 8.58 at initial program entry to 3.50 per program in the first quarter. By midyear, the number reduced to 2.00. The change pattern shows that seven programs reached zero family counts at end of sixth month.

**Unmet Transportation Needs for Family Members**

Like food and childcare services, transportation is considered a fundamental need for families with young children, particularly those in rural areas (U.S. Department of Education, 2004). Waller (2005) concurred that “In rural areas, public transportation options are scarce and have limited hours of service” (p. 2). First 5 Kern has designated a result indicator in its strategic plan to enhance transportation support for families with children ages 0-5. As a result, Table 43 shows the number of families *with unmet transportation needs* across 15 programs.

**TABLE 43: NUMBER OF FAMILIES WITH UNMET TRANSPORTATION NEEDS**

<b>Program*</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
AFRC	0	0	0
BCRC	5	4	0
DSR	15	7	2
DVRP	25	2	0
EKFRC	14	3	1
GSR	4	1	0
GCP	4	4	2
IWVFRC	8	2	2
KRVFRC	6	4	0
LHFRC	1	1	0
LVS RP	13	5	3
RSNC	5	5	4
SHS	3	3	0
WSCRC	13	3	2
WSN	20	1	0

\*Program acronyms are listed in Appendix A.

Six hundred eighty families were served by these programs in Table 43. The average number of families *with unmet transportation needs* dropped from 9.07 upon program entry to 3.00 per program in third month. The number plunged to 1.07 by midyear. Eight programs indicated no transportation issue after the first six months. The progress was especially important in Kern County because a large portion of its population worked in agricultural industry throughout rural communities.

**Availability of Convenient Childcare**

Beyond *food, childcare, and transportation* needs at the basic level, the impact of First 5 Kern was indicated by availability of *convenient childcare providers* for children ages 0-5. Table 44 shows that the shortage of service providers was alleviated by 14 programs this year. For families *in need of convenient childcare*, the average count per program decreased from 12.29 to 4.50 within first three months. By midyear, the

number fell to 2.43. Six programs reported zero counts at end of sixth month. Programs in Table 44 served 625 families this year.

**TABLE 44: NUMBER OF FAMILIES LACKING CONVENIENT CHILDCARE PROVIDERS**

Program*	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
AFRC	3	0	0
BCRC	5	2	0
BCSD	29	15	14
DSR	24	15	9
DVRP	14	0	0
EKFRC	5	1	1
GSR	7	3	0
IWVFRC	7	2	1
KRVFRC	11	5	1
LVS RP	15	7	2
MFRC	11	4	4
SHS	7	5	0
WSCRC	11	3	2
WSN	23	1	0

\*Program acronyms are listed in Appendix A.

### Job Security

Although Maslow’s (1954) hierarchy stressed *security* as an important need, security considerations were inseparable from basic household needs. In particular, family members might miss work or school due to lack of childcare, which indirectly undermined job security and family income. Table 45 shows the number of families with members *missing work or school due to childcare* at three time points. On average, the security issue surfaced for 9.91 families per program at the beginning. The number dived to 4.27 and 2.27 by third and sixth months across 11 programs. In FY 2013-14, programs in Table 45 served a total of 546 families across Kern County, and six of the programs showed zero frequency counts by midyear.

**TABLE 45: NUMBER OF FAMILIES MISSED WORK/SCHOOL DUE TO CHILDCARE**

Program	Initial	3 <sup>rd</sup> Month	6 <sup>th</sup> Month
BCRC	5	5	0
BCSD	15	11	11
DSR	22	13	8
DVRP	11	1	0
GSR	2	1	0
KRVFRC	5	0	0
LVS RP	8	3	2
MFRC	8	5	2
SHS	4	3	0
WSCRC	13	4	2
WSN	16	1	0

Schroeder and Stefanich (2001) also cited transportation as one of the primary barriers that caused family members to miss work or school. Although job and school

commitments were made by older family members, they inevitably impacted the wellbeing of children through family functioning.

**TABLE 46: NUMBER OF FAMILIES MISSING WORK/SCHOOL DUE TO TRANSPORTATION**

<b>Program*</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
AFRC	0	0	0
BCSD	16	12	12
DSR	14	6	2
DVRP	29	2	0
EKFRC	11	1	1
GSR	3	3	0
GCP	5	2	0
IWVFRC	4	2	0
KRVFRC	6	4	1
LVSRP	10	5	4
LHFRC	2	1	1
MFRC	7	2	2
MCFRC	1	1	0
RSNC	8	6	4
WSCRC	13	6	1
WSN	17	1	0

\*Program acronyms are listed in Appendix A.

Based on the zero counts in Table 46, transportation issues were solved for families at seven program sites by midyear. On average, 9.13 families per program were identified with transportation difficulties to *go to work or school* upon initial entry. The number shrank to 3.38 and 1.75 by third and sixth months, respectively. With ongoing support from First 5 Kern, the improvement was consistently demonstrated by 16 programs that delivered services for 785 families.

### **Unmet Health Insurance Needs**

In California, policy changes occurred recently to merge the Healthy Families and Medi-Cal services. As a program director reported, “Whenever there is a disruption in one of the state health insurance programs, it seems others are also affected”.<sup>38</sup> Therefore, First 5 Kern has to confront this challenge by reducing disruption of health insurance coverage for families with children ages 0-5.

Table 47 shows a declining numbers of families lacking insurance to see doctors across 16 programs. At program entry, the average number of families in need of health insurance was 14.50 per program. The number dipped to 6.81 in third month and 4.63 by end of sixth month. Six programs indicated zero family count by midyear. A total of 16 programs in Table 47 served 834 families this year.

<sup>38</sup> Personal communication with Ms. Janet Hefner on October 3, 2013 for data verification.

**TABLE 47: NUMBER OF FAMILIES LACKING INSURANCE TO SEE DOCTOR**

<b>Program*</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
BCSD	53	35	35
BCRC	7	5	1
DSR	20	7	5
DVRP	13	0	0
EKFRC	4	0	0
GSR	11	5	1
GCP	28	9	3
IWVFRC	3	2	0
KRVFRC	2	0	0
LVS RP	14	3	2
LHFRC	17	14	13
RSNC	17	16	9
SHS	10	6	1
SENP	19	4	4
WSCRC	7	3	0
WSN	7	0	0

\*Program acronyms are listed in Appendix A.

### Unmet Dental or Eye Care Needs

Fourteen programs received First 5 Kern funding to support 678 families with children ages 0-5. Table 48 indicated that the average number of families in need of dental or eye care dropped from 48.43 upon initial program entry to 15.64 per program in the first quarter. By midyear, the average family count reduced to 7.14 per program. The trends in Table 48 also show zero frequency counts for five programs at end of sixth month.

**TABLE 48: NUMBER OF FAMILIES LACKING DENTAL AND EYE CARE**

<b>Program*</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
BCRC	7	5	3
DSR	14	7	6
DVRP	20	0	0
GSR	11	3	0
GCP	33	14	5
IWVFRC	10	3	0
KRVFRC	14	5	0
LVS RP	15	6	2
LHFRC	17	15	12
MFRC	16	14	13
RSNC	19	15	10
SHS	6	5	1
WSCRC	15	8	1
WSN	22	0	0

\*Program acronyms are listed in Appendix A.

**Unsafe Housing**

In FY 2013-14, the number of families living in unsafe houses decreased across 13 programs. The average number of families per program dropped from 8.15 upon program entry to 0.92 in third month. The number was reduced to 0.31 by midyear. Eleven programs reported no house safety issue at end of sixth month. Programs in Table 49 served a total of 657 families across Kern County.

**TABLE 49: NUMBER OF FAMILIES LIVING IN UNSAFE HOUSES**

<b>Program*</b>	<b>Initial</b>	<b>3<sup>rd</sup> Month</b>	<b>6<sup>th</sup> Month</b>
AFRC	2	0	0
BCRC	1	1	0
DSR	8	5	3
DVRP	66	2	0
EKFRC	6	0	0
GCP	1	0	0
IWVFRC	1	0	0
KRVFRC	1	0	0
MFRC	2	1	0
RSNC	1	0	0
SHS	1	0	0
WSCRC	7	3	1
WSN	9	0	0

\*Program acronyms are listed in Appendix A.

In the 2013 report card of Kern County Network for Children (KCNC), Golich acknowledged, "Housing affordability in Kern County is increasingly more difficult and more families are accessing safety net food programs" (p. i). Food supply, childcare, transportation, and housing conditions also hinged on job security to provide the monetary resources. FSR results in this section demonstrated improvement of family functioning across these stability indicators in FY 2013-14.

**Improvement of Child Wellbeing Between Adjacent Years**

The State Commission stressed that "Evaluation should be conducted in such a way that it provides direct feedback to the County Commission and to the community as a whole" (First 5 California, 2010, p. 17). Besides tracking enhancement of family functioning, First 5 Kern gathered CDE data to monitor child wellbeing between adjacent years. In particular, five-year-olds in FY 2012-13 have reached age 6 this year, and thus, are no longer received First 5 Kern support. Meanwhile, newborns are added to the population of children ages 0-5. Therefore, child wellbeing can be compared on an annual basis to assess improvement of key CDE indicators across programs.

In addition to child health variables, CDE data contain information on child development and protection. Indicators of child health and development also include breastfeeding, home reading, and preschool attendance. Child protection is illustrated by program support for dental care, immunization, and smoke prevention. Improvements of early childhood services are summarized here to document the impact of First 5 Kern in program outcomes.

**Prenatal Care**

Chen (2012) noted that “From a life course perspective, the concept of early childhood health may begin with prenatal health” (p. 2). Although Proposition 10 funding is designed to serve children ages 0-5, prenatal care focuses on health checkup for expectant mothers to ensure proper development of fetus prior to natural birth. According to medical doctors, “prenatal care that started in the first trimester was associated with better pregnancy outcome” (Showstack, Budetti, & Minkler, 1984, p. 1003).

In Kern County, Wasson and Goon (2013) reported that “For a variety of reasons, high-risk mothers may delay or avoid prenatal care” (p. 28). First 5 Kern funded programs to jointly support prenatal care through parent education and healthcare services. The starting dates of prenatal visit were tracked by each program and compared to the baseline records from last year. Table 50 shows an increase in the percent of timely prenatal care across seven programs.

**TABLE 50: INCREASE OF TIMELY PRENATAL CARE BETWEEN TWO ADJACENT YEARS**

Program*	FY 2012-13		FY 2013-14	
	n	Prenatal care @ 1 <sup>st</sup> trimester (%)	n	Prenatal care @ 1 <sup>st</sup> trimester (%)
AFRC	86	93	72	94
BCRC	43	95	29	97
MFRC	84	90	65	97
MVIP	76	74	71	83
SENP	142	91	107	93
SSEC	20	65	15	73
WSCRC	100	72	85	91

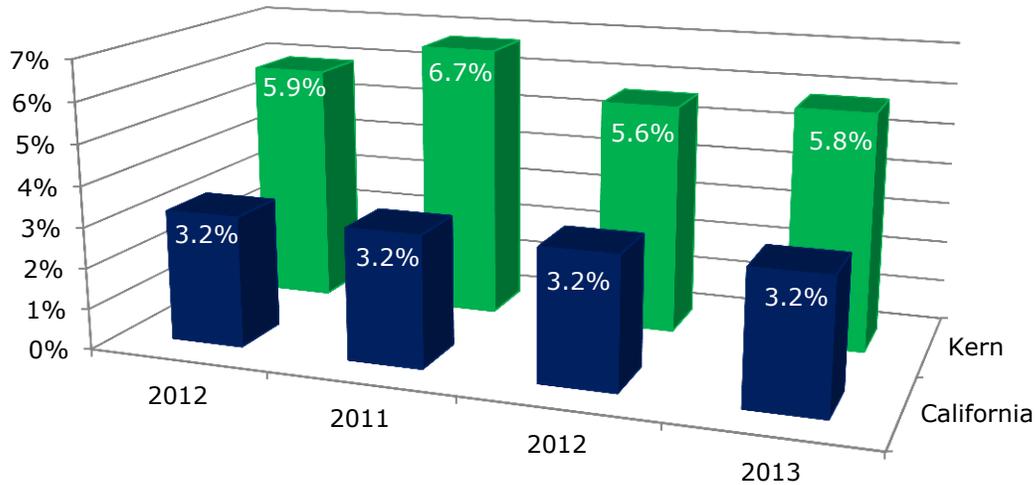
\*Program acronyms are listed in Appendix A.

According to Kern County Network for Children (2014), “Three out of four Kern County pregnant mothers received prenatal care in their first trimester in 2012” (p. 19). Table 50 shows two programs below the county average in FY 2012-13. This year, Special Start for Exceptional Children (SSEC) is the only program that remains below the county average. In part, this is because SSEC provides services during “non-traditional hours for medically fragile infants and toddlers” (First 5 Kern, 2014b, p. 5). Despite the special circumstance, the rate of timely prenatal care has been substantially improved between adjacent years toward the 75% rate across Kern County.

In Table 50, the average rate of timely prenatal care increased from 82.86% in last year to 89.71% this year. Programs in Table 50 served a total of 444 children in FY 2013-14. This accomplishment occurred in Kern County where the percent of late or no prenatal care was consistently above the state average over past four years (Figure 31).<sup>39</sup> Therefore, First 5 Kern has responded to a strong local demand by funding effective programs in traditionally underserved communities.

<sup>39</sup> [HTTP://KERN.ORG/KCNC/REPORTCARD/](http://kern.org/kcnc/reportcard/).

**FIGURE 31: PERCENT OF LATE OR NO PRENATAL CARE IN KERN AND CALIFORNIA**



**Full-Term Pregnancy**

Table 51 shows that full-term pregnancy rates across 17 programs have reached a level above 75% this year. Two of the programs attained a rate of 100%. On average, the rate of full-term pregnancy increased from 84.53% in last year to 90.53% this year. Altogether programs in Table 51 served 852 children in FY 2013-14.

**TABLE 51: INCREASE OF FULL-TERM PREGNANCY BETWEEN TWO ADJACENT YEARS**

Program*	FY 2012-13		FY 2013-14	
	n	Full-term pregnancy (%)	n	Full-term pregnancy (%)
AFRC	86	88	72	94
BAS	88	88	47	94
BCRC	43	91	29	93
BIH	50	76	32	78
DDLCCC	23	87	21	100
EIP	55	75	17	76
GSR	107	84	106	92
IWVFRC	56	86	55	93
KRVFRC	44	82	32	88
MFRC	84	81	65	92
NFP	41	85	20	90
RSNC	49	76	66	85
SENP	142	87	107	90
SSCDC	35	91	26	96
WIW	23	91	20	100
WSCRC	100	89	85	93
WSN	64	80	52	85

\*Program acronyms are listed in Appendix A.

Wasson and Goon (2013) pointed out, "The average first-year medical costs are about 10 times greater for pre-term infants than full-term infants" (p. 28). Hence,

resource savings from full-term pregnancy are much needed as state revenue from tobacco tax dwindles down over time. Because of the increase in full-term pregnancy, First 5 Kern has effectively worked with its service providers toward reducing medical bills during the first year of child life (Wasson & Goon, 2013).

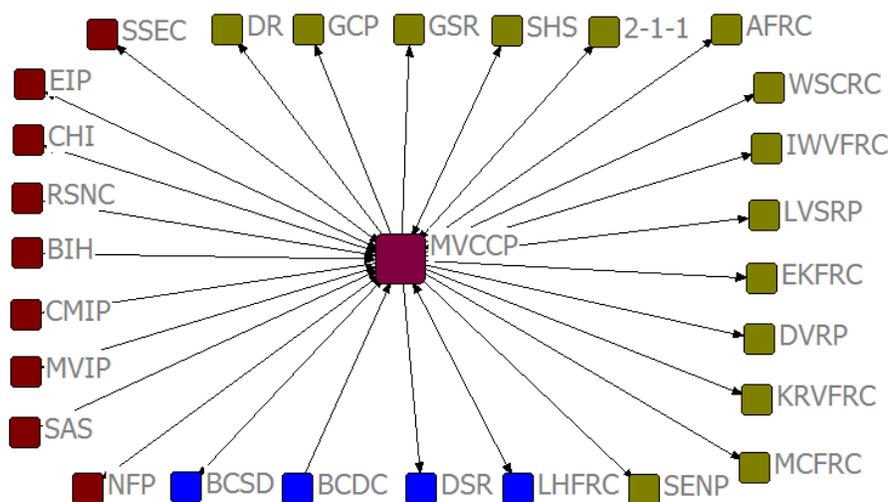
**Low Birth Weight**

Early birth was often linked to low birth weight (LBW), which could cause medical complication for children ages 0-5 (Ponzio, Palomino, Puccini, Strufaldi, & Franco, 2013). Levere (2012) rated LBW as one of the most serious health issues in early childhood development. LBW was also linked to low educational attainment and high prevalence of socio-emotional and behavioral problems for children in later years (Chen, 2012). In the 2013 report card of Kern County Network for Children, Golich (2013) acknowledged that “More babies were born at low birth weight” (p. i).

LBW was further confounded with other medical problems. Ponzio et al. (2013) reported that “low-birth-weight children with current obesity are more likely to have higher systolic blood pressure levels and impaired  $\beta$ -cell function” (p. 1678). Consequently, Kern County was ranked at sixth and eighth positions across the state for LBW and obesity<sup>40</sup>, respectively. Scientists further indicated that “nutritionally deprived newborns are ‘programmed’ to eat more because they develop less neurons in the region of the brain that controls food intake”.<sup>41</sup> Therefore, controlling the LBW rate has a long-term influence on the wellbeing of children in multiple aspects.

First 5 Kern supported systems of care to offer a combination of education, prevention, and treatment services for medically vulnerable children with LBW. Figure 32 showed that Medically Vulnerable Care Coordination Project (MVCCP) established partnerships with 27 programs beyond the level of *Co-Existence*. Twelve of the links were recognized as mutual partnerships.

**FIGURE 32: NETWORK FOR SERVICE ACCESS BY MEDICALLY VULNERABLE CHILDREN**



<sup>40</sup> <http://www.kidsdata.org>.

<sup>41</sup> <http://www.sciencedaily.com/releases/2011/03/110310070311.htm>.

Built on the extensive support network, 10 programs in Table 52 show reduction in average LBW rate from 10.40% in last year to 7.3% this year. These programs served a total of 882 children in FY 2013-14. Similar to the issue of preterm birth, LBW has imposed a persistent problem to drain medical resources. Because most parts of Kern County belong to a Medically Underserved Area (MUA), the resource savings have played an important role to sustain First 5 Kern support for children ages 0-5.

**TABLE 52: DECREASE IN THE PROPORTION OF CHILDREN WITH LOW BIRTH WEIGHT**

Program*	FY 2012-13		FY 2013-14	
	n	Low birth weight (%)	n	Low birth weight (%)
BCSD	276	11	260	9
DDLCCC	23	13	21	10
EIP	55	7	17	6
GSR	107	9	106	5
KRVFRC	44	14	32	6
MFRC	84	8	65	7
NOR	197	9	182	7
RSNC	49	14	66	8
SENP	142	10	107	8
SSCDC	35	9	26	7

\*Program acronyms are listed in Appendix A.

### Breastfeeding

Kirkham, Harris, and Grzybowski (2005) reported that “Breastfeeding is the best feeding method for most infants” (p. 1308). More importantly, the positive impact has been found beyond child health, and “The majority of studies observe improved cognitive ability or academic performance among breastfed children” (Smith et al., 2003, p. 1075). Anderson et al. (1999) conducted a meta-analysis and confirmed strong links between breastfeeding and cognitive development among infants with LBW.

**TABLE 53: INCREASE IN BREASTFEEDING RATE BETWEEN TWO ADJACENT YEARS**

Program*	FY 2012-13		FY 2013-14	
	n	Breastfeeding (%)	n	Breastfeeding (%)
BCDC	24	83	21	90
BCRC	43	63	29	69
BCSD	276	71	260	72
DSR	86	71	70	74
IWVFRC	56	66	55	75
MFRC	84	68	65	72
MVIP	76	74	71	85
SFP	25	40	16	69
SSCDC	35	69	26	77
WSN	64	64	52	69

\*Program acronyms are listed in Appendix A.

In 2011, the federal government sponsored development of a national objective to have at least 46% of children breastfed through three months old.<sup>42</sup> All programs in

<sup>42</sup> [www.kidsdata.org/export/pdf?cat=46](http://www.kidsdata.org/export/pdf?cat=46).

Table 53 have surpassed the national objective this year. Therefore, Table 53 indicates ongoing improvement of breastfeeding support in 10 programs according to the criterion-referenced assessment.

Because breast milk has the most complete form of nutrition for infants (American Academy of Pediatrics, 2012), First 5 Kern designated breastfeeding as a result indicator for the Nurse Family Partnership (NFP) program. The number of NFP partners has reached 20 beyond the *Co-Existing* level. Across 10 programs in Table 53, the average breastfeeding rate increased from 66.90% in last year to 75.20% this year. The positive results impacted a total of 665 children in Kern County.

### Home Reading

First 5 Kern’s (2014b) strategic plan has identified an indicator of service effectiveness according to the “Number and percentage of families who report reading or telling stories regularly to their children” (p. 10). Home reading is an important component of family functioning. Sagan (2014) further maintained that “One of the greatest gifts adults can give—to their offspring and to their society—is to read to children.”<sup>43</sup> Between the adjacent years in Table 54, 14 programs demonstrated increases in the percent of children who had *two or more home-reading activities* per week. On average, the percent grew from 67.50% in last year to 73.43% this year. This progress impacted 847 children across Kern County in FY 2013-14.

**TABLE 54: PERCENT OF CHILDREN WITH READING ACTIVITIES PER WEEK**

Program*	FY 2012-13		FY 2013-14	
	n	Two or more reading activities per week (%)	n	Two or more reading activities per week (%)
BCSD	159	71	141	74
BAS	88	64	51	71
BCDC	23	39	22	45
BCRC	40	55	36	61
DSR	84	71	70	76
DDLCCC	25	72	21	76
GSR	108	73	107	80
KRVFRC	50	76	34	77
MCFRC	34	76	21	90
NOR	179	87	163	88
SFP	25	92	14	93
SENP	130	45	71	62
WSCRC	101	64	53	70
WSN	60	60	43	65

\*Program acronyms are listed in Appendix A.

### Preschool Attendance

Snell (2014) reported that “In the last half-century, U.S. preschool attendance has gone up to nearly 70% from 16%.”<sup>44</sup> Preschool services were designed to enhance child readiness for kindergarten. According to the State Commission, “Preschool

<sup>43</sup> <http://bilingualmonkeys.com/43-great-quotes-on-the-power-and-importance-of-reading/>.

<sup>44</sup> <http://www.intellectualtakeout.org/content/quotes-preschool-education-myths>.

attendance is correlated with improved kindergarten readiness and kindergarten readiness is associated with long-term achievement” (First 5 California, 2013, p. 17). Table 55 shows the percent of children *participating in preschool activities* on a regular basis. On average, the rate increased from 18.79% in last year to 26.57% this year. This positive change benefited 881 children across 14 programs since the beginning of FY 2013-14.

**TABLE 55: INCREASED SUPPORT FOR CHILDREN TO ATTEND PRESCHOOL**

Program*	FY 2012-13		FY 2013-14	
	n	Attending Activities (%)	n	Attending Activities (%)
BCSD	159	7	141	8
BCRC	40	40	36	42
DSR	84	28	70	30
DDLCCC	25	24	21	48
GSR	108	15	107	20
IWVFRC	56	21	54	31
KRVFRC	50	22	34	26
MFRC	119	13	63	11
MCFRC	34	9	21	33
NOR	179	18	163	8
SHS	59	14	78	22
SSCDC	34	29	26	35
SFP	25	20	14	43
WSCRC	101	3	53	15

\*Program acronyms are listed in Appendix A.

### Dental Care

First 5 Kern funded Kern County Children's Dental Health Network to deliver dental care services across Kern County. As Montoya (2013) recapped,

Since its inception in 1999, the network has traveled to 2,025 pre-schools and 285 elementary schools in 15 Kern County communities, where hygiene clinicians have provided oral health assessments to more than 30,000 children, administered 29,600 cleanings and fluoride treatments, and place over 15,000 sealants on first time molars (p. 41).

According to American Academy of Pediatric Dentistry<sup>45</sup>, the first dental visit should occur by occur by a child's first birthday. “Because dental caries are one of the most frequent as well as debilitating and untreated chronic health conditions in children, access to dental care is an important indicator of access to health care” (Inkelas et al., 2003, p. x). Between last year and this year, the number of dental homes increased from 234 to 245 to address additional population demand in Kern County. Table 56 shows the percent of children without dental checkups each year. On average, the percent declined from 45.00% in last year to 31.62% this year across 13 programs. A total of 628 children benefited from the improvement in dental care access in FY 2013-14.

<sup>45</sup> <http://www.aapd.org/assets/2/7/GetItDoneInYearOne.pdf>.

**TABLE 56: PERCENT OF CHILDREN NEVER HAD DENTAL VISIT**

Program*	FY 2012-13		FY 2013-14	
	n	No Dental Care (%)	n	No Dental Care (%)
BCDC	23	100	22	23
BCRC	40	25	36	19
DDLCCC	25	76	21	74
EIP	59	22	17	12
IWVFRC	56	38	54	28
LVSRP	112	17	103	9
MCFRC	34	74	21	38
NOR	179	46	163	40
SHS	59	12	78	5
SSCDC	34	53	26	50
SSEC	20	60	15	53
WIW	22	27	19	26
WSCRC	101	35	53	34

\*Program acronyms are listed in Appendix A.

### Immunization

First 5 Kern funded Children’s Mobile Immunization Program of San Joaquin Community Hospital to deliver immunization services throughout Kern County. According to Centers for Disease Control and Prevention (2010), immunization can protect children against 15 vaccine-preventable diseases.<sup>46</sup> Table 57 lists percent of children who completed *all immunizations* across 16 programs. The average percent per program increased from 86.06% in last year to 91.00% this year. This improvement impacted a total of 883 children in Kern County since the last fiscal year.

**TABLE 57: PERCENT OF CHILDREN WITH RECOMMENDED IMMUNIZATIONS**

Program*	FY 2012-13		FY 2013-14	
	n	All Immunization (%)	n	All Immunization (%)
BIH	53	68	30	70
BCDC	23	61	22	82
BCRC	40	98	36	100
DSR	84	98	70	100
DDLCCC	25	92	21	95
EIP	59	90	17	100
EKFRC	117	84	54	85
IWVFRC	56	79	54	85
KRVFRC	50	78	34	88
LVSRP	112	91	103	94
MFRC	119	97	63	100
NOR	179	91	163	92
SHS	59	98	78	100
SFP	25	92	14	93
SENP	130	85	71	89
WSCRC	101	75	53	83

\*Program acronyms are listed in Appendix A.

<sup>46</sup> <http://www.immunize.org/catg.d/p4019.pdf>.

### Smoking Reduction

Children can be exposed to passive smoking during prenatal care and after birth. According to Proposition 10, the public should be educated “on the dangers caused by smoking and other tobacco use by pregnant women to themselves and to infants and young children” (p. 3). As a result of the anti-smoking campaign, the percent of mothers *smoking during pregnancy* dropped from an average of 14.38% in last year to 7.15% this year across 13 programs (Table 58). This positive change was confirmed by CDE data from 989 families this year.

**TABLE 58: PERCENT OF MOTHERS SMOKING DURING PREGNANCY**

Program*	FY 2012-13		FY 2013-14	
	n	Smoke while pregnant (%)	n	Smoke while pregnant (%)
AFRC	86	6	72	0
BCDC	24	17	21	10
BCRC	43	5	29	0
BCSD	276	3	260	2
BIH	50	28	32	10
DDLCCC	23	43	21	33
LVS RP	117	3	106	0
MVIP	76	9	71	6
NOR	197	5	182	2
SENP	142	23	107	11
SFP	25	12	16	6
WIW	23	13	20	0
WSN	64	20	52	13

\*Program acronyms are listed in Appendix A.

Proposition 10 further cautioned against “the dangers of secondhand smoke to all children” (p. 3). As Robles, Vargas, Perry, and Feild (2009) reported, “exposure of children to environmental tobacco smoke (ETS) has been associated with multiple health problems. These problems, including asthma, are particularly critical for children younger than 5 years” (p. 8-9). Programs funded by First 5 Kern maintained a “focus on anti-tobacco education programs” (Armstrong, 2012, p. 21). Across the 12 programs in Table 59, the average percent of children under a *home-smoking setting* decreased from 10.42% in last year to 5.33% this year.

Besides the anti-smoking impact on 723 children this year (Table 59), CDE results from three additional programs (AFRC, BCRC, & LHFRC) confirmed *no smoke exposure* for 148 children in two adjacent years. Therefore, First 5 Kern’s funding was invested in smoke control and child safety according to an assertion of the State Commission, i.e., “Parental smoking and secondhand smoke exposure have been linked to a range of ailments in babies and young children including, asthma, ear infections, pneumonia, bronchitis, and Sudden Infant Death Syndrome (SIDS)” (First 5 California, 2013, p. 30).

**TABLE 59: REDUCTION OF SMOKE EXPOSURE RATE BETWEEN ADJACENT YEARS**

Program*	FY 2012-13		FY 2013-14	
	n	Exposed to smoke (%)	n	Exposed to smoke (%)
BAS	88	10	51	4
BCDC	23	9	22	0
EIP	59	8	17	0
GSR	108	3	107	0
IWVFRC	56	9	54	7
KRVFRC	50	20	34	15
MVIP	73	7	70	3
NOR	179	8	163	3
RSNC	54	6	72	0
SENP	130	22	71	20
WIW	22	5	19	0
WSN	60	18	43	12

\*Program acronyms are listed in Appendix A.

In summary, value-added assessments have been supported by CDE and FSR data to examine the improvement of service outcomes through result tracking. In comparison to last year, the positive impact of First 5 Kern funding is revealed by CDE results on 10 fronts in FY 2013-14:

1. More mothers provided **breastfeeding**, and the improvement was demonstrated across 10 programs that offered services for 665 children;
2. More expectant mothers received timely **prenatal care**. The result impacted 444 children in seven programs;
3. An increase in the rate of **full-term pregnancy** occurred for 852 children in 17 programs;
4. The rate of **low birth weight** dropped among 882 children in 10 programs;
5. **Dental service access** increased for 628 children in 13 programs;
6. Sixteen programs served a total of 883 children and raised the percent of children receiving all **immunizations**;
7. The percent of mothers **smoking during pregnancy** dropped in 13 programs that delivered services for 989 children;
8. Twelve programs demonstrated reduction in the **rate of smoke exposure at home** for 723 children;
9. More parents maintained **two or more reading activities** with children each week, impacting 847 children in 14 programs;
10. More children **attended preschool events** in 14 programs that served 881 children in Kern County.

While the CDE findings represented annual summative results, FSR data indicate formative outcomes between program entry and midyear to avoid ceiling effects:

1. The number of families with **unmet food needs** dropped from 74 to 6 in 14 programs;
2. The number of families with **unmet childcare needs** plunged from 103 to 24 throughout 12 programs;
3. The number of families with **unmet transportation needs** decreased from 136 to 16 across 15 programs;

4. The number of families **lacking convenient childcare providers** decreased from 252 to 71 among 14 programs;
5. The number of families with members who **missed work or school due to childcare** fell from 109 to 25 across 11 programs;
6. The number of families with members **missing work or school due to transportation** plunged from 146 to 28 in 16 programs;
7. The number of families **lacking health insurance coverage** dropped from 232 to 74 throughout 16 programs;
8. The number of families with **unmet dental or eye care needs** declined from 219 to 53 in 14 programs;
9. The number of families **living in unsafe houses** decreased from 104 to 4 across 13 programs.

As First 5 Kern approached its 15<sup>th</sup> anniversary in FY 2013-14, funding stability has been maintained at the program level throughout this funding cycle. However, due to economic inflation, population growth, and minimum wage increase, the stagnant program budget can hardly support the same level of early childhood services in Kern County. Therefore, First 5 Kern's accomplishments are supported by the *turning the curve* effects to maintain the well-rounded progress in service delivery across the state-designated focus areas of *Child Health* (see Tables 50-53 & 56-59), *Family Functioning* (see Tables 41-49), and *Child Development* (see Tables 54 & 55).

## Chapter 5: Conclusions and Future Directions

According to the Statewide Evaluation Framework, two levels of data are needed “to provide accountability information to all stakeholders” (First 5 California, 2005, p. 5). At the first level, descriptive data indicate *how much* has been accomplished in supporting children and their families across a county. At the second level, assessment data are employed to track service improvement on the time dimension. Following this guideline, descriptive data are summarized at both *commission* and *program* levels to evaluate the impact of Proposition 10 funding in each focus area (Chapters 1-3). The service improvement is reflected by assessment outcomes at *family* and *child* levels during a *turning the curve* process (Chapter 4). In combination, the multilevel approach has produced extensive results to inform local and state stakeholders the effectiveness of program support in Kern County.

In clarifying the Results-Based Accountability (RBA) model, Hayes (2002) indicated that another step beyond *turning the curve* was to tell the “*story behind the curve*” (p. 15). This year First 5 Kern selected three programs to demonstrate stories of service delivery in *Child Health*, *Family Functioning*, and *Child Development*. The program highlight was mandatory because “county commissions are required to report annual expenditure and service data on their programs to First 5 California” (First 5 California, 2013, p. 33). To strengthen utility of the annual report, this chapter begins with a description of program stories from service providers. In addition, past recommendations are reviewed to assess ongoing progress in FY 2013-14. Future directions are discussed in a *New Recommendations* section to sustain program improvement next year.

### Recap of the Story Telling in Each Focus Area

The state report templates include highlights of service providers to document program effectiveness in three focus areas.<sup>47</sup> This year First 5 Kern chose Richardson Special Needs Collaborative (RSNC) to illustrate the program impact in *Child Health*. In *Family Functioning*, Differential Response (DR) was selected for reducing recurrence rates of child abuse and neglect in local households. In *Child Development*, School Readiness Program of Bakersfield City School District (BCSD) was reported for strengthening parent education and Summer Bridge provision. Compelling evidence is examined in this section to recap program services and partnership buildings this year.

#### Richardson Special Needs Collaborative

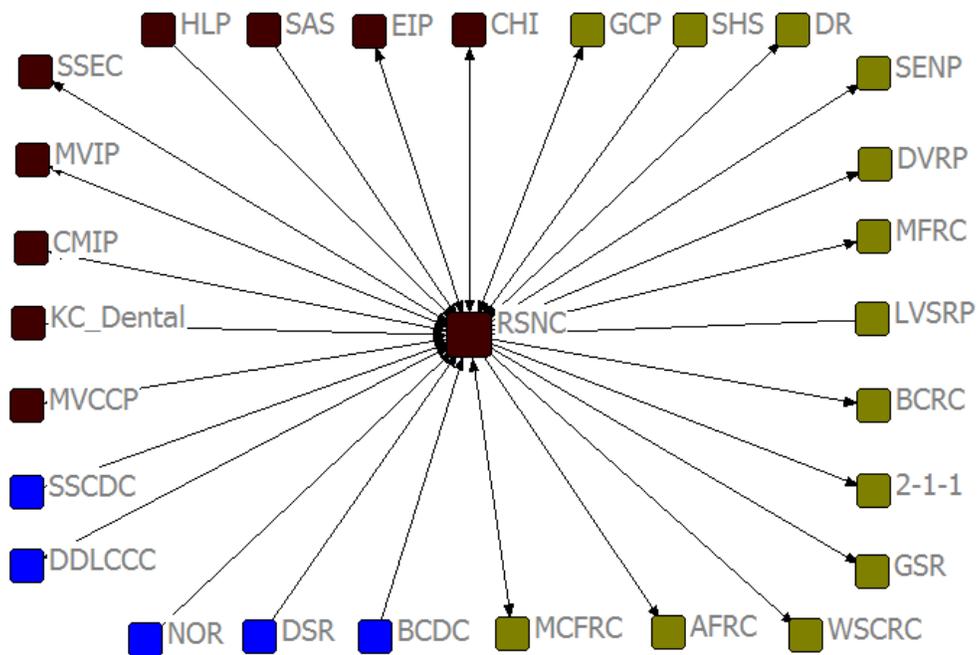
RSNC services were provided in both English and Spanish to support children during mental health interventions. Built on stable funding from First 5 Kern, RSNC increased the number of case management services from 66 in last year to 73 this year. One hundred seventy-nine parents participated in education workshops, a sharp increase from 94 parents last year. Access to RSNC Resource Library increased from 75 parents last year to 84 parents this year. Additional referral services were provided to 159 families, more than doubling the count from last year. RSNC also offered home-based education for 54 parents. Case management outcomes were tracked for 68

<sup>47</sup> [http://www.cfc.ca.gov/pdf/research/reporting\\_tools/AR/Revised\\_Annual\\_Report\\_Guidelines\\_FY\\_13-14.pdf](http://www.cfc.ca.gov/pdf/research/reporting_tools/AR/Revised_Annual_Report_Guidelines_FY_13-14.pdf).

families in RSNC. As a result, the number of families with *unmet dental* and *eye care needs* dropped from 19 at program intake to 1 in 12<sup>th</sup> month. NSCS results indicated significant improvements of parenting knowledge and skills among 41 parents. Seventy-two children were tracked since program intake for *lack of immunization, physical exam, and/or dental care*. RSNC services reduced the case number to 23 by midyear and one at end of the year. In addition, the number of children with *unmet healthcare needs*, including vision care, hearing care, and health insurance, dropped to zero at end of the 12<sup>th</sup> month. RSNC's child behavior assessment also confirmed less concerns on child health and safety between case intake and closure at  $\alpha=.05$ .

As a collaborative partner of Kern County Network for Children (KCNC), RSNC created professional networks with 27 programs receiving support from First 5 Kern. Figure 33 shows nine partners in *Child Health* (brown nodes), 13 service providers in *Family Functioning* (olive nodes), and five programs in *Child Development* (blue nodes). Ten of the partnerships were verified for mutual support. Based on the capacity building beyond program *co-existence*, RSNC has established a track record to enhance professional services for local families. Prior to the recognition from First 5 Kern, RSNC was a recipient of the 2012 Kern County Community Solution Makers Award from Health Net Community Solution (Harrison, 2014).

**FIGURE 33: NETWORK OF RSNC BEYOND THE CO-EXISTING LEVEL**



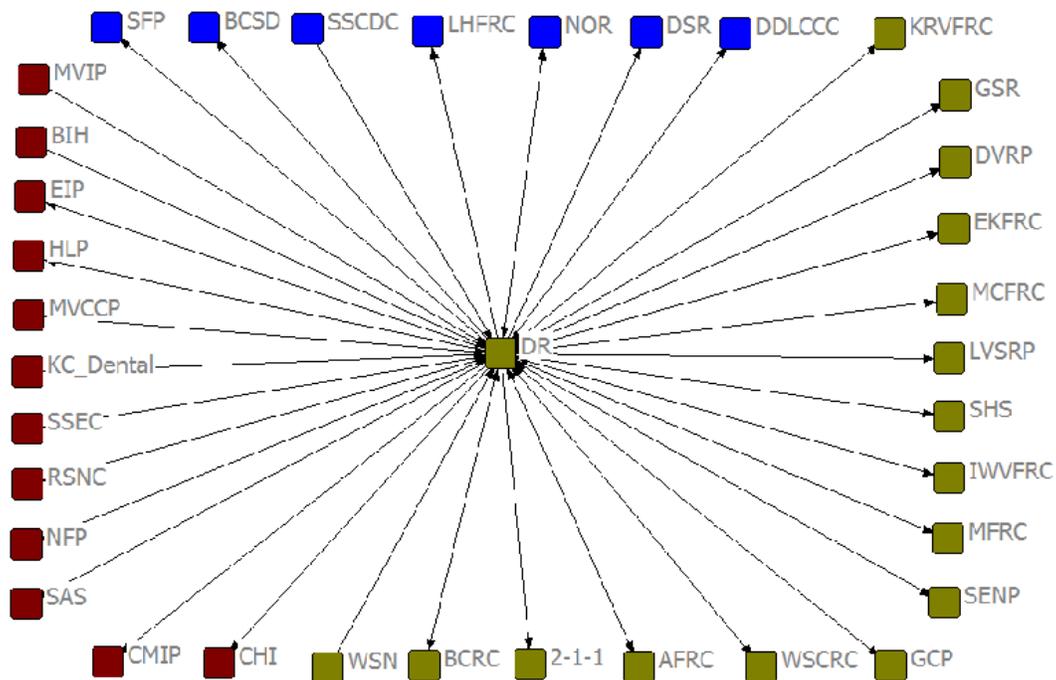
**Differential Response**

DR provided child protection services (CPS) pertinent to specific cases of child abuse and neglect. Upon receiving CPS referrals, service providers were dispatched to contact clients within 72 hours and make an in-home visit within 10 working days. In FY 2013-14, DR handled case management services for 1,920 children. Seventy-three percent of the families completed case plans. An exit survey indicated a 99% rate of

satisfaction. Meanwhile, more than 500 families were tracked by DR, and significant improvement of household conditions has been found in all eight domains of the NCFAS-G scale between pretest and posttest (see Table 17).

In this funding cycle, DR leveraged over 70% of its annual budget from seven federal, state, and local agencies to sustain and expand child protective services. The partnership building was grounded on an extensive network with 35 programs beyond the *Co-Existing* level. As illustrated in Figure 34, the service integration involved 12 partners in *Child Health* (brown nodes), 16 collaborators in *Family Functioning* (olive nodes), and seven programs in *Child Development* (blue nodes). All these partners received funding from First 5 Kern to serve children ages 0-5 and their families. Seventeen of the links were confirmed as mutual partnerships.

**FIGURE 34: NETWORK OF DR BEYOND THE CO-EXISTING LEVEL**

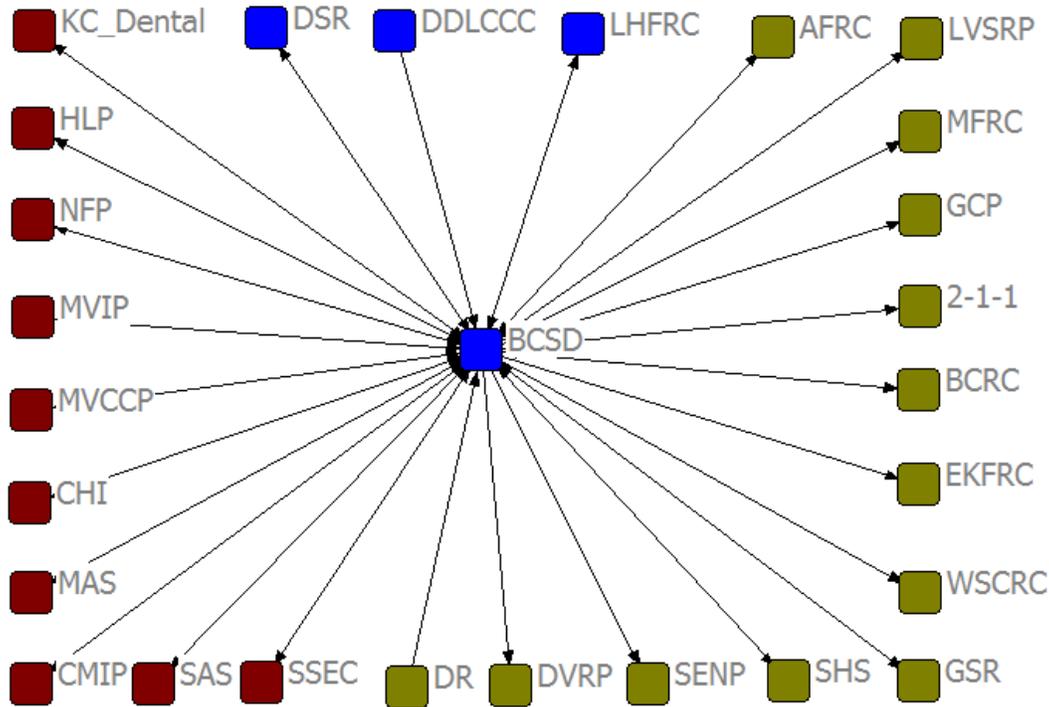


**School Readiness Program of Bakersfield City School District**

BCSD incorporated widespread services to support early childhood development, including (1) assisting 30 children with health insurance enrollment, (2) providing health screening for 179 children, (3) case-managing 114 families, (4) delivering home-based education for 31 children, (5) offering group-based education for 509 parents and 147 children. In FY 2013-14, knowledge of child development has been significantly enhanced in the NSCS results from 223 parents between pretest and posttest. The ASQ-3 data indicated performance of 397 children significantly above the corresponding thresholds in *Communication, Gross Motor, Fine Motor, Problem Solving, and Personal-Social* domains during Months 2-60. More than 92% of the children surpassed all ASQ-3 thresholds. In addition, BCSD offered the Summer Bridge program, and significant improvement of *Cognitive, Communication, Self-Help, Social Emotional, and Fine Motor* skills has been found among 107 children ages 4-5.

As the largest elementary school district in California, BCSD delivered age-appropriate services from three FRCs and 12 elementary school sites. In support of the service coverage, BCSD developed a professional network with 26 First 5 Kern-funded programs beyond the *Co-Existing* level. Figure 35 shows the partnership building across focus areas of *Child Health* (brown nodes), *Family Functioning* (olive nodes), and *Child Development* (blue nodes). Sixteen of the links were confirmed as mutual partnerships.

**FIGURE 35: NETWORK OF BCSD BEYOND THE CO-EXISTING LEVEL**



In summary, stories of RSNC, DR, and BCSD demonstrated effective service delivery and network building among First 5 Kern-funded programs. While service outcomes were categorized in focus areas of *Child Health*, *Family Functioning*, and *Child Development*, the fourth focus area, *Systems of Care*, was illustrated by network building. Table 60 shows partnership counts of RSNC, DR, and BCSD across all focus areas. In comparison, more partnership links were found in *Family Functioning* above the *Co-Existing* level (Table 60). In addition, more partnerships have been built between *Child Health* and *Child Development* than within each focus area. Based on the consistent findings from previous chapters and program descriptions in this section, First 5 Kern funded effective programs to concurrently support children ages 0-5 and their families in Kern County.

**TABLE 60: CONFIRMED PARTNERSHIP COUNTS OF RSNC, DR, AND BCSD**

Program Area	Area of Partnership Count		
	Child Health	Family Functioning	Child Development
Child Health (RSNC)	9	13	5
Family Functioning (DR)	12	16	7
Child Development (BCSD)	10	13	3

## Past Recommendations Revisited

In the last annual report, three recommendations were made to strengthen the momentum of progress at First 5 Kern:

- (1) Enhance alignment among the different levels of Result Indicators in the new RFP process;
- (2) Revise the hierarchy between goals and objectives in the strategic plan;
- (3) Offer Nurturing Parenting Curriculum Training for the 18 service providers that employed NSCS outcomes for program assessment.

In past strategic plans, First 5 Kern designated 47 Result Indicators (RIs) for local services. However, the Scope of Work-Evaluation Plan (SOW-EP) documents covered 29 RIs across 40 programs. The first recommendation addressed this gap between program funding and strategic planning. In FY 2013-14, the commission took steps to stratify RIs in three tiers, i.e., *Expected RIs*, *Implemented RIs*, and *Achieved RIs*. Feedback was collected from a focus group of service providers to support revision of curriculum and assessment for school-readiness programs. Built on the new conceptual framework and program feedback, a plan has been developed to enhance the local curriculum and assessment in FY 2015-16. Therefore, progress has been made to strengthen the link between *Expected RIs* in strategic planning and *Achieved RIs* from program assessment. The evidence indicates that First 5 Kern has implemented the first recommendation from last year.

Proposition 10 requires review of the strategic plan every year through public hearings. In the past, First 5 Kern listed "goals" as a subcategory of "objectives" (e.g., Objective 4.2) in its strategic plan. According to the Results-Based Accountability model, "The word 'objective' is often paired with the word 'goal' to specify a series of 'sub-goals'" (Friedman, 2005, p. 154). Changes have been made this year to reverse the hierarchical structure between objectives and goals in the strategic plan. Hence, the second recommendation has been adopted by First 5 Kern to enhance its conformation to the model of Results-Based Accountability.

While Recommendations 1 and 2 focused on key components of internal planning, Recommendation 3 was derived from external comparisons with sister commissions. In particular, several county commissions employed the NSCS assessment over the past nine years. In these counties, three days of training were offered to help local service providers understand the Nurturing Parenting Curriculum before adopting this curriculum-based instrument. In Kern County, the NSCS instrument was employed by 18 service providers in this funding cycle. Based on the cross-sectional comparison with sister commissions, the third recommendation supported the offer of NSCS trainings for local service providers to improve their curriculum design. First 5 Kern sent staff to a *Training of Trainers* workshop this year. The staff members have been certified as Nurturing Parenting Trainers. Therefore, First 5 Kern has initiated changes to address the third recommendation.

In summary, First 5 Kern has completely addressed all recommendations from last year. In addition to revising its strategic plan, First 5 Kern worked with service providers through focus-group discussions to examine RIs at different levels. The commission staff received training to support NSCS assessment across local programs.

The collaborative efforts reflected the policy impact from evaluation recommendations in Kern County. As was indicated by KCNC (2013), “Working collaboratively is vitally important and is something Kern does well” (p. i).

**New Recommendations**

To channel more state investment in direct services, First 5 Kern maintained a frugal budget in grant administration. Upon its inception, the Board of Supervisors of Kern County granted permission to use “eight percent (8%) of the annual fund allocation” for administrative and staff support (Ord. G-6637, 1999). In FY 2013-14, a sister commission spent eight percent of its budget on administration.<sup>48</sup> Nonetheless, First 5 Kern kept the administrative spending at 6.14% of its total budget.

In compliance with the IRB requirements, confidentiality training was provided by an internal staff member without adding more administrative positions. Meanwhile, the external evaluator made quarterly IRB reports to abide by the federal, state, and local regulations for data collection. Site visits were conducted by internal evaluators to monitor unexpected adverse effects at program sites. Through the seamless teamwork, First 5 Kern no longer paid overhead to a private company for the IRB service, which put First 5 Kern’s evaluation budget under 4.8%. Without the collaborative platform, a sister commission of comparable size has to spend 9% of its budget on evaluation.<sup>49</sup> Built on these cumulative savings, First 5 Kern used around \$10 million budget to fund the same number of programs that cost \$12 million of state investment in a sister commission.<sup>50</sup>

**TABLE 61: COUNTS OF SERVICE BARRIERS BETWEEN ADJACENT YEARS**

Barrier	FY 2012-13		FY 2013-14	
	Initial	12 <sup>th</sup> Month	Initial	12 <sup>th</sup> Month
1. Childcare Support	17	8	23	2
2. Availability of Healthcare Provider	10	1	8	3
3. Availability of Appropriate Doctor	25	0	9	1
4. Copayment	24	1	12	1
5. Doctor for Medi-Cal	45	9	31	8
6. Health Insurance	43	5	37	1
7. Immigration Status	4	0	5	0
8. Language	45	7	24	9
9. Transportation	257	30	215	38

The funding commitment has led to reduction of service barriers in adjacent years. In Table 61, Core Data Element survey results indicated service barriers on nine dimensions. California Children and Families Resolution required First 5 County Commissions to “Offer services to all children and their families regardless of

<sup>48</sup> <http://first5fresno.org/wp-content/uploads/2014/05/A9-Agenda-Item-3-F5FC-2013-2015-Proposed-Two-Year-Budget.pdf>.

<sup>49</sup> See Note 48.

<sup>50</sup> See Note 48.

immigration status,<sup>51</sup> which demanded elimination of the seventh barrier in Table 61. The other barriers were targeted under the guidance of First 5 Kern's strategic plan. As children entered and exited ages 0-5 each year, Table 61 showed consistent drop of service barriers between entry and exit points.

To sustain the progress according to the future strategic plan, professional practices, as reflected by the positive trends, should be considered to support an informed decision on distribution of the state investment in the next funding cycle. Hence, **the first recommendation is to allocate program funding based on (1) the past track records from service providers and (2) future community needs in First 5 Kern's strategic plan.**

Debruhal (2014) noted that "This current year signifies the 15 year anniversary of the First 5 program throughout California" (p. 8). The current funding cycle lasted five years, covering one third of the lifespan for First 5 Kern. In this period, new service platforms emerged due to the rapid technology expansion in cyberspace, such as the offering of 2-1-1 referrals online since last year. Meanwhile, Health Literacy Program of Bakersfield Adult School incorporated additional services that were not reflected by outcome measures of the "Be Choosy Be Healthy" instrument. MVIP also adopted NSCS assessments that were not specifically designed for parents of medically vulnerable children. Thus, **the second recommendation is to exercise local creativity and incorporate new indicators that are more pertinent to the improvement of service delivery in Kern County.**

Proposition 10 stressed disseminations of valid results to "inform involved professionals and the general public about programs that focus on early childhood development" (p. 3). In the last year, First 5 Kern results were distributed in the Journal of Social Service Research (JSSR) (Wang, Henderson, & Harniman, 2013) and at the 2013 annual meeting of National Association for the Education of Young Children (NAEYC) in Washington, DC (Wang, Ortiz, & Rodriguez, 2013). In June 2014, another article, "An Empirical Study of Ambulatory Surgery Services in Multilevel Context" (Navarro, Maier, Ortiz, & Wang, 2014), was accepted for presentation at the 142<sup>nd</sup> annual meeting of American Public Health Association (APHA) in New Orleans.

Meanwhile, the reports of First 5 Kern were subjected to external peer reviews and recruited for dissemination by the Education Resources Information Center (ERIC) of U.S. Department of Education.<sup>52</sup> Like the status of APHA and NAEYC as the major organizations in public health and child development, ERIC is the largest digital library of education literature.<sup>53</sup> The scholarly publications and nationally-refereed presentations not only offered a chance for staff development in these professional communities, but also allowed First 5 Kern to enrich the existing knowledge with its innovative findings from Kern County. With the ongoing support and protection from IRB protocol, **the third recommendation is to maintain visibility of First 5 Kern through extensive dissemination of program findings.**

<sup>51</sup> [http://www.cafc.ca.gov/pdf/media/publications/pub\\_F5C\\_PrinciplesEquity-Spread.pdf](http://www.cafc.ca.gov/pdf/media/publications/pub_F5C_PrinciplesEquity-Spread.pdf).

<sup>52</sup> See "2010-11 Annual Report of First 5 Kern" at <http://files.eric.ed.gov/fulltext/ED538687.pdf>; "2011-12 Annual Report of First 5 Kern" at <http://files.eric.ed.gov/fulltext/ED539378.pdf>.

"2012-13 Annual Report of First 5 Kern" at <http://eric.ed.gov/?q=first+5+kern&id=ED545555>.

<sup>53</sup> <http://learn.st/boards/17762/learnings/131979-eric-world-s-largest-digital-library-of-education-literature>.

In summary, the state commission indicated that "Proposition 10 programs shall allocate sufficient resources to support accountability and evaluation activities."<sup>54</sup> In this chapter, Recommendations 1 and 2 were adduced to sustain internal improvement of program effectiveness according to Results-Based Accountability. The third recommendation was designed to broaden the impact of First 5 Kern service outcomes through incorporation of peer reviews from professional organizations. These recommendations are aligned with the state statute that demands service accountability and result dissemination. The enhancement of commission visibility is well-justified for this region where Bakersfield is already larger than well-known cities like St Louis<sup>55</sup> and Kern County covers a land area as large as the state of New Jersey.

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<sup>54</sup> [http://www.cfc.ca.gov/pdf/media/publications/pub\\_F5C\\_PrinciplesEquity-Spread.pdf](http://www.cfc.ca.gov/pdf/media/publications/pub_F5C_PrinciplesEquity-Spread.pdf).

<sup>55</sup> [http://www.bestplaces.net/compare-cities/st.\\_louis\\_mo/bakersfield\\_ca/people](http://www.bestplaces.net/compare-cities/st._louis_mo/bakersfield_ca/people).

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**Appendix A**  
**Index of Program Acronyms**

**A**

Arvin Family Resource Center (AFRC), 30-32, 41, 44, 46, 47, 49, 55, 71-74, 76-78, 84

**B**

Bakersfield Adult School Health Literacy Program (HLP), 20, 24, 26, 29, 51

BCSD School Readiness (BCSD), 5, 31-32, 43-44, 46-47, 49, 55-56, 66, 73-75, 80-82, 84, 87, 89-90

Black Infant Health Program (BIH), 20-21, 24, 26, 47, 56, 78, 83, 84

Blanton Child Development Center (BCDC), 31, 43-45, 51, 53, 55-56, 64, 66, 80-81, 83-85

Buttonwillow Community Resource Center (BCRC), 30-32, 41, 44, 46-47, 55, 71-73, 75-78, 80-84

**C**

Children's Health Initiative (CHI), 20-21, 56

Children's Mobile Immunization Program (CMIP), 20-21, 56

Child Signature Program (CSP)

**D**

Delano School Readiness (DSR), 31-32, 43-44, 46-49, 52-55, 68, 71-76, 80-83

Differential Response (DR), 5, 30, 35-37, 39, 41, 87-90

Discovery Depot Licensed Child Care Center (DDLCCC), 31, 43-45, 51-53, 55, 66, 68, 78, 80-84

Domestic Violence Reduction Project (DVRP), 35, 37-39, 56, 71-76

**E**

Early Intervention Program (EIP), 20, 27-29, 56, 64, 78, 80, 83, 85

East Kern Family Resource Center (EKFRCC), 30-31, 33-34, 41, 46-48, 66, 68, 71-76, 83

**G**

Greenfield School Readiness (GSR), 30-32, 41, 44, 46-47, 49, 55, 66, 71-75, 78, 80-82, 85

Guardianship Caregiver Project (GCP), 30, 35, 38-39, 55, 71-72, 74-76

**I**

Indian Wells Valley Family Resource Center (IWFVFC), 30-31, 34, 41, 44, 46-47, 49, 72-76, 78, 80, 82-83, 85

**K**

Kern County Children's Dental Health Network (KC\_Dental), 20, 24, 29, 102

Kern River Valley Family Resource Center – Great Beginnings Program (KRVFRC), 30-32, 34-35, 41, 46-47, 71-76, 78, 80-83, 85

**L**

Lamont Vineland School Readiness Program (LVSRP), 30-31, 41, 44, 46-49, 55, 66, 71-75, 83-84

Lost Hills Family Resource Center (LHFRC), 32, 43-44, 46-47, 49, 53, 56, 66, 71-72, 74-75, 84

**M**

Make a Splash (MAS), 20, 22, 24

McFarland Family Resource Center (MFRC), 30-32, 41, 44-47, 49, 71, 73-78, 80, 82-83

Medically Vulnerable Care Coordination Project (MVCCP), 20, 22-24, 56, 67-68, 79

Medically Vulnerable Infant Program (MVIP), 20-21, 24, 26, 38, 47, 56, 77, 80, 84-85, 93

Mountain Communities Family Resource Center (MCFRC), 30-32, 41, 44, 46-47, 49, 55, 66, 71, 74, 81-83

**N**

Neighborhood Place Parent Community Learning Center (NOR), 31-32, 34, 43-47, 53, 80-85

Nurse Family Partnership Program (NFP), 20-21, 24-26, 56, 66, 68, 78, 81

**R**

Ready to Start (R2S), 7, 43-45, 50, 53, 55

Richardson Special Needs Collaborative (RSNC), 6, 20, 24, 26, 56, 71-72, 74-76, 78, 80, 85, 87-88, 90

**S**

Shafter Healthy Start (SHS), 30-31, 34, 41, 44, 46, 49, 55-56, 66, 71-73, 75-76, 82-83

Small Steps Child Development Center (SSCDC), 31-32, 43-45, 51-53, 56, 66, 68, 78, 80, 82-83

South Fork Preschool (SFP), 31, 43-45, 51-53, 55, 68, 80-84

Southeast Neighborhood Partnership Family Resource Center (SENP), 30-31, 34, 41, 46-47, 56, 75, 77-78, 80-81, 83-85

Special Start for Exceptional Children (SSEC), 20, 24, 29, 56, 77, 83

Successful Application Stipend (SAS), 7, 20, 24-25, 28, 30, 53, 56, 64-65

**T**

The Wind in the Willows Preschool (WIW), 43-44, 51-53, 78, 83-85

**W**

West Side Community Resource Center (WSCRC), 30-32, 41, 44, 46-47, 49, 55-56, 71-78, 81-83

Women's Shelter Network (WSN), 41-42, 44, 46-48, 53, 68, 71-76, 78, 80-81, 84-85

2-1-1 Kern County, 7, 30, 39-41, 43, 45, 55-56, 65-67, 70, 93

**Appendix B**

**Technical Advisory Committee served in FY 2013-14 and Current Year**

**Mimi Audelo (Chair and Commissioner)<sup>56</sup>**

Director of Special Events, San Joaquin Community Hospital

**Sam Aunai (Commissioner)**

Director of Career Technical Education, Taft College

**Tammy Burns**

Coordinator, Early Childhood Council of Kern - Kern County Superintendent of Schools

**Deanna Cloud**

Children's System of Care Administrator, Kern County Mental Health System of Care

**Tom Corson**

Executive Director, Kern County Network for Children

**Jesus Cordova**

Coordinator, Shafter Healthy Start - Richland School District

**Irene Cook**

Childcare Director, Small Steps Child Development Center - Alliance Against Family Violence and Sexual Assault

**Michelle Curioso**

Director of Nursing, County of Kern Public Health Services Department

**Emily Duran (Commissioner)**

Director of Provider Relations, Kern Health Systems

**Jan Hefner**

Director, Children's Health Initiative of Kern County - Mercy Foundation - Bakersfield

**Antoinette Jones-Reed**

Assistant Director, Child Protective Services, Kern County Human Services Department

**Sandy Koenig**

Coordinator, West Side Community Resource Center - Taft City School District

**Bill Phelps**

Chief of Programs, Clinica Sierra Vista

**Larry J. Rhoades (Chair and Commissioner)<sup>57</sup>**

Retired Kern County Administrator

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<sup>56</sup> Mimi Audelo, Technical Advisory Committee Chair (02/2008-08/2013)

<sup>57</sup> Larry J. Rhoades, Technical Advisory Committee Chair (09/2013 - 08/2014)

**Rick Robles (Chair and Commissioner)<sup>58</sup>**

Superintendent, Lamont School District

**Al Sandrini**

Retired School District Superintendent

**Jenni Sill, LMFT**

Kern County Mental Health

**Meserat Springer, PHN**

Public Health Nurse, County of Kern Public Health Services Department

**Lucinda Wasson, R.N.**

Director, Public Health Nursing, County of Kern Public Health Services Department

**Debbie Wood**

Coordinator, Supporting Parents & Children for School Readiness - Bakersfield City School District

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<sup>58</sup> Rick Robles, Technical Advisory Committee Chair (09/2014 – Current)