

FIRST 5 KERN ANNUAL REPORT

FISCAL YEAR 2016-2017



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Acknowledgements

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Throughout Fiscal Year 2016-17, parents and service providers worked with key stakeholders in the ongoing data collection to monitor quality service deliveries across Kern County. The information gathering procedure was reviewed quarterly by the Institutional Review Board of California State University, Bakersfield according to federal, state, and local laws and/or regulations. In retrospect, I thank the following professionals and organizations for supporting the report completion:

- Commissioners Al Sandrini (Chair), Dena Murphy (Treasurer), Claudia Jonah (Secretary), Sam Aunai, David Couch, Mike Maggard, Jennie Sill, Rick Robles (Vice Chair), William Walker, and Cindy Wasson.
- Past Commissioner Mike Maggard.
- First 5 Kern Technical Advisory Committee (TAC).
- First 5 Kern Commission staff:
 - Roland Maier, Executive Director
 - Kathy Ives, Chief Finance Officer
 - Theresa Ortiz, Chief Evaluation/Program Officer
 - Sharon Powell, Administrative Assistant
 - Jan St Pierre, Communications Officer
 - Christine Lollar, Communications and Media Specialist
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 - Diana Navarro, Research Analyst
 - Crystal Gardner, Finance Specialist
 - Charlene McNama, Administrative Finance Specialist
 - Patti Taylor, Senior Finance Officer
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Members of the Technical Advisory Committee are recognized in Appendix B and alternate commission members are listed in Exhibit 1 to acknowledge their professional leadership. While appreciating these indispensable supports, I conducted the data analyses and shall be fully responsible for any inaccuracies in this report.

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Professor of Research Design and Statistics
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Executive Summary

The Kern County Children and Families Commission (First 5 Kern) was created under Proposition 10 (i.e., the Children and Families First Act) in 1998 to support early childhood development and smoking cessation in Kern County. Following Ordinance G-6565 of the County Board of Supervisors, the Commission is responsible for administering the state trust fund from Proposition 10. The state revenue is generated from a 50 cent-per-pack tax on cigarette and other tobacco products. Per requirement of the state statute, this annual report is developed to address Outcome-Based Accountability (a.k.a., Results-Based Accountability) of First 5 Kern.

In Fiscal Year (FY) 2016-17, First 5 Kern funded 42 programs in three focus areas, 14 in *Child Health*, 18 in *Family Functioning*, and 10 in *Child Development* (see Appendix A). In addition, *Service Integration* was identified as the fourth focus area in First 5 Kern's (2016) strategic plan to enhance the *Systems of Care*. Based on a legislative amendment in 2005, the State Controller's Office (SCO) assumed oversight responsibility to audit the local spending. To justify the return to state investment, effectiveness of the annual program support is evaluated using the local service data, and future recommendations are developed according to the local strategic plan (First 5 Kern, 2016) for service improvement.

New Developments

Proposition 10 designates 80% of its revenue to First 5 county commissions. The state investment is based on the proportion of live birth in each county. As a result, the relatively high birth rate has channeled additional state investment in Kern County to partially balance the impact of revenue decline due to less tobacco consumption. While the funding mechanism for Proposition 10 remains unchanged in FY 2016-17, two new developments occurred in the context of early childhood support across Kern County:

First, the passage of Proposition 56, *the California Healthcare, Research and Prevention Tobacco Tax Act of 2016*, caused an increase of the state tobacco tax from \$.87 to \$2.87 per pack of cigarettes. In its implementation plan, the state tax on other tobacco products, such as e-cigarettes, did not start until July 1, 2017. Thus, the exact amount of backfill cannot be configured for Proposition 10 before end of this fiscal year.

Secondly, system building has been promoted by the state commission as a priority this year¹. In response, First 5 Kern expanded its visibility on social media to strengthen program networking. In addition to maintaining an informative website at <http://first5kern.org/>, First 5 Kern added *Instagram*, *Twitter*, *Pinterest*, and *LinkedIn* sites to report early childhood development and parent education efforts across Kern County. This initiative was led by a new Communications and Media Specialist, and has generated a five-star rating from 230 Facebook followers (average 400 viewers per post), 894 pins in Pinterest, 4,000 impressions through LinkedIn, 155 followers on Twitter, and 71 followers on Instagram (144 posts). By end of FY 2016-17, the online outreach became an integral component of the local professional network to disseminate community

¹ http://www.cafc.ca.gov/pdf/commission/meetings/handouts/Commission-Handouts_2016-04/Item_6_-_State_Budget_and_Legislative_Update.pdf

newsletters and foster public input, interaction, information-sharing, and collaboration among stakeholders across Kern County.

In summary, Proposition 56 has an unprecedented impact for increasing California tobacco tax from *approximately half of the national average to the ninth highest tax* across the United States (Dillon, 2016). In Kern County, the effort on system building is further reflected by establishment of First 5 Kern's visibility on social media to promote program support for children ages 0 to 5 in the areas of health and wellness, early childcare and education, parent education and support services, and integration of services.

Improvement of Program Performance

To sustain improvement of local service deliveries, First 5 Kern tracked the impact of its funded programs on the time dimension. As a result, evidence has been gathered to reflect the ongoing progresses within this fiscal year and/or between adjacent years on 16 aspects.

Within FY 2016-17, improvements were made on six aspects

1) Screening of Child Development

- Twenty-one programs tracked developmental growth of 1,749 children in months 2-60. Child performance was found significantly above the age-specific thresholds across all Ages and Stages Questionnaire-3 (ASQ-3) domains;

2) Assessment of Parent Education

- Pretest and posttest data were gathered from 89 families across six court-mandated parent-education programs. The results showed strong effect sizes (i.e., Cohen's $d > .80$) from Adult-Adolescent Parenting Inventory-2 (AAPI-2) findings;

3) Enhancement of Child Protection

- The Differential Response (DR) program demonstrated strong and significant impact on child protection. DR data tracked over 600 children across Kern County;

4) Satisfaction of Parent Workshops

- On a five-point scale with "5" representing the most positive result, effectiveness of 10 Nurturing-Parenting workshops was indicated by improvement of the average rating from 3.25 in pretest to 4.22 in posttest across 1,138 responses in seven programs;

5) Strengthening of Preschool Preparation

- Ready to Start conducted pretest and posttest assessments to show improvement of preschool preparation among 362 children in four school

districts. The effect size was 1.71, indicating its strong practical impact on kindergarten readiness;

6) Effect on Childcare Support

- First 5 Kern monitored stability of 295 families across 12 programs. At the program entry, an average of 2.8 families indicated unmet childcare needs. The quarterly data tracking showed the number decreases to 1.1 and 0.3 families per program in months 3 and 6, respectively. No family reported unmet childcare needs in nine programs by midyear;

In comparison to last year, programs improved services on 10 aspects

1) Offering of Home Reading Activities

- The number of children being read to twice or more times per week was tracked for 604 families in 14 programs. The rate increased from 58.9% in last year to 70.2% this year;

2) Expansion of Prenatal Care Coverage

- The percent of mothers receiving prenatal care increased across 14 programs from 88.8% in last year to 99.3% this year across 791 families. Five of the programs reached 100% this year;

3) Implementation of Well-Child Checkup

- The proportion of families having annual well-child checkup increased across 16 programs from 81.7% in last year to 91.5% this year. These programs jointly completed Core Data Elements surveys for 1,823 children in FY 2016-17;

4) Increase of Full-Term Pregnancy

- The percent of full-term pregnancy increased from 79.5% in last year to 88.4% this year across 13 programs. Altogether, these programs served 1,703 newborns this year;

5) Decline of Low-Birth Weight

- The rate of low-birth weight decreased from 12.2% in last year to 7.9% this year in 12 programs. These programs served a total of 1,820 children in FY 2016-17;

6) Expansion of Breastfeeding

- The average breastfeeding rate across 15 programs increased from 64.0% in last year to 76.7% this year. This change supported healthy growth of 825 children in Kern County;

7) Increase of Preschool Involvement

- The rate of children regularly attending preschool events increased from 23.6% in last year to 30.9% this year. This positive change benefited 823 children since their third birthday across 14 programs in FY 2016-17;

8) Fulfillment of Immunization Requirements

- The percent of children receiving all immunizations increased across 19 programs from 83.8% in the last year to 90.4% this year. This improvement impacted a total of 1,971 children in Kern County after the last fiscal year;

9) Monitoring of Dental Care

- The proportion of children with annual dental checkups across 19 programs. On average, the percent across these programs increased from 45.2% in last year to 51.0% this year. A total of 1,895 children benefited from this change in FY 2016-17;

10) Reduction of Prenatal Smoking

- The rate of prenatal smoking was reduced from 10.8% in last year to 3.6% this year across 14 programs. The result impacted 911 newborns this year.

While impact within this year demonstrated results-based accountability across multiple programs for the annual outcome reporting, progresses between adjacent years was guided by First 5 Kern's (2016) strategic plan to "facilitate turning the curve on result indicators that most accurately represent the developmental needs of Kern County's children ages prenatal through five and their families" (p. 3).

Summary of Evaluation Activities

To assess the ongoing progress, the following evaluation activities have been completed under the Commission's leadership:

1) Presented evaluation reports for different stakeholders, including:

- Kern County Board of Supervisors (televised presentation on 5/23/2017).
- The First 5 Kern Commission (annual report presentation on 2/1/2017).
- The 2016 annual meeting of the National Association for the Education of Young Children (NAEYC) (research report on examining the impact of Proposition 10 funding by Ortiz et al. in November, 2016).
- California State University, Bakersfield Institutional Review Board (IRB) (quarterly reports to ensure the commission compliance to legal stipulations).

2) Filed an annual report to the state commission:

- First 5 Kern annual report was submitted to the state commission in Fall, 2017.

3) Expanded a theoretical framework for Cost-Benefit Analysis (CBA) of early childhood support programs:

- The past literature was primarily focused on the impact or “use value” of early childhood support for the society. By design, the benefit generated by First 5 Kern was not for its own consumption, but in exchange for better lives of the future generation. In this context, “exchange value” was introduced from the principles of economics to triangulated CBA results from both producer and consumer perspectives. Built on a contrast of the local impact with and without Proposition 10 support, the exchange value is created by the replacement cost of program administration to expand the benefit configuration from use-value assessment.
- 4) Maintained a secured data portal on Blackboard to share and archive evaluation data for report construction:
- A password-protected setting was sustained for transfer of individually-identifiable data between internal and external evaluators.
- 5) Continued professional development in evaluation data analysis:
- The evaluation team learned new tools for network and statistical data analyses.
 - First 5 Kern renewed a state license for data access from the Office of Statewide Health Planning and Development (OSHPD).
- 6) Collected common assessment data across multiple programs:
- ASQ-3 data were gathered from children ages 0-5 across 21 programs.
 - AAPI-2 data were collected from six programs.
 - Child Assessment-Summer Bridge data were accumulated from 12 programs.
 - Core Data Element survey data were collected from 29 programs.
 - Birth Survey data were gathered from 29 programs.
 - Family Stability Rubric data were collected from 16 programs.
 - Desired Results Developmental Profile-2015 data were gathered from infants/toddlers, preschoolers, and children with disabilities in seven programs.
 - Parenting Survey data were collected from 10 Nurturing-Parenting workshops across six programs.
- 7) Gathered program-specific data in Child Health, Family Functioning, and Child Development:
- Eyberg, Sutter-Eyberg, and Be Choosy, Be Healthy data were collected in Child Health.
 - North Carolina Family Assessment Scale for General Services data were gathered in Family Functioning.
 - Ready-to-Start Scorecard data were obtained from Child Development.
- 8) Collected community feedback on local service needs through 12 town hall meetings:
- In collaboration with the family resource centers and community agencies, town hall meetings took place in Arvin/Lamont, Bakersfield (including Greenfield,

Oildale, Southeast), Delano, Mountain Communities, Kern River Valley, Lost Hills, Mojave, Ridgecrest, Shafter, and Taft.

9) Sponsored an internship from California State University, Bakersfield:

- An intern was supervised to assist evaluation data cleaning/exporting and result presentation at the 2016 annual meeting of NAEYC.

Highlights of Exemplary Programs

Each year, the state commission requires highlights of at least two exemplary programs for annual reporting. Justification of the program recognition must include three components: (1) Most Recent Compelling Service Outcome, (2) Benchmark/Baseline Data, and (3) Outcome Measurement Tool (First 5 California, 2016a). In examining the evaluation findings across service providers, First 5 Kern chose two effective programs to illustrate exemplary local services in its annual report to the state.

Neighborhood Place Community Learning Center (NPCLC)

NPCLC is funded in the focus area of Child Development to offer programs and activities for children ages 0-5 and their parents to facilitate kindergarten transition. Outcomes of child development are indicated by findings across 211 children using age-specific thresholds of the Ages and Stages Questionnaire-3 (ASQ-3) in Communication, Fine Motor, Gross Motor, Personal-Social, and Problem Solving domains. A norm-referenced Adult-Adolescent Parenting Inventory-2 (AAPI-2) is employed to evaluate effectiveness of its court-mandated education for 23 parents. In comparison to last year, the Core Data Elements Survey indicates percent of families having children being read to twice or more times per week increased from 78.1% to 81.6%. While these compelling service outcomes impacted 171 families in FY 2016-17, NPCLC has its service coverage across 125,000 residents in 215 square miles. Thus, the service outcome is not only illustrated in the program merit, but also reflected by the broad impact.

Among four instruments that are employed for the data gathering, ASQ-3 is developmental screening tool for children ages 0-5. AAPI-2 is an instrument for assessing parenting and child rearing behaviors. Core Data Elements Survey is grounded on a questionnaire to monitor health and social outcomes. Birth Survey uses a questionnaire for documenting prenatal care and birth conditions. Positive changes have been delineated through the system data collections at child, parent, and family levels.

In particular, the ASQ-3 data indicate child performance significantly above the age-specific thresholds at $\alpha=.0001$. The effect sizes are larger than 2.35 to indicate strong program impacts. The AAPI-2 results show improvement of parent beliefs against five constructs: (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, and (E) Oppressing children's power and independence. The change between pretest and posttest is significant at $=.0001$ with effect size >3.7 to reconfirm strong practical impact from NPCLC. With partnership support, NPCLC also illustrates improvement of childrearing practice among parents. As a result, rate increase has occurred in (1) full-term pregnancy from 92.3% in last year to

94.7% this year, (2) prenatal care coverage from 86.7% in last year to 91.2% this year, and (3) insurance coverage from 92.9% in last year to 96.6% this year.

Lamont Vineland School Readiness Program (LVSRP)

LVSRP is a program in the focus area of Family Functioning to offer case management and parent education for improvement of Nurturing-Parenting (NP) knowledge pertaining to service outcomes in childhood development, kindergarten preparation, and family stability. Parent education services are delivered through 10 NP workshops, and the outcome is indicated by participant responses on whether they have learned something applicable to their children. In addition, ASQ-3 is employed to screen child development against age-specific thresholds in Communication, Fine Motor, Gross Motor, Personal-Social, and Problem Solving domains. In comparison to a total of 96 ASQ-3 screenings last year, LVSRP increased the screening count to 134 this year. Family stability indicators are monitored quarterly to assess improvement of household conditions that are critical to supporting health and the development of children ages 0-5.

In addition to employing ASQ-3 for child developmental screening, LVSRP incorporates two approaches to track program impacts, (1) NP Workshop Survey is built on an instrument for rating outcomes of 10 workshops of Nurturing-Parenting training, and (2) Family Stability Rubric (FSR) is employed to support a longitudinal assessment to identify family stability.

As a result, NP workshop participants indicated readiness to apply what they learned to their children. The first nine NP workshops were rated by 89 participants on a five-point scale with five representing the most positive outcome. The average rating increased from 2.81 in pretest to 3.87 in posttest to confirm significant difference at $=.0001$ [i.e., $t(88)=6.15$, $p<.0001$]. The effect size equals 1.31, indicating a strong program impact in the NP learning outcomes. At end of the 10th workshop, 92.3% of participants reported more confidence in helping children handle stress in positive ways. LVSRP also increased the proportion of children surpassing the ASQ-3 thresholds in Communication, Fine Motor, Gross Motor, Personal-Social, and Problem Solving domains by at least four percent over the last year. Meanwhile, household conditions demonstrated improvement in housing affordability, insurance coverage, childcare support, and food spending according to the FSR findings.

In summary, this report is built on a requirement of Proposition 10 to delineate evidences in the commission annual report to the state. To streamline the result presentation, three approaches have been taken to conform to the Statewide Evaluation Framework (First 5 California, 2005) on information triangulation: (1) descriptive data were gathered to identify one exemplary program in each focus area, (2) assessment data were aggregated from pretest and posttest settings to evaluate the program impacts on multiple indicators, and (3) trend data are examined across service providers to configure a "road map" of program improvement on the time dimension. The data gathering procedure was reviewed and approved by an Institutional Review Board according to federal, state, and local laws and regulations. It was stipulated in First 5 Kern's (2017) strategic plan that "The results-based accountability model, as adopted by First 5 California, requires the collection and analysis of data and a report of findings in order to evaluate the effectiveness of funded programs" (p. 10).

In this report, a five-chapter structure is adopted to summarize the impact of Proposition 10 funding in Kern County. In Chapter 1, an overview of First 5 Kern’s vision, mission, and partnership building is presented at the commission level. Based on the program affiliation, service outcomes are examined across three focus areas of *Child Health*, *Family Functioning*, and *Child Development* in Chapter 2. To address the fourth focus area, *Systems of Care*, interview data are aggregated across programs to evaluate effectiveness of partnership building (Chapter 3). In Chapter 4, trend data are analyzed from CDE surveys and FSR assessments to track common service indicators between adjacent years. This report ends with a *Conclusions and Future Directions* chapter to highlight current exemplary practices, review past recommendations, and adduce new recommendations to maintain the momentum of ongoing progress in this funding cycle (see Chapter 5).

Chapter 1: First 5 Kern Overview

Proposition 10 funding has been decreasing consistently since 2000 primarily due to decline of tobacco consumption. Even without the impact of Proposition 56, the state revenue dropped at an annual rate of 3-5% in the past (First 5 Association of California, 2017). The trend is accelerating in the current funding cycle, as a result of the smoke age increase from 18 to 21. To cope with the funding inadequacy, the annual auditing report indicated that First 5 Kern reduced its payroll and employee benefit costs by \$144,608 and \$58,177, respectively. In addition, "Actual operating revenues were \$158,834 less than budgeted revenues" (Brown Armstrong Accountancy Corporation, 2017, p. 4). These frugal measures saved the funding for service providers at the forefront of child and family supports across Kern County.

In FY 2016-17, First 5 Kern followed its strategic plan to fund 42 programs for improvement of child health and education services in local communities. As a result, Brown Armstrong Accountancy Corporation (2017), the independent external auditor chosen by Kern County Board of Supervisors², acknowledged that "Kern County's Commission is a leader at the state level and serves as a model for others. Contractors are held to strict standards of financial and program compliance" (p. 3). The collaboration at both commission and program levels has strengthened the system building and maintained a sound financial status for First 5 Kern. As the external auditor recapped,

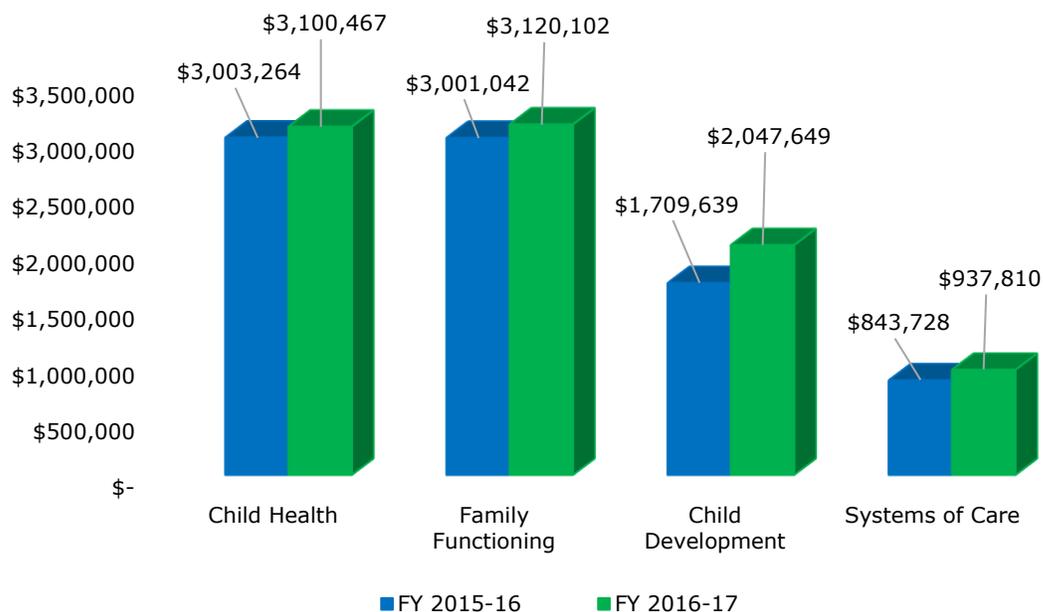
Net position is reported in three distinct categories: net investment in capital assets represents the portion of the Commission's net position that is comprised of capital assets, restricted net position represents resources that are subject to restrictions on how they may be used, and the remaining balance is local initiative and unrestricted. At the end of fiscal years 2016-17 and 2015-16, the Commission was able to report **positive balances in all three categories** of net position. (Brown Armstrong Accountancy Corporation, 2017, p. 5)

The state revenue allocation is based on distribution of newborns in local population, i.e., "county commissions shall receive the portion of the total moneys available to all county commissions equal to the percentage of the number of births recorded in the relevant county" (Proposition 10, p. 8). Across the state, "Birth rates have been declining nearly every year for the last 20 years" (Governor's Budget Office, 2016, p. 139). However, Kern County is predicted to increase its child population from a little over 250,000 in 2016 to 278,144 by 2020 (Kern County Network for Children, 2016). The reverse trend supports more share of the state tobacco revenue in Kern County.

Under the principle of local control, county commissions are required by Proposition 10 to identify, review, and fund programs across service providers for supporting early childhood development from prenatal to age 5. Accompanied with the local population increase is a strong service demand for additional program spending. Figure 1 shows a comparison of First 5 Kern investment between the adjacent years within this funding cycle across focus areas of *Child Health, Family Functioning, Child Development, and Systems of Care*. The total spending increase over the last year amounts to \$618,091.

² <https://www.kerncounty.com/compliance/pdf/report-08082017.pdf>

Figure 1: Increase of First 5 Kern Investment across Four Focus Areas



Source: First 5 Kern annual reports to the state.

It should be noted that Proposition 10 was never adequate to meet all early childhood needs across California. Even at the funding peak in 2000, the state investment averaged to \$200 per child. By 2020, First 5 Association of California (2017) projects a funding level at 40% of the amount at the peak. While the challenge of insufficient funding is encountered by all county commissions, First 5 Kern has taken prudent approaches to meet the acute needs of local service access, including reducing its reserve to increase program investment over last year (see Figure 1).

First 5 Kern also kept its management cost at a low level. For instance, according to First 5 Association of California’s projection in 2016³, First 5 Kern’s state funding is around 90% of the state revenue for First 5 Fresno. The office of First 5 Fresno has 22 employees⁴. In contrast, First 5 Kern hired 12 staff members⁵, less than 55% of the hiring at First 5 Fresno. The efficiency of office operation is built on both effective program coordination and service provider cooperation. As Resnick (2012) pointed out, “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).

Although the essential local services are dependent on the volatile tobacco tax revenue across the state, First 5 Kern was able to allocate more than \$183 million to fund child development programs in Kern County since its inception. Through the Commission strategic planning, First 5 Kern incorporates family-focused, culturally appropriate and community-based supports to ensure that all children are healthy and well-prepared to enter school.

³ http://intranet.first5association.org/townsquare/managed_files/Document/2252/May%202016%20Projections%20-%20FINAL%20with%202014%20Actual%20Birthrates.pdf

⁴ <http://www.first5fresno.org/staff/>

⁵ <http://first5kern.org/our-staff/>

Focus Areas of First 5 Kern Funding

To invest the limited state resources wisely in Kern County, First 5 Kern strategically classified programs into focus areas according to the local service needs. Robison-Frankhouser (2003) described multiple challenges to justify the needs of First 5 Kern support:

In their efforts to deliver these programs to Kern County families, the KCCFC [First 5 Kern] faced geographical and demographic challenges within Kern County. The challenge of mountain ranges that surround the valley region and also isolate the desert areas limited families’ access to needed services. Low-income and/or LEP [Limited English Proficiency] families often struggled to reach services that were too far from their homes. Too often, they found themselves isolated from medical care and child-care services. (p. 6)

It was stipulated by the Health and Safety Code of California that the state commission shall be responsible for “Providing technical assistance to county commissions in adopting and implementing county strategic plans for early childhood development” (No. 130125). In particular, First 5 California reaffirmed that “While counties design their programs to fit their local needs, they must provide services in each of the following four focus areas: Child Health, Child Development, Family Functioning, Systems of Care.”⁶

In balancing the consideration between local needs and professional practices, First 5 Kern identified four focus areas in its strategic plan for Funding Cycle 2015-20:

Three focus areas advance specific children’s issues of Health and Wellness, Parent Education and Support Services, and Early Childcare and Education. The fourth focus area, 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, 2015b, p. 3).

As a member of the 58-county commissions across California, First 5 Kern articulated its focus areas with a strategic plan of the state commission (First 5 California, 2014). Table 1 shows a clear match in the focus area setting between First 5 Kern and the State Commission.

Table 1: Focus Area Alignments at Local and State Levels

	State Focus Area	First 5 Kern Focus Area
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

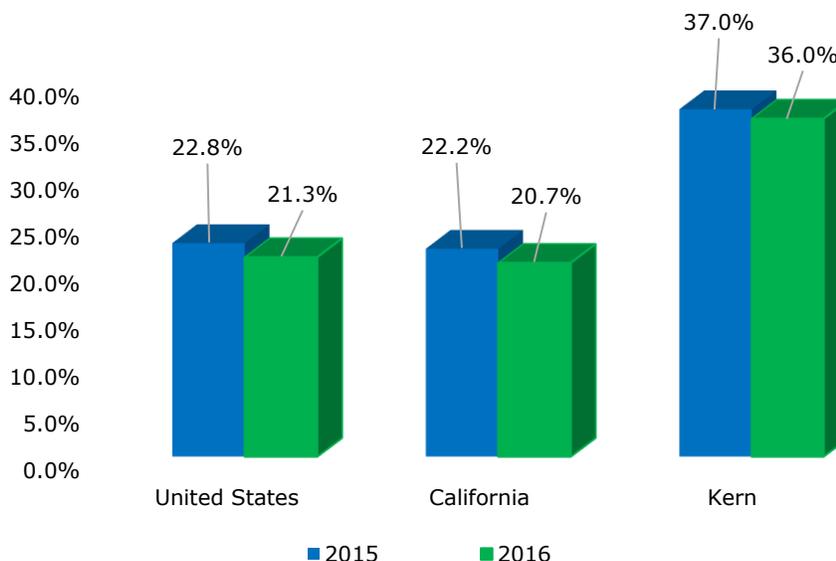
Vision Statement

At the state level, First 5 California (2015a) has announced its vision to have

⁶ First 5 California (2010). *2009-2010 Annual Report*. Sacramento, CA: Author.

all children receive the best possible start in life and thrive. In delivering local support for children ages 0-5, economic deprivation in Kern County is a profound barrier for service providers to overcome. In comparison to child-living conditions in California and across the nation, Figure 2 shows a much higher *poverty rate for children under 5* in Kern County. As LaVoice (2016) noted, “many new moms might not have people or resources in their life to help them through such an important time” (¶. 8). Thus, First 5 Kern-funded programs play an important role in supporting children across these traditionally-underserved communities.

Figure 2: Poverty Rate for Children Under 5 Between Adjacent Years



Source: US Census Bureau, Form S1701.

To reflect the local needs, a key phrase of “supportive, safe, and loving homes and neighborhoods” was incorporated in First 5 Kern’s vision statement to support early childhood development:

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, 2015a, p. 2)

In its current form, the vision statement indicates what First 5 Kern strives to achieve in early childhood services, and is worded as “A broad, general statement of the desired future” based on the *Guidelines for Implementing the California Children and Families Act* (First 5 California, 2010, p. 28). This vision statement serves as First 5 Kern’s compass to guide its identification, implementation, and promotion of best practices for improving child wellbeing in Kern County. Meanwhile, new policy changes may be unforeseen at beginning of a funding cycle, such as the passage of Proposition 56. First 5 Kern is required by Proposition 10 to conduct annual reviews and updates on the vision and mission statements as part of the ongoing strategic planning process. For the purpose of annual reconfirmation, these statements are documented in Chapter 1 of this report.

Mission Statement

To ensure that young children in Kern County thrive with the care and support they need, First 5 Kern adopts both proven and innovative practices to create, leverage, and maximize local resources through strategic planning. The system building has led First 5 Kern to embrace the following mission statement:

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, 2016, p. 1)

The mission indicates a focus of First 5 Kern on children and families with support from well-rounded programs since prenatal care. The mission is also outcome-driven to not only demonstrate the commitment to service integration among the funded programs, but also identify specific emphases in key service areas. This unique combination differentiates First 5 Kern’s function and expertise from other organizations that are collaborating toward realization of the same vision statement. As Smith et al. (2009) noted, “While many entities purportedly provide care coordination, there is a lack of communication among the multiple agencies serving the same child” (p. 7). Hence, the mission statement has addressed the local needs for service system building.

The vision and mission statements have been fully endorsed by the County Commission that includes representations of elected officials, service providers, program administrators, community volunteers, and First 5 Kern advocates (Exhibit 1). Appointments of the Commissioners followed the California Health and Safety Code (Section 130140), i.e., “The county commission shall be appointed by the board of supervisors and shall consist of at least five but not more than nine members.” Each Commissioner completed a government document (i.e., Form 700) to declare no conflict of interest in the funding decisions. The entire commission collectively brings more than 17 years of experience in building and improving *systems of care* to facilitate the full-spectrum of early childhood support in Kern County.

Exhibit 1: First 5 Kern Commission Members

Commissioner	Affiliation
Larry J. Rhoades (Chair)	Retired Kern County Administrator
Al Sandrini (Chair)	Retired School District Superintendent
Dena Murphy (Treasurer)	Director, Kern County Department of Human Services
Claudia Jonah, M.D (Secretary)	Public Health Officer, Kern County Public Health Services Department
Sam Aunai	Vice President of Instruction, Porterville College
David Couch*, 4 th District	Supervisor, Kern County Board of Supervisors
Susan Lerude*	Community Advocate
Mike Maggard*, 3 rd District	Supervisor, Kern County Board of Supervisors
Jennie Sill	Children’s System of Care Administrator, Behavioral health and Recovery Services
Rick Robles (Vice Chair)	Superintendent, Lamont School District
William Walker*	Director, Behavioral health and Recovery Services

Commissioner	Affiliation
Lucinda Wasson	Retired County of Kern Nursing Director and Community Advocate
Alternate Members	
Leticia Perez*, 5 th District	Supervisor, Kern County Board of Supervisors
Michelle Curioso	Director of Nursing, Kern County Public Health Services Department
Antenette Reed	Assistant Director, Child Protective Services of Department of Human Services
Heather Hornibrook	Mental Health Unit Supervisor II, Behavioral Health and Recovery Services

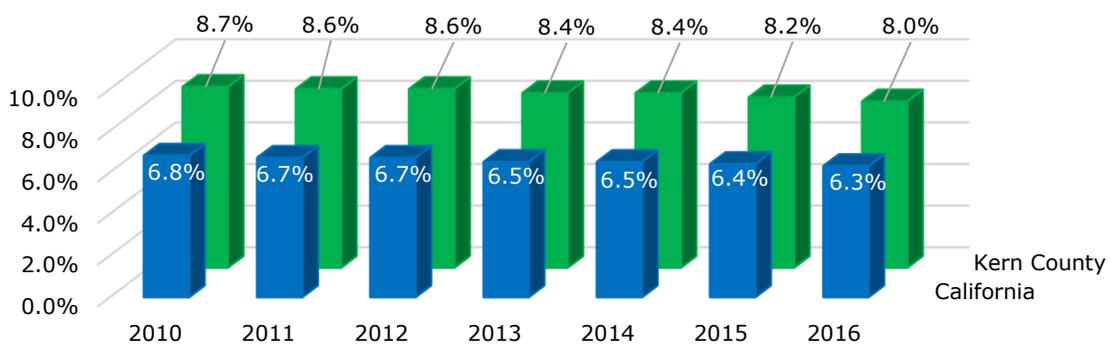
*Served part of the fiscal year.

Commissioners of First 5 Kern are assigned to five committees, Technical Advisory Committee (TAC), Executive Committee (EC), Budget and Finance Committee (BFC), and Personnel Committee (PC). TAC includes four Commissioners and 14 community representatives to advise on all matters relevant or useful to fulfillment of the Commission responsibilities. EC is composed of the Commission Chairperson, the Vice-Chairperson, the Secretary, and the Treasurer to act on any matters pertaining to First 5 Kern operation. BFC is led by the Treasurer and three Commissioners to guide the Commission and the Executive Director on budgetary and financial planning. PC is supervised by the Commission Vice-Chairperson and three Commissioners to attend all personnel matters, including employment, evaluation, compensation, and discipline of Commission employees. The EC, BFC, and PC memberships are publicized in the agenda of each Commission meeting. TAC members are recognized in Appendix B of this report.

Profile of Kern County Children

During the first two years of this funding cycle, the total population in Kern County increased from 882,176 in 2015 to 884,788 in 2016 (US Census Bureau, Form B02001). Local residents with Hispanic or Latino origin counted for more than 52% of the total population in 2016 (US Census Bureau, Form DP05). In comparison to the entire state of California, Kern County has a large proportion of children under age 5 (Figure 3).

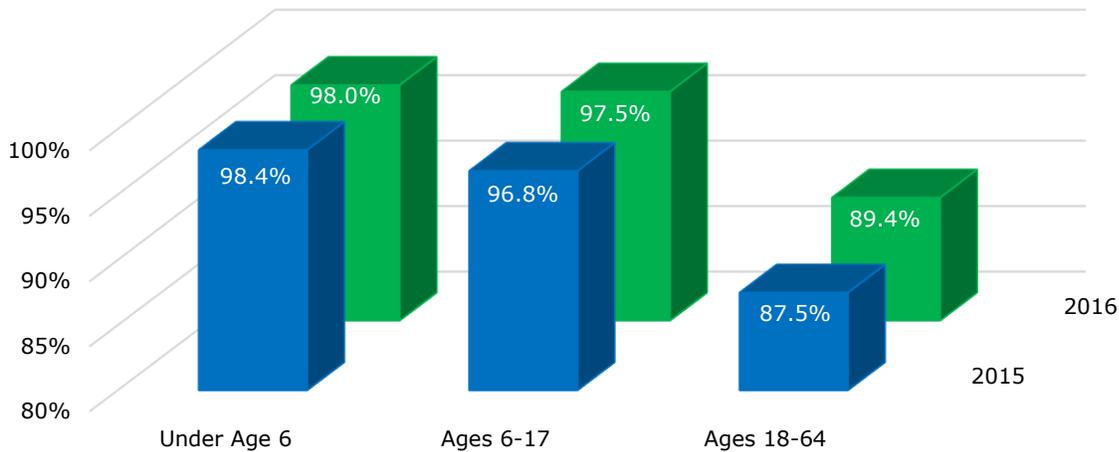
Figure 3: Percent of Children under 5 Years Since 2010 Census



Source: US Census Bureau, Form S0101

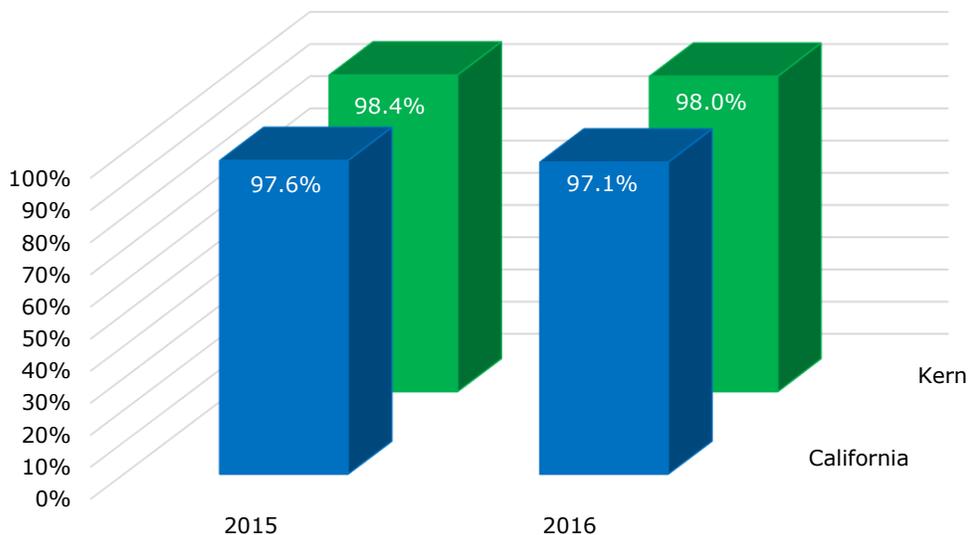
Coincided with the current funding cycle of First 5 Kern, U.S. Census Bureau developed Form S2701 to track *percent of health insurance coverage* across the nation since 2015. Figure 4 shows the largest insurance coverage across the local population under age 6. First 5 Kern-funded *referral* and *enrollment* services targeted on expanding the insurance coverage for young children, and the impact is evident in the age-grouped results within the first two years of this funding cycle (Figure 4).

Figure 4: Percent of Kern Population with Health Insurance Coverage



Source: US Census Bureau, Form S2701

Figure 5: Percent of Insured Children Under Age 6 in 2015 and 2016



Source: US Census Bureau, Form S2701

Furthermore, the concerted effort on population outreach has generated better local outcomes than First 5 Kern’s sister commissions across the state. Figure 5 shows a higher percent of insured children under age 6 in Kern County than their counterpart

across the entire state. In particular, San Francisco County has a land area of 46.89 square miles while Kern communities are spread across 8,132 square miles. Despite the land area difference, both counties received nearly equal amount of state funding from Proposition 10 due to similar population sizes. As a result, an extra effort of *turning the curve* is needed to support young children in Kern County with higher cost for distant service deliveries.

Altogether, First 5 Kern-funded programs cover a total of 15 service categories of the state report glossary, and the *support for health insurance enrollment* belongs a category of *Health Access* (see First 5 Association of California, 2013). The service counts across different categories are listed in Table 2 to summarize what has been accomplished in FY 2016-17. In *Child Health*, six different services are accessed by 6,170 children, three educational supports are provided to 3,612 parents, and the Quality Health Systems Improvement initiative has benefited 284 service providers (see the first eight categories of Table 2). In addition, 2,600 children, 4,987 parents, and 284 service providers are identified as recipients of First 5 Kern support in *Family Functioning* (see categories 9-11 of Table 2). In *Child Development*, 6,582 children, 585 parents, and 189 program providers are beneficiaries of local services funded by Proposition 10 (see categories 12-15 of Table 2).

Table 2: Counts of First 5 Kern-Funded Services across 15 Report Categories

Service Category	Beneficiaries*
[1] Nutrition and Fitness	109 children; 102 parents
[2] Health Access	210 children
[3] Maternal and Child Health Care	165 parents
[4] Oral Health	3,436 children; 3,436 parents
[5] Primary and Specialty Medical Services	1,563 children
[6] Targeted Intensive Intervention for Identified Special Needs	250 children
[7] Safety Education and Injury Prevention	602 children; 74 parents
[8] Quality Health Systems Improvement	284 providers
[9] Community Resource and Referral	3,100 parents
[10] Targeted Intensive Family Support Services	2,600 children; 1,887 parents
[11] General Parenting Education and Family Support Programs	4,539 children; 8,106 parents
[12] Preschool Programs for 3- and 4-Year-Olds	71 children
[13] Infants, Toddlers, and All-Age Early Learning Programs	143 children
[14] Kindergarten Transition Services	1,123 children; 585 parents
[15] Quality Early Childhood Education Investments	5,245 children; 189 providers

*Parents include guardians and primary caregivers. All numbers are quoted from the 2017 state report.

In summary, First 5 Kern is responsible for the wise and effective use of Proposition 10 funds in the local setting that has relatively more young children, and most of them come from ethnic minority background. Scientific literature indicates that the brain of an infant at birth is only 25% of the size of an average adult’s brain. By age 3, the brain growth has reached 90% of that of an adult⁷. Thus, early childhood development has a long-lasting impact on a child’s growth and lifelong journey. Because the local needs for early childhood services are stronger than the rest regions across the state (Figures 2 &

⁷ <http://www.first5scc.org/sites/default/files/PDF/Top10ThingsChildrenNeed.pdf>

3), more investment in FY 2016-17 (see Figure 1) is a proper response to the increasing demand for early childhood service programs in Kern County.

Activities for Service System Building

According to Proposition 10, county commissions are expected to receive guidance on strategic planning from the state commission. First 5 California (2014) indicated in its strategic plan that “advocate[s] for public policies and increased resources to improve outcomes and support systems for children prenatal through 5” (p. 5). Therefore, First 5 Kern is expected to follow the lead and enhance the service system building to sustain effective programs in Kern County. In FY 2016-17, major partnership building is reflected on six fronts:

1. Supporting Summer Bridge Programs with School District Assistance

In 2010, the State Assembly passed a Kindergarten Readiness Act to change the cutoff date for kindergarten entry from December 1 to September 1 in California. Consequently, 4-year-olds born from September 2 through December were required to enroll in Transitional Kindergarten (TK). In 2016, Governor Jerry Brown suggested elimination of the school-based TK services (Frey, 2016) despite the fact that the Governor's budget did not fulfill the Preschool Promise signed into law last year (First 5 Association of California, 2017).

To fill the service gap, First 5 Kern has been sponsoring Summer Bridge programs for kindergarten preparation prior to the beginning of last funding cycle in 2010. Through partnership building, some school districts started to offer in-kind support by providing classrooms, credentialed teachers, or lunches for participating children in this funding cycle. According to James Heckman (2012), a Nobel Prize Laureate, “The highest rate of return in early childhood development comes from investing as early as possible” (¶. 2). To address the urgent needs with inadequate state funding, First 5 Kern is exploring the possibility of having school districts absorb the Summer Bridge program cost in the next funding cycle to sustain the support for preschool-aged children in kindergarten transition.

2. Promoting Quality Rating and Improvement System in Kern County

Program quality is essential in early childhood services. As Burchinal et al. (2009) pointed out, “there were larger benefits in terms of children’s development when quality was in the good to high range” (p. 3). In 2012, California received federal funding to create and implement a Quality Rating and Improvement System (QRIS) to evaluate program performance. In FY 2016-17, First 5 Kern channeled Proposition 10 funding from the state to sponsor Infant Toddler QRIS as a rating system in Kern County. As a result, QRIS ratings are posted for participating childcare centers to publicly recognize the service quality from one-star (Licensed and in Good Standing) to five-star (High Quality Plus) categories. Similar to rating systems for restaurants and hotels, the QRIS initiative offers a reliable method to assess, improve and communicate the level of quality in early care and education programs (QRIS National Learning Network, 2011).

First 5 Kern led the development of Kern Early Stars Local Consortium with a broad-based representation across 10 organizations (Burns & Jefferson, 2016). The spirit of partnership building is clearly incorporated in the Kern Early Stars Vision Statement, i.e.,

all those with a role in the provision of early care and education of young children are unified so that every child receives high quality early learning experiences, which contributes to their future success. Because local programs are given opportunities to participate in QRIS-based training for continuous quality improvement, promotion of the QRIS model has an extensive impact on all childcare programs in Kern County, regardless of their license status.

3. Expanding Social Media Communication for Partnership Engagement

As illustrated in the 2016 U.S. presidential election, social media play a critical role in public affairs. In an Executive Director survey conducted by First 5 Association of California, less than 42% of the respondents *agreed or strongly agreed* to a statement, "Our First 5 uses social media effectively"⁸. To amend the gap, First 5 Kern expanded its network building on social media in FY 2016-17. Besides maintaining an informative website at <http://first5kern.org/>, First 5 Kern used *Facebook, Instagram, Twitter, Pinterest, and LinkedIn* sites to report early childhood development and parent education efforts across Kern County. This initiative has generated a five-star rating from 230 Facebook followers (average 400 viewers per post), 894 pins in Pinterest, 4,000 impressions through LinkedIn, 155 followers on Twitter, and 71 followers on Instagram (144 posts). By end of FY 2016-17, the online outreach became an integral component of the local professional network to disseminate community newsletters and foster public input, interaction, information-sharing, and collaboration among key stakeholders.

The social media establishment allows First 5 Kern to set a role model for its funded programs, particularly the referral programs like 2-1-1 Kern County (2-1-1), Help Me Grow (HMG), and Medically Vulnerable Care Coordination Program (MVCCP), to deliver accurate information online and cross-promote their work through mutual references. Unlike printed materials, social media can be subjected to quick changes to close information gaps due to unexpected service adjustments at the program level. Hence, the social media expansion has strengthened multilateral collaborations among First 5 Kern, the referral programs, and direct service providers to ensure seamless service access by children ages 0-5 and their families. In addition, First 5 Kern's *Handprints Newsletter* are distributed quarterly via social media to keep the community informed on important policies and practices pertaining to early childhood supports.

4. Leveraging Support from Policy Makers for Program Sustainability

Proposition 10 funding is generated from state tax revenue for tobacco product sales, which positioned early childhood services as a shared responsibility between state and local governments. On January 31, 2017, Executive Director Maier, Commissioner Wasson, and Chief Financial Officer Ives represented First 5 Kern to visit Assemblyman Devin Mathis from District 26, Senator Vidak from District 14, Assemblyman Lackey from District 36, Assemblyman Fong from District 34, Senator Fuller from District 16, and Assemblyman Salas from District 32 per coordination of First 5 Association of California. The joint effort was aligned with the Number 1 priority of First 5 County Commissions to "build strong, effective and sustainable systems to serve young children in California" (Ibid. 8).

⁸ The survey results from 42 Executive Directors were released on 5/20/2017 at http://intranet.first5association.org/townsquare/managed_files/Document/207/First%205%20ED%20Survey%20--%20Communications,%20Connections%20&%20Policy.pdf

At the local level, according to the survey of Executive Directors in FY 2016-17, more than 95% of the respondents indicated their access to and connection with the Board of Supervisors (BOS) in each county (Ibid. 8). First 5 Kern's governance structure includes a county supervisor as its Commissioner to keep BOS informed about the Commission activities. On May 23, 2017, Kern BOS designated an agenda item to reporting high returns of the state investment across 42 programs of First 5 Kern. Similar televised presentations occurred in the past to summarize evidences of results-based accountability per stipulation of Proposition 10. Because state lawmakers and county supervisors are elected by popular votes, First 5 Kern's outreach effort not only sustains public attention on Proposition 10 investment, but also assists local programs to gain the support for early childhood services from the county and state policymakers.

5. Promoting Safe Sleep Initiative for Infant Protection

Sudden Unexpected Infant Death is among the worst and most preventable mortality of children, along with suicide and drownings⁹. In FY 2016-17, First 5 Kern assisted as a stakeholder in reducing child deaths via:

1. Kern Medical Foundation contribution of \$30,000 providing pack-n-plays or cribs to new mothers;
2. City of Bakersfield McMurtrey Aquatic Center funding for the Make a Splash program to offer CPR training, first aid, and water safety education;
3. Safe Sleep social media campaign disseminating tips for parents, care providers, and other stakeholder.

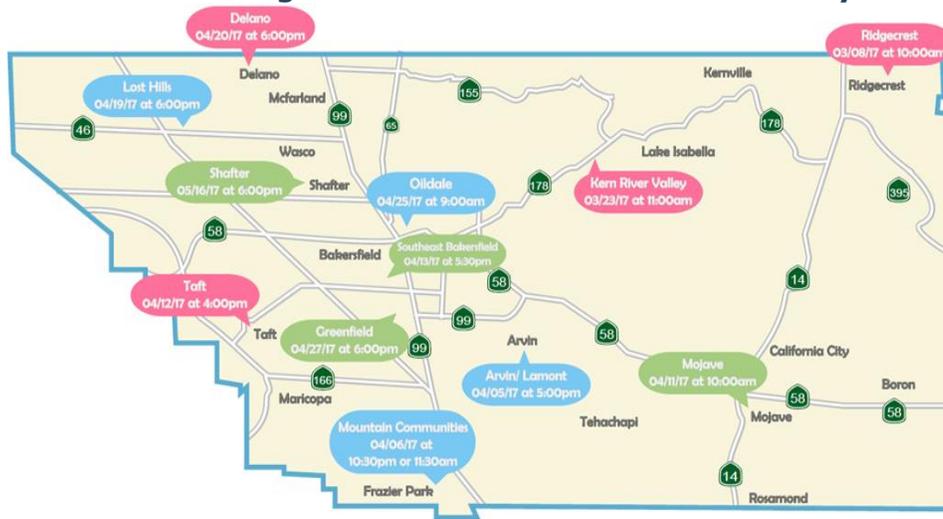
6. Conducting Town Hall Meetings for Future Strategic Planning

At the beginning stage of new strategic planning for next funding cycle, 12 town hall meetings were held across the county in FY 2016-17 to identify service needs and fill system gaps at different locations (Figure 6). All the meetings were open to the public, and have been advertised via flyers, network messaging, and public service announcements. Four components were included in the meeting agenda:

1. Share First 5 Kern's history and planning steps for the next funding cycle;
2. Identify service priorities and gaps that First 5 Kern may address in its Request for Proposal process;
3. Discuss with residents and key stakeholders to better understand local service demands;
4. Gather attendee input, ideas, and priorities pertaining to First 5 Kern's focus areas of Health and Wellness, Parent Education and Support Services, and Early Childcare and Education.

⁹ P.3 of <http://files.constantcontact.com/c405ddb5001/b5acbee4-0f0b-41b0-a569-2a22781ae42f.pdf>.

Figure 6: Town Hall Meetings in FY 2016-17 across Kern County



As a result, four needs have been identified from nearly all the town hall meetings:

- Increasing pediatric services;
- Continuing parenting classes;
- Increasing preschool capacity;
- Increasing transportation services to appointments and services.

The first three points are directly linked to First 5 Kern’s support in the focus areas of Child Health, Family Functioning, and Child Development. The last point is related to the geographically-widespread Kern County that needs transportation services for program access. Hence, additional attention needs to be placed on the service-receiving part. As most Executive Directors indicated in 2017, “The First 5s use innovative and creative approaches to leverage resources and maximize existing funding streams to ensure that young children receive the care and support they need to thrive” (Ibid. 8).

Kern County spreads across a land area as large as New Jersey. Consequently, families continue to face challenges of service access due to lack of transportations in outlying areas. Mobile services, such as the support of immunization van, do not have adequate funding to cover remote communities of Lost Hills, Kern River Valley, and East Kern. Since Proposition 10 funding is not based on the distance of service delivery, TAC members have analyzed the community input and begun to consider a local solution, such as collaboration with regional transportation agencies to create more convenient routes for service access in remote locations. In this regard, local town hall meetings, as well as the other four partnership-building initiatives in this section, not only revealed gaps in the existing service system, but also guided enhancement of program support across the vast valley, mountain, and desert communities.

Enhancement of Local Community Support

In FY 2016-17, local advocates, funders, health care experts, and business leaders supported First 5 Kern’s efforts to build on proven best practices and sponsor cost-

effective programs for local service deliveries. As was noted by Brown Armstrong Accountancy (2015), "Contractors are held to strict standards of financial and program compliance. The Commission also performs administrative site visits to monitor contract compliance with the requirements of their general agreement and to assist in program evaluation, sustainability, and improvement" (p. 3). To reciprocate the mutual partnership building, First 5 Kern made outreach efforts to serve as an active participant in 28 countywide undertakings (Table 3).

Table 3: First 5 Kern’s Participation in Local Undertakings

• 34 th Street Neighborhood Partnership
• Bakersfield College Child Development Advisory Committee
• Buttonwillow Community Collaborative
• Community Connection for Childcare Foundation Advisory Committee Meetings
• Delano Neighborhood Partnership
• Early Childhood Council of Kern Meetings
• East Bakersfield Community Collaborative
• East Kern Collaborative
• General Collaborative
• Good Neighbor Festival Committee
• Greenfield H.E.L.P.S (Healthy Enriched Lives Produce Success) Collaborative
• Head Start – Policy Council
• Health Net Kern Community Advisory Committee
• H.E.A.R.T.S (Help, Encourage, Advocate, Resources, Training, Support) Connection
• Indian Wells Valley Collaborative
• Kern River Valley Collaborative
• Lost Hills Collaborative
• McFarland Community Collaborative
• Medically Vulnerable Care Coordination Committee
• Oildale Collaborative
• Richardson Collaborative
• Shafter Healthy Start Collaborative
• South Chester Collaborative
• Southeast Neighborhood Partnership Collaborative
• South Valley Neighborhood Partnership Arvin/Lamont Weedpatch Collaborative
• Taft Collaborative
• Wasco Collaborative

In the *Integration of Services* section of First 5 Kern’s (2016) strategic plan, an objective has been set to address “Community strengthening efforts that support education and community awareness” (p. 7). To sustain partnership building, a total of 12 TAC and/or Commission meetings were held regularly throughout the year to keep the community informed about First 5 Kern activities. In addition, the Commission staff participated in First 5 California Summit in 2016 to expand network connections across sister counties. Table 4 lists 49 outreach services that are accomplished by First 5 Kern at the community, county, and state levels. Similar track records have been established since last funding cycle (e.g., Wang, 2016). In retrospect, First 5 Kern’s drive to improve systems of care across local communities is grounded on its 17 years of extensive experiences from grant administration, program development, and public campaign for early childhood support.

Table 4: First 5 Kern’s Outreach Effort to Promote Public Awareness

Event	Initiator	Participant	Count
Community	<ul style="list-style-type: none"> • First 5 Kern Newsletter • First 5 Kern Strategic Plan • First 5 Kern Website 	<ul style="list-style-type: none"> • Community Fairs – Exhibit Booth (4) • Rotary Groups 	8
County	<ul style="list-style-type: none"> • Chamber of Commerce Governmental Review Council • First 5 Kern Contractor Gathering • Kern County Board of Supervisors Meetings • Kern County School Boards Association • News Conferences (2) • Nurturing Parenting – Best Practices Meetings • Town Hall Meetings (12) 	<ul style="list-style-type: none"> • Kaitlyn’s Law: Purple Ribbon Month Committee – Safety in and around vehicles • Kern Association for the Education of Young Children • Kern Council for Social Emotional Learning Meetings • Kern County Breastfeeding Coalition • Kern County Child Assessment Team • Kern County Homeless Collaborative – Coordinated Entry and Assessment Committee • Kern County Network for Children’s Collaborative • Kern County Superintendent of Schools Kern Early Stars Consortium • Kern Medical Safe Home, Safe Baby • MVCCP Trauma Informed Care Conference • Safe Sleep Coalition of Kern • Safely Surrendered Baby Committee • Tobacco Free Coalition of Kern 	33
State	<ul style="list-style-type: none"> • First 5 Kern Legislative Visits (2) 	<ul style="list-style-type: none"> • California QRIS Consortium Meeting • Central Valley Regional Meeting • First 5 California Child Health, Education, and Care Summit • First 5 California Meetings • First 5 Association of California Meetings • First 5 California Statewide Communications Region Representative 	8

In summary, First 5 Kern followed the mandates of Proposition 10 to collect program data for demonstrating results. The results-based accountability (RBA) requires evidence-based reports on the effectiveness of funded programs, including the consideration of more resource demand to deliver services in remote areas (Waller, 2005).

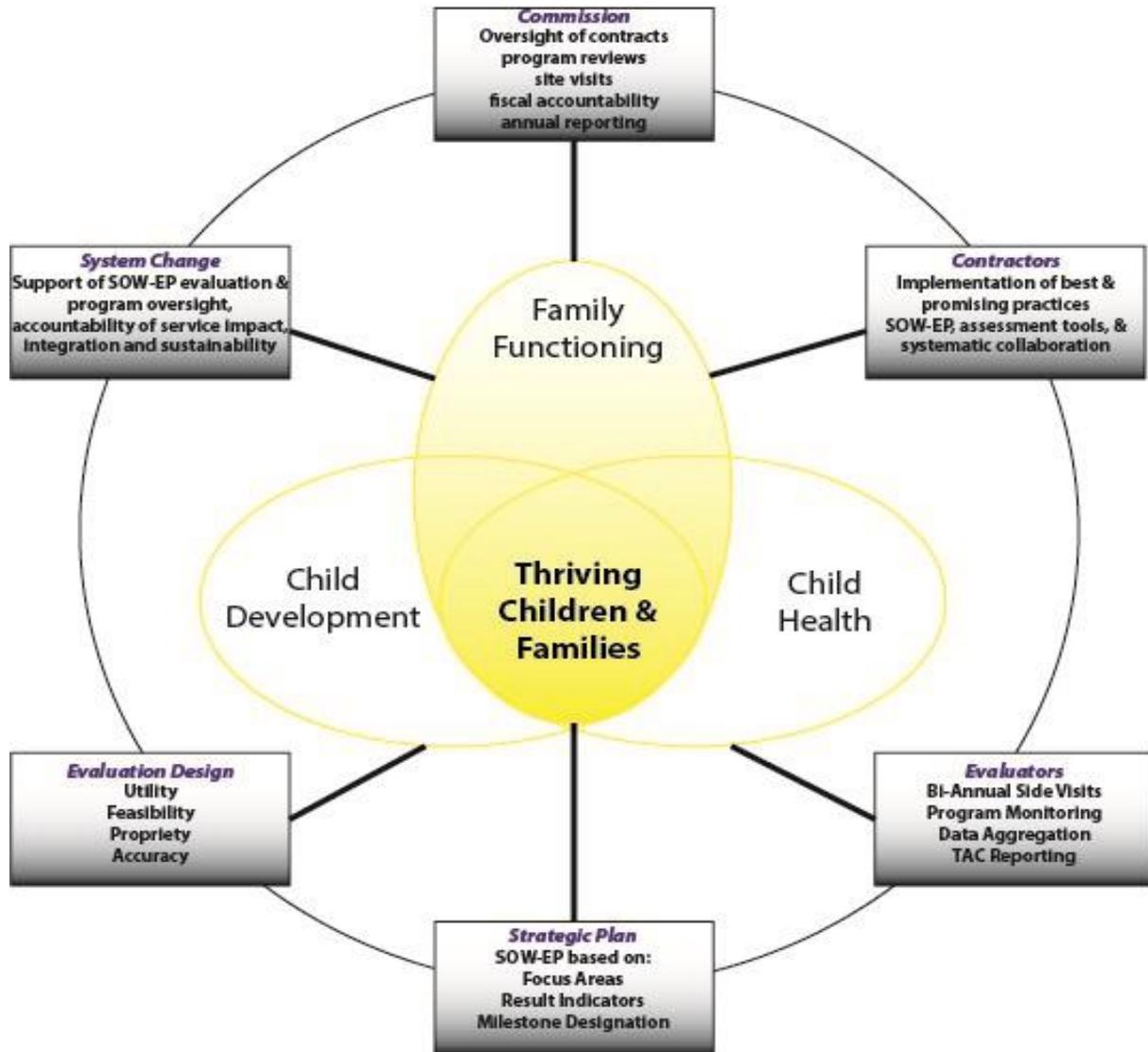
Based on the Commission partnership building in Chapter 1, program effectiveness is examined in Chapter 2 according to service outcomes in each focus area. Chapter 3 is devoted to addressing the results of program collaboration across focus areas. In combination, the first three chapters are focused on evaluation findings within FY 2016-17. Improvement in key child-wellbeing indicators is tracked between adjacent years in Chapter 4 to demonstrate the impact of “turning the curve” process under the RBA model (Friedman, 2005). Conclusions in Chapter 5 are grounded on the evidences gathered under a comprehensive evaluation framework in Exhibit 2.

Description of the Evaluation Framework

Mark Friedman, forefather of the RBA model, pointed out, “RBA makes a fundamental distinction between Population Accountability and Performance Accountability” (Friedman, 2009, p. 2). Whereas performance accountability is an important component of RBA, population accountability relies on partnership building (Friedman, 2011). Based on the dual aspects, the state commission suggested an evaluation framework to include both *needs-based assessment* and *asset-based assessment* (First 5 California, 2010). In addressing the needs of children ages 0-5 and their families, service providers in Kern County articulated *needs statements* and *measurable objectives* in a Scope of Work-Evaluation Plan (SOW-EP) to delineate resources, data collection tools, result indicators, performance measures, and annual targets. Meanwhile, the evaluation team attended TAC meetings regularly to meet an expectation of First 5 Kern’s (2015b) strategic plan, i.e., “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” (First 5 Kern, 2015b, p. 8).

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). While the asset-based assessment was conducted quarterly to monitor state investment and service delivery at the program level, First 5 Kern gathered information from program reviews and site visits to identify service gaps and support the centering the evaluation framework on the key stakeholders, i.e., “thriving children and families”, in Exhibit 2. In addition, the systems of care are articulated across core components of *strategic planning*, *system accountability*, *commission leadership*, *contractor support*, *evaluation design*, and *evaluator responsibility*. The *evaluation design* and *evaluator responsibility* components are guided by an IRB panel of California State University, Bakersfield (CSUB) to ensure *adequate*, *transparent*, and *accurate* data collection across 42 programs. As an important part of strategic planning, the evaluation mechanism is fully incorporated in First 5 Kern’s daily operation to facilitate assessment of program performance in *Child Health*, *Family Functioning*, and *Child Development*, and sustain partnership building for improvement of child wellbeing in Kern County.

Exhibit 2: First 5 Kern Evaluation Framework



Summary of Evaluation Activities

The evaluation framework has guided completion of the following evaluation activities under the Commission leadership:

- 1) Presented evaluation reports for different stakeholders, including:
 - Kern County Board of Supervisors (televised presentation on 5/23/2017);
 - The First 5 Kern Commission (annual report presentation on 2/1/2017);
 - The 2016 annual meeting of the National Association for the Education of Young Children (NAEYC) (resear+ch report on examining the impact of Proposition 10 funding by Ortiz et al. in November, 2016);

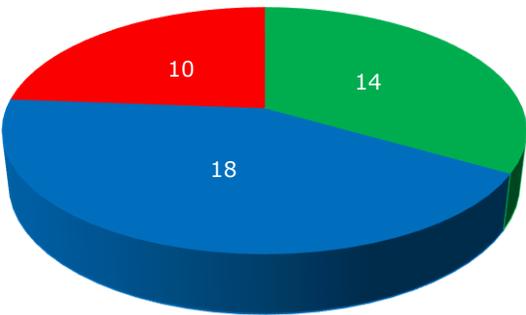
- California State University, Bakersfield Institutional Review Board (IRB) (quarterly reports to ensure the commission compliance to legal stipulations).
- 2) Filed an annual report to the state commission:
- First 5 Kern annual report was submitted to the state commission in Fall, 2016.
- 3) Expanded a theoretical framework for Cost-Benefit Analysis (CBA) of early childhood support programs:
- The past literature was primarily focused on the impact or “use value” of early childhood support for the society. By design, the benefit generated by First 5 Kern was not for its own consumption, but in exchange for better lives of the future generation. In this context, “exchange value” was introduced from the principles of economics to triangulated CBA results from both producer and consumer perspectives. Built on a contrast of the local impact with and without Proposition 10 support, the exchange value is created by the replacement cost of program administration to expand the benefit configuration from use-value assessment.
- 4) Maintained a secured data portal on Blackboard to share and archive evaluation data for report construction:
- A password-protected setting was sustained for transfer of individually-identifiable data between internal and external evaluators.
- 5) Continued professional development in evaluation data analysis:
- The evaluation team learned new tools for network and statistical data analyses.
 - First 5 Kern renewed a state license for data access from the Office of Statewide Health Planning and Development (OSHPD).
- 6) Collected common assessment data across multiple programs:
- ASQ-3 data were gathered from children ages 0-5 across 21 programs.
 - AAPI-2 data were collected from six programs.
 - Child Assessment-Summer Bridge data were accumulated from 12 programs.
 - Core Data Element survey data were collected from 29 programs.
 - Birth Survey data were gathered from 29 programs.
 - Family Stability Rubric data were collected from 16 programs.
 - Desired Results Developmental Profile-2015 data were gathered from infants/toddlers, preschoolers, and children with disabilities in seven programs.
 - Parenting Survey data were collected from 10 Nurturing-Parenting workshops across six programs.
- 7) Gathered program-specific data in Child Health, Family Functioning, and Child Development:
- Eyberg, Sutter-Eyberg, and Be Choosy, Be Healthy data were collected in Child Health.

- North Carolina Family Assessment Scale for General Services data were gathered in Family Functioning.
 - Ready-to-Start Scorecard data were obtained from Child Development.
- 8) Collected community feedback on local service needs through 12 town hall meetings:
- In collaboration with the family resource centers and community agencies, town hall meetings took place in Arvin/Lamont, Bakersfield (including Greenfield, Oildale, Southeast), Delano, Mountain Communities, Kern River Valley, Lost Hills, Mojave, Ridgecrest, Shafter, and Taft.
- 9) Sponsored an internship for California State University, Bakersfield:
- An intern was supervised to assist evaluation data cleaning/exporting and result presentation at the 2016 annual meeting of NAEYC.

Chapter 2: Impact of First 5 Kern-Funded Programs

Without funding increases from the state, First 5 Kern added a program, Help Me Grow (HMG), in FY 2016-17 to strengthen referral capacity for system building. As a result, a total of 42 programs are funded across focus areas of Child Health, Family Functioning, and Child Development. Depending on SOW-EP and service cost, the funding distribution and service counts vary across focus areas (see Table 5). Family Functioning is a focus area that has 18 programs, followed by Child Health with 14 programs. In the third focus area, 10 programs are funded in Child Development. The program count is approximately proportional to the funding amount per focus area (Table 5). Because Child Health has more countywide programs than Family Functioning and Child Development, the funding configuration also depends on the program scope and per-service cost which tend to be higher in Child Health. Program features are described online across these focus areas¹⁰. In this chapter, service outcomes from FY 2016-17 are analyzed at the program level with conformation to the results-based accountability requirement from Proposition 10.

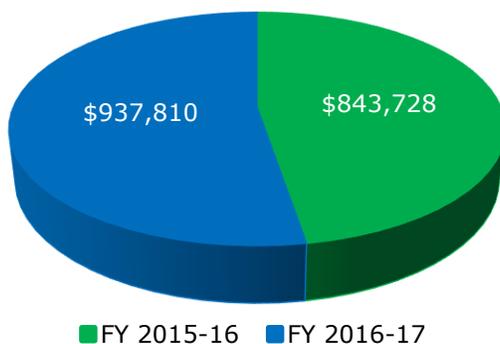
Table 5: Funding Amount and Program Count across Focus Areas

Comparison	Pattern								
Program Count	 <table border="1" data-bbox="560 1186 1226 1228"> <thead> <tr> <th>Focus Area</th> <th>Program Count</th> </tr> </thead> <tbody> <tr> <td>Child Health</td> <td>14</td> </tr> <tr> <td>Family Functioning</td> <td>18</td> </tr> <tr> <td>Child Development</td> <td>10</td> </tr> </tbody> </table>	Focus Area	Program Count	Child Health	14	Family Functioning	18	Child Development	10
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Focus Area	Funding Amount								
Child Health	\$3,100,476								
Family Functioning	\$3,120,102								
Child Development	\$2,047,649								

¹⁰ MVCCP split into case identification and referral parts at <http://first5kern.org/wp-content/uploads/sites/21/2017/07/Funded-Programs-Guide-072417.pdf>

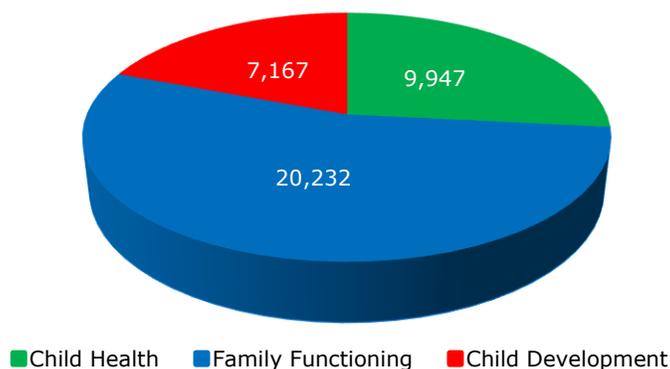
In the local strategic plan, the fourth focus area is named “Integration of Services” (First 5 Kern, 2016). This is also an area labeled by the state commission as “Improved Systems of Care” (see Table 1). Instead of directly supporting children and their families, First 5 California (2015a) indicated that “One result area, Improved Systems of Care, differs from the others; it consists of programs and initiatives that support **program providers** in the other three result areas” (p. 10). Following the statewide emphasis on community outreach and partnership creation, First 5 Kern designated more funding this year than last year to sustain the service system building in the fourth focus area (Figure 7).

Figure 7: Increase of First 5 Kern Funding in Service Integration



In this chapter, state report glossaries from First 5 Association of California (2013) are employed to describe services within each focus area. Assessment data are gathered to examine improvement of program outcomes under a pretest and posttest setting. In FY 2016-17, a total of 37,346 children and/or parents/guardians received services in *Child Health, Family Functioning, and Child Development* (Figure 8). In last year, the service count was 36,759. The rate of service increase outpaced rate of population growth in Kern County (Form B01003 of the Census Bureau).

Figure 8: Total Number of Service Recipients in Each Focus Area



In summary, without altering the local strategic plan for this funding cycle, First 5 Kern funded more programs to expand service deliveries this year (see Figure 8). Identification of the service needs is guided by objectives of the local strategic plan (First 5 Kern, 2016). To streamline the result presentation, Chapter 2 is devoted to analyses of program data in the first three focus areas to assess the impact of service deliveries for

children ages 0-5 and their families. Fund leverage is summarized at end of this chapter to evaluate the system building effort at the program level. The fourth focus area, *Systems of Care*, is addressed in Chapter 3 to examine the effectiveness of service integration across programs.

(I) Improvement of Child Health

In *Child Health*, early childhood supports from First 5 Kern-funded programs are categorized in eight service domains according to the state report glossary (First 5 Association of California, 2013):

- [1] Nutrition and Fitness
- [2] Health Access
- [3] Maternal and Child Health Care
- [4] Oral Health
- [5] Primary and Specialty Medical Services
- [6] Targeted Intensive Intervention for Identified Special Needs
- [7] Safety Education and Injury Prevention
- [8] Quality Health Systems Improvement

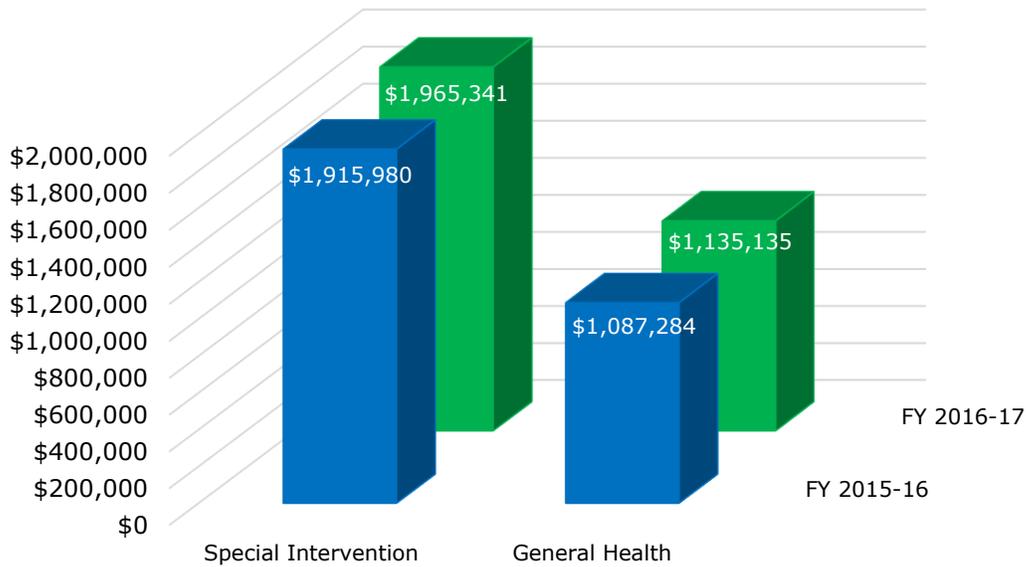
Within the local setting, six objectives have been identified in First 5 Kern’s (2016) strategic plan to address a goal in *Child Health*, i.e., “All children will have an early start toward good health” (p. 6). Table 6 shows connections between the statewide report domains and local service objectives.

Table 6: Association Between State Domains and Local Objectives

Objectives in Child Health	Glossary Domain
1. Children will be enrolled in existing health insurance programs.	[2]
2. Pregnant women will be linked to early and continuous care.	[3]
3. Children will be provided health, dental, mental health, developmental and vision screenings and/or preventative services.	[4] [5] [6]
4. Children with identified special needs will be referred to appropriate services.	[8]
5. Children will develop early healthy habits through nutrition and/or fitness education.	[1]
6. Children and their parents/guardians will be provided with safety education and/or injury prevention services.	[7]

According to Gearhart (2016), “Kern County often ranks as one of the poorest providers of healthcare in the country. ... Not only is our population in ill health, but the county does not have the healthcare resources to alleviate these issues” (p. 13). To meet the dual challenges, First 5 Kern funded programs in Domains (4), (5), and (6) to improve *special interventions* in *oral health*, *medical treatment*, and *mental health*. Services in Domains (1), (2), (3), (7), and (8) further broadened the program impact on *general health* of children across Kern County. Throughout the entire fiscal year, \$1,965,341 was invested to sustain the special intervention services and \$1,135,135 was designated to improvement of general child health. The funding distribution is plotted in Figure 9 to show increases of First 5 Kern investment in *Child Health* over last year.

Figure 9: Funding Increases for Special Intervention and General Health



Capacity of Program Support in Child Health

Following the local strategic plan, multiple result indicators (RI) are identified to assess the service capacity in *Child Health*. Depending on the program offerings, health insurance enrollment (Objective 1), healthy habit development (Objective 5), and safety education for injury prevention (Objective 6) are linked to service capacities at both child and family levels (i.e., RI 1.1.1-1.1.7, 1.5.1, 1.5.2, 1.6.1-1.6.4 of the strategic plan¹¹). Objective 3 in Table 6 depends on delivery of different clinic services. The corresponding result indicators not only represent the number of children being served (RI 1.3.1-1.3.8, 1.3.11-1.3.13, Ibid. 11), but also reflect the capacity of service providers (RI 1.3.9, 1.3.10, Ibid. 11). Objectives 2 and 4 address services for *mothers in pregnancy* and *children with special needs*, respectively. Therefore, result indicators are developed for prenatal care (RI 1.2.1-1.2.7, Ibid 10) and special need identification (RI 1.4.1, 1.4.2). The alignment between RI designation and service description is presented in Table 7.

Table 7: Service Description and RI Designation in Child Health

Objective	Service Description	RI Designation
[1]	Health Insurance Enrollment	Family and Child Coverage
[2]	Prenatal Services	Support for Mothers in Pregnancy
[3]	Clinic Services in Child Health	Child Service Count; Provider Support
[4]	Special Needs Referral	Support for Children with Special Needs
[5]	Healthy Habit Development	Family and Child Support
[6]	Safety Education	Services for Children and Parents

To address *Health Insurance Enrollment* in Objective [1], First 5 Kern funded the Successful Application Stipend (SAS) program to assist health insurance application and facilitate medical home establishment. In Kern County, insurance enrollment and renewal are particularly critical for young children because of the local population growth and “the importance of having health insurance and a regular source of care to ensure that children

¹¹ <http://first5kern.org/wp-content/uploads/sites/21/2014/10/2016-17-Strategic-Plan-Booklet-0415161.pdf>

have access to health services” (Medi-Cal Managed Care Division, 2013, p. 61). SAS, an enrollment assistance program, is designed to collaborate with the Community Health Initiative of Kern County (CHI KC) to support Certified Application Counselor trainings. In FY 2016-17, SAS renewed health insurance for 65 children and completed new insurance enrollments for 35 children. Twenty-eight new enrollees received well-child check-ups to fit services in Domain [2] of the state report glossary. Altogether, SAS partnered with AFRC, BCRC, CHI KC, GSR, LVSRP, and WSCRC¹² to assist 489 families with health insurance applications.

In the *Maternal and Child Health Care* category, the statewide glossary definition stipulated reports of health and wellbeing of women who were at a stage of raising children from prenatal to 2 years of age. Due to well-documented risk factors, special attention was given to *first-time parents* and/or *African-American mothers* to help them gain knowledge about themselves, pregnancies, babies, and local resources. In this year, 10 prenatal and 10 post-partum sessions were offered by Black Infant Health (BIH) in culturally-supportive settings to reduce family stress and strengthen parenting skills in Objective [2]. Fifty-nine expectant mothers were educated by BIH on tobacco cessation and against substance abuse. Eighty-nine pregnant women and mothers were visited by nurses from NFP to gain information and education on the importance of breastfeeding. Through the service alignment with State Domain [3], BIH and NFP offered education to 105 mothers on the importance of prenatal care, and Children’s Mobile Immunization Program (CMIP) provided 447 mothers hemoglobin screenings.

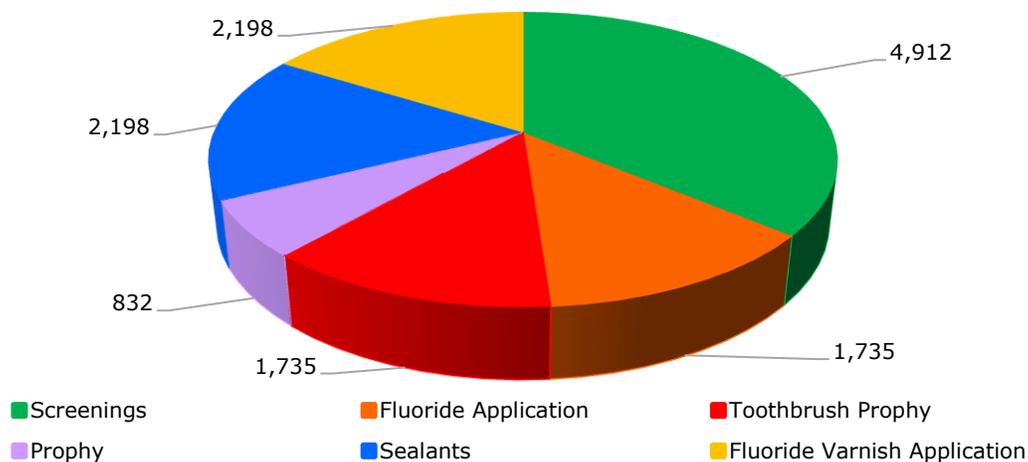
Clinic Services in Child Health compose another core component of Objective [3]. To facilitate *Targeted Intensive Intervention for Identified Special Needs* in State Domain [6], MVIP incorporated case management services for medically vulnerable infants and their families. Meanwhile, special-need services from Richardson Special Needs Collaborative (RSNC) offered case managements, behavioral screenings, and referrals. A Family Resource Library was sponsored by RSNC to disseminate information about children with special-needs. Special Start for Exceptional Children (SSEC) expanded its support in non-traditional hours to accommodate needs in local communities. The broad spectrum of services reflected variations of early childhood support due to *medical and mental health conditions, infant and toddler services, bilingual support, and hours of program operation*.

First 5 Kern further expanded clinic support in dental health. According to First 5 Association of California (2017), tooth decay ranked among the most common reason for chronic absenteeism in kindergarten. To address this issue, Kern County Children's Dental Health Network (KCCDHN) incorporated mobile services in dental screening, cleaning, treatment, fluoride varnish, and parent education at 97 dental clinics. In FY 2016-17, 4,912 children had dental screenings, 1,735 received prophylaxis treatments, 1,735 completed fluoride application, 832 received sealants, 2,198 were treated for toothbrush prophylaxis, and 2,198 had fluoride varnish applications (Figure 10). In particular, dental screenings covered 625 more children this year than last year. A six-month reminder was sent to families to continue the services after dental home establishment. Because of the systematic efforts, dental homes have been established for 451 children, referrals to pediatric dentists were made for 1,227 children, and preventative treatments were 32,

¹² Program acronyms are defined in Appendix A of this report.

completed for 13,610 children across Kern County. These services fit Domain [4] of the state report glossary (Table 6).

Figure 10: Oral Health Services in FY 2016-17



As a preventative measure, First 5 Kern funded provision of vaccines to boost child immune systems against serious infections and diseases. It was reported that “Childhood vaccines prevent 10.5 million diseases among all children born in the United States in a given year and are a cost-effective preventive measure” (Medi-Cal Managed Care Division, 2013, p. 54). Prior to kindergarten entry, children received immunizations from CMIP. The mobile unit supported service outreach in remote regions. As a result, CMIP increased the number of immunization clinics from 153 in last year to 171 this year. While providing immunizations for 1,558 children ages 0-5, CMIP offered hemoglobin screenings for 75 children. These *Primary and Specialty Medical Services* matched program description in Domain [5] of the state glossary.

To address *Special Needs Referrals* in Objective [4], MVCCP and MVCCP Kern County (MVCCP KC) led care coordination for case identification and referrals to support case-management services and reduce the risk of medical and/or developmental issues. MVCCP started in 2008 as a Kern County Medically Vulnerable Workgroup for coordinating monthly meetings to address the complex needs of medically vulnerable children and their families. The initial supporting system included over 50 partner organizations. In November, 2016, First 5 Kern partnered with Kaiser Permanente, Kern Family Health Care, and Health Net to sponsor the sixth annual MVCCP conference that was attended by healthcare professionals, social workers, case managers, parents, and childcare providers. Due to the seamless MVCCP and MVCCP KC support, 22 Emergency Room (ER) visits were avoided in 2016 (Thibault, 2017).

Across California, First 5 county commissions have been recognized as the largest funders of home visiting programs (First 5 Association of California, 2017). In Kern County, NFP received funding to support nurse visits for healthy child development. Following professional practices, NFP demonstrated its effective child health services through randomized trials across the nation (Heckman, 2014). BIH is another program that has been proven effective across 13 counties and two cities in California on reducing infant mortality in communities where over 90% of births were African-American children. In combination, the *group-based education in BIH* and *home-based consultation in NFP*

contributed to enhancement of *maternal and infant care* indicators in Domain [8] of the state report glossary.

According to First 5 Association of California (2013), *Quality Health Systems Improvement* encompassed service outreach, planning, management, and provider capacity building. First 5 Kern funded MVCCP to convene partners bi-weekly for supporting medically vulnerable children. The network building has resulted in an increase of the medical home capacities across seven programs¹³. As a result, these programs expanded their capacity from serving 1,015 children in last year to accommodating 1,201 children this year. In particular, 1,016 children were monitored for *special needs* services from MVIP and MVCCP, up from 901 in last year.

To facilitate *Healthy Habit Development* under Objective [5], Bakersfield Adult School Health Literacy Program (HLP) supported parent knowledge development on developmental milestones and behavioral norms through offering monthly *interactive parent/child workshops, take-home health kits on parent-child interactive activities, and parent reading strategies*. These services matched and/or exceeded the glossary definition of program support in Domain [1] (see Tables 6). According to First 5 Association of California (2013), services in *Nutrition and Fitness* were designed to address core elements of *healthy weight and height, basic principles of healthy eating, safe food handling and preparation, and tools to help organizations incorporate physical activity and nutrition*.

KVAP and MAS are programs to address *Safety Education* in Objective [6]. In Kern County, an important aspect of *Safety Education and Injury Prevention* hinges on child protection against the risk of drowning around swimming pools, canals, lakes, and the Kern River. KVAP and MAS provide swimming pool access to families with children ages 0-5. The safety education includes First Aid classes, swim lessons, and water safety trainings on different devices in remotely-located Weldon and densely-populated Bakersfield. In FY 2016-17, outcomes in Domain [7] of the state report glossary were reflected in swim lesson completion by 577 children. Meanwhile, 35 parents/guardians participated in the water safety training from KVAP and MAS. These programs also collaborated with SPCSR to offer First Aid/Cardiopulmonary Resuscitation (CPR) education for 134 parents/guardians.

In summary, young children are “the most likely to experience severe injury or death as a result of abuse or neglect” (Kern County Network for Children, 2017, p. 10). Parent education on hazard prevention, such as water safety, is particularly important for maintaining health and wellness of infants, toddlers, and preschoolers. While the water safety concerns were addressed by KVAP and MAS, services of CMIP, CHI KC, HLP, and SAS have increased the local immunization coverage, family literacy, and healthcare access. In addition, oral, medical, and mental health services were provided by BIH, KCCDHN, MVIP, NFP, RSNC, and SSEC in traditionally underserved communities. The system care further incorporated two programs (MVCCP & MVCCP KC) for case identification and service coordination. In combination, a total of 14 programs collectively addressed all six objectives of *Child Health* in First 5 Kern’s (2016) Strategic Plan:

¹³ These programs are BIH, CHI KC, MVCCP, MVIP, NFP, SAS, and SPCSR in Appendix A.

- (1) Health insurance enrollments were assisted by SAS and CHI KC;
- (2) Prenatal support was provided by BIH and NFP programs;
- (3) Medical, dental, and mental health services were delivered by CMIP, KCCDHN, and RSNC;
- (4) Special-needs services were supported by MVIP, SSEC, MVCCP, and MVCCP KC;
- (5) Early health education was offered by HLP for both children and parents;
- (6) Injury prevention and water safety were addressed by KVAP and MAS.

Primary features of the program support are categorized in three domains to differentiate the *general*, *special*, and *coordination* services for children ages 0-5 (Table 8).

Table 8: Features of Child Health Programs Funded by First 5 Kern

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

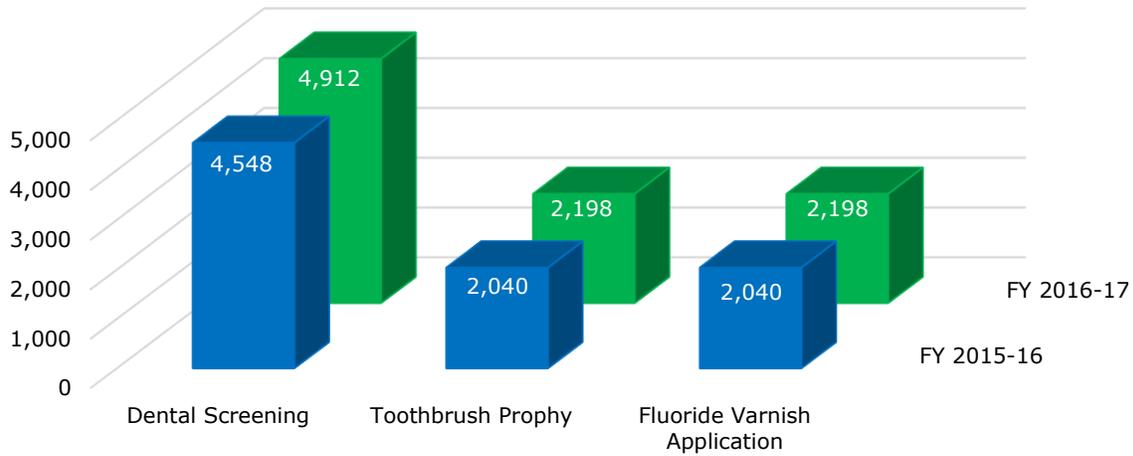
Improvement of Service Outcomes Across Child Health Programs

In FY 2016-17, improvement of *Child Health* has been tracked at the program level across multiple services, including oral health support, parent education, and mental health intervention. In each domain, service outcomes were gathered to evaluate the benefit for local children ages 0-5 and their families.

1. Outcomes of Oral Health Service

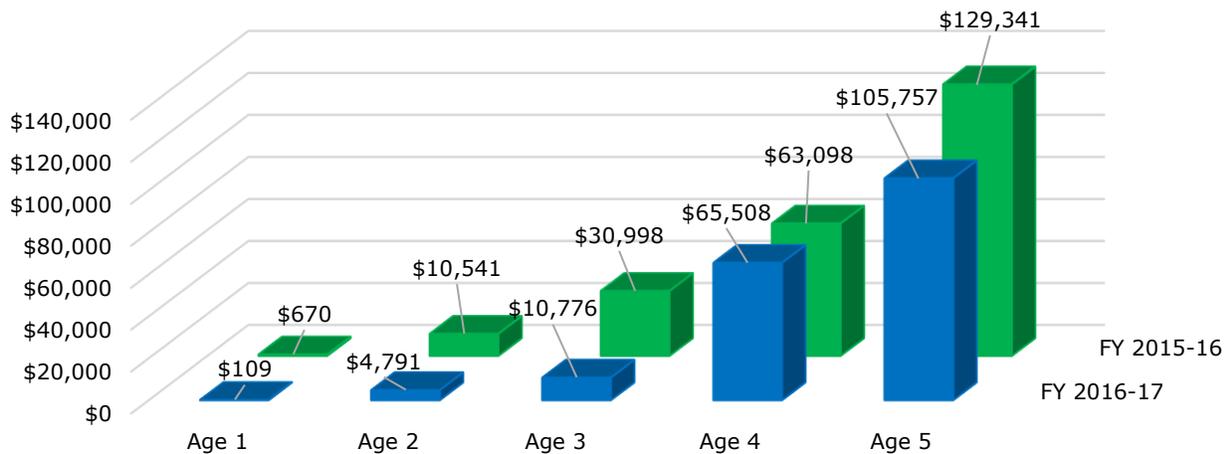
In 2017, First 5 Association of California developed a policy agenda to “Expand access to preventative and restorative oral health services and oral health education” (p. 5). In Kern County, KCCDHN was the program that delivered services in oral health. Figure 11 showed that KCCDHN offered more *screening*, *toothbrush prophylaxis*, and *fluoride varnish application* services this year than last year. Meanwhile, the program spending decreased from \$1,090,000 in last year to \$1,079,338 this year.

Figure 11: Increases of Preventative Treatments Between Adjacent Years



The annual spending per age group is plotted in Figure 12 to compare KCCDHN spending between last year and this year. Except for age 4, program expenditure for service deliveries decreased for children in other age groups during the adjacent years. As a result, the overall savings across ages 1-5 added to \$47,707. Accompanied with tooth growth, a steady increase of the oral health expenditure occurred for children near age 5 (see Figure 12).

Figure 12: Comparison of Service Spending across Age Groups



In FY 2016-17, KCCDHN tracked plaque indices during initial and recheck visits for 337 children. The program impact was indicated by a drop of Average Plaque Index (API) from 67.57 in pretest to 36.93 in posttest. The average API reduction reached 30.64, larger than the corresponding result of 22.46 in last year. The improvement of oral health was statistically significant [$t(336)=25.23, p<.0001$]. The effect size also reached 2.75, suggesting a strong program impact (Cohen, 1988). Through its mobile service outreach,

KCCDHN performed 2,685 restorative treatments and case-managed 1,079 children ages 0-5 across Kern County.

2. Results of Mental Health Support

Across the state, First 5 Association of California (2017) stressed “The need for early mental health interventions and maternal mental health consultations” (p. 4). Mental health support was provided by Richardson Special Needs Collaborative (RSNC) and Small Steps Child Development Center (SSCDC). The Eyberg Child Behavior Inventory (ECBI) was employed to assess the outcome of child therapy and parent education. ECBI contained two scales: (1) A problem scale allowed parents to identify the degree to which the child’s behavior is problematic; (2) An intensity scale indicated the frequency for certain behaviors to occur¹⁴. Table 9 showed the number of cases below cutoff scores of the ECBI scales in each program.

Table 9: Number of Cases below the Cutoff Scores of the Eyberg Scales

Program	Problem Scales		Intensity Scales	
	Pretest	Posttest	Pretest	Posttest
RSNC	2	18	2	19
SSCDC	11	3	14	2

In particular, RSNC had 21 cases in the pretest and 19 cases in the posttest. The result tracking indicated less intensity of *problem behaviors* in the posttest. It was reconfirmed by the statistical testing that significant reduction occurred in child behavior problem [i.e., $t(18)=4.71, p=.0002$] and intensity [i.e., $t(18)=4.26, p=.0005$] in FY 2016-17. The RSNC data also demonstrated a high level of result consistency, or a high reliability, as suggested by Cronbach’s alpha index ($\alpha=0.92$). The effect size was 1.14 on the ECBI behavior problem scale, indicating a strong practical impact from the RSNC intervention. More specifically, Table 10 showed significant improvements on 18 ECBI indicators.

Table 10: Improvement of ECBI Indicators in RSNC

Eyberg Indicator	Statistical Testing
Refuses to do chores when asked	$t(18)=2.81, p=0.0117$
Refuses to go to bed on time	$t(18)=2.39, p=0.0281$
Does not obey house rules on own	$t(18)=2.16, p=0.0442$
Refuses to obey until threatened with punishment	$t(18)=3.16, p=0.0054$
Acts defiant when told to do something	$t(18)=4.75, p=0.0002$
Gets angry when doesn't get own way	$t(18)=2.93, p=0.0090$
Has temper tantrums	$t(18)=3.19, p=0.0050$
Sasses adults	$t(18)=2.65, p=0.0163$
Whines	$t(18)=3.75, p=0.0015$
Cries easily	$t(18)=4.31, p=0.0004$
Yells or screams	$t(18)=5.62, p<0.0001$
Destroys toys and other objects	$t(18)=4.02, p=0.0008$
Constantly seeks attention	$t(18)=2.50, p=0.0221$
Interrupts	$t(18)=2.79, p=0.0122$
Is easily distracted	$t(18)=3.07, p=0.0066$

¹⁴ <http://lausdsmh.net/wp-content/uploads/2010/10/ECBI-Quick-Guide.pdf>

Eyberg Indicator	Statistical Testing
Fails to finish tasks or projects	t(18)=3.43, p=0.0030
Has difficulty concentrating on one thing	t(18)=3.90, p=0.0010
Is overactive or restless	t(18)=4.62, p=0.0019

SSCDC provided early childcare and education to children ages 0 to 5 whose mothers were victims of domestic violence. Because of the issues in the family environment, a pertinent instrument like the ECBI is needed to assess mental health conditions for children in the SSCDC program. Table 9 showed 17 cases in the pretest and 3 cases in the posttest. Only two of the cases were tracked between pretest and posttest. The lack of posttest data prohibited statistical testing on the SSCDC outcomes. For the same reason, no reliability index, such as Cronbach’s alpha, can be computed from the SSCDC data. While this example illustrated the importance of data tracking for result reporting, more stories behind the result patterns should be noted. In FY 2016-17, SSCDC changed its evaluation tool from ECBI to Ages and Stages Questionnaire-Social Emotional (ASQ-SE), and thus, discontinued the posttest administration for most cases. The ASQ-SE results were aggregated between SSCDC and Women’s Shelter Network (WSN), another program serving victims of domestic violence in *Focus Area II: Family Functioning*, to show the positive program impacts (see a section titled “Collaborative Interventions on Family Support” of this chapter).

To triangulate the findings from ECBI, Sutter-Eyberg Student Behavior Inventory-Revised (SESBIR) was employed to collect assessment data from preschool teachers about performance of 19 children *before* and *after* RSNC services. The program effectiveness was indicated by a significant decrease in *behavior problem* [i.e., t(19)=5.63, p<.0001] and *intensity* [i.e., t(19)=6.07, p<.0001]. The corresponding effect sizes reached 2.58 and 2.79 to confirm strong program impacts on the SESBIR *behavior problem* and *intensity* scales, respectively. Cronbach’s alpha index for the teacher rating was above 0.96. 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). Hence, the reliability index supported adoption of the teacher rating scale to evaluate disruptive behaviors of preschool children in RSNC. Specific improvements of child behaviors were illustrated by 28 SESBIR indicators at $\alpha=.05$ (Table 11).

Table 11: Improvement of Child Behavior Indicators in SESBIR Assessment

Sutter Eyberg Indicator	Statistical Testing
Pouts	t(19)=2.10, p=.0498
Teases or provokes other students	t(19)=3.57, p=.0021
Lies	t(19)=3.17, p=.0051
Does not obey school rules on his/her own	t(19)=4.57, p=.0002
Demands teacher attention	t(19)=4.19, p=.0005
Dawdles in obeying rules or instructions	t(19)=3.81, p=.0012
Gets angry when doesn't get his/her own way	t(19)=3.50, p=.0024
Interrupts teacher	t(19)=4.84, p=.0001
Impulsive, acts before thinking	t(19)=2.94, p=.0084
Refuses to obey until threatened with punishment	t(19)=6.32, p<.0001
Had difficulty staying on task	t(19)=6.48, p<.0001
Blames other for problem behaviors	t(19)=3.64, p=.0017
Has difficulty entering groups	t(19)=2.16, p=.0441

Sutter Eyberg Indicator	Statistical Testing
Is easily distracted	t(19)=4.62, p=.0002
Has difficulty accepting criticism or correction	t(19)=3.28, p=.0039
Fails to finish tasks or projects	t(19)=3.82, p=.0011
Verbally fights with other students	t(19)=3.08, p=.0061
Whines	t(19)=2.98, p=.0077
Is overactive or restless	t(19)=5.04, p<.0001
Acts defiant when told to do something	t(19)=3.81, p=.0012
Interrupts other students	t(19)=5.82, p<.0001
Is noisy	t(19)=3.27, p=.0041
Has trouble awaiting turn	t(19)=4.48, p=.0003
Talks excessively	t(19)=4.23, p=.0005
Fidgets or squirms in seat	t(19)=3.75, p=.0014
Fails to listen to instructions	t(19)=6.37, p<.0001
Is touchy or easily annoyed	t(19)=5.55, p<.0001
Bothers others on purpose	t(19)=4.17, p=.0005

SSCDC was another program that had SESBIR data collection. Because of the aforementioned instrument change, SSCDC only followed 8 cases in the data collection during its early intervention services for children with disabilities and other special needs. Consequently, no statistical testing can be conducted due to the small sample size.

3. Enhancement of Healthy Child Development

With dual foci on *thriving children and families* at the center of the Evaluation Framework (see Exhibit 2 in Chapter 1), results of early childhood development were compared against age-specific thresholds from ASQ-3 across three programs in *Child Health*. The sample size issue resurfaced in the ASQ-3 data analysis because BIH only tracked data on two infants. MVIP and NFP were the other programs in *Child Health* that collected ASQ-3 data this year. In contrast to BIH, MVIP and NFP enhanced their efforts in data collection. The sample sizes for MVIP increased from 44 cases in last year to 134 cases this year. NFP also expanded its sample size from 35 to 64 during the same period.

First 5 Kern’s funding in NFP filled a void in the early childhood service system due to its focus on supporting low-income, first-time mothers at prenatal and infant care stages. The program arranged nurse visits in sequential steps: (1) weekly during the first month of enrollment, (2) every other week until the birth of the baby, (3) weekly during the first six weeks after delivery, (4) every other week until the baby is 21 months, and (5) monthly during months 22-24. Topics of the home consulting included newborn care, parenting preparation, baby environment setting, referral assistance, and healthy pregnancy. To broaden the program impact, NFP extended its services in Bakersfield, Lamont, Ridgecrest, Rosamond, Shafter and Wasco. The program also offered communications in both English and Spanish to ensure proper parental engagement.

MVIP was originally redesigned from another project, *High Risk Infant Program*, to promote family-centered, community-based, coordinated care for children with special health care needs. Clinica Sierra Vista was one of the few agencies that received the Title V grant in June, 2000 to offer nurse visits and case management services for over 2,000 infants in Kern County. In FY 2016-17, the program focused on (1) reducing hospitalizations and ER visits; (2) identifying developmental disabilities and/or delays and

referring to appropriate resources to help minimize/prevent delays; (3) linking families to community resources; (4) helping families establish safe homes for medically fragile infants; (5) empowering families through education; (6) helping families adjust to infant’s special needs; (7) reducing infant mortality in high-risk population; (8) preventing child abuse. The service provider has sustained these early childhood services in Kern County for 17 years.

Results in Table 12 indicated infant performance in both NFP and MVIP programs significantly above the corresponding thresholds in *Communication, Gross Motor, Fine Motor, Problem Solving, and Personal-Social* domains at $\alpha=.0001$. The practical difference made by each program was demonstrated by the minimum effect size of 2.15 for MVIP and 3.31 for NFP, both were much larger than the threshold of 0.80 for strong intervention impact.

Table 12: ASQ-3 Results from MVIP and NFP

ASQ-3 Domains	MVIP	NFP
Communication	t(112)=16.65, p<.0001	t(63)=21.06, p<.0001
Gross Motor	t(112)=13.14, p<.0001	t(63)=13.15, p<.0001
Fine Motor	t(112)=11.36, p<.0001	t(63)=20.78, p<.0001
Problem Solving	t(112)=16.96, p<.0001	t(63)=17.25, p<.0001
Personal-Social	t(112)=16.57, p<.0001	t(63)=25.84, p<.0001

4. Improvement of Parent Health Literacy

The state commission advocated a policy agenda to “Improve parent and young children’s knowledge about and access to healthy foods and physical activity” (First 5 California, 2015c, p. 1). At the seat of Kern County, Bakersfield Adult School offered HLP to improve parent health literacy. The program tracked knowledge of 34 parents about the content of *Be Choosy, Be Healthy* (BCBH) instrument this year. The improvement of parent knowledge was confirmed by statistical analyses from the pretest and posttest settings. The results showed significant knowledge improvement at $\alpha=.001$ [i.e., $t(33)=3.74, p=.0007$]. In addition, more than 94.1% of the parents indicated that they would practice at least some of the BCBH concepts after the workshops. The enhancement of parent literacy has addressed Result Indicator 1.5.2 of First 5 Kern’s (2015b) strategic plan, i.e., “Number of parents/guardians who received nutrition and/or fitness education” (p. 5).

5. Support of Healthy Parent-Infant Interaction

Parent-infant interaction is important in developing infant central nervous systems (Barlow et al., 2007). To monitor parent-infant interaction, NFP administered the Dyadic Assessment of Naturalistic Caregiver-child Experiences (DANCE). The golden standards of the DANCE *Sensitivity and Responsivity* scale¹⁵ were listed in Table 13 to evaluate the effect of parent-infant interaction on 14 infants.

¹⁵ The DANCE Coding Sheet: Sensitivity and Responsivity Dimension
http://cittdesign.com/dance/sites/default/files/1107_12M_1_0.pdf

Table 13: DANCE Results on the Sensitivity and Responsivity Scale

Scale of Sensitivity and Responsivity	NFP Result	Golden Standard
1. Positioning	99.6%	100%
2. Visual Engagement	87.9%	95%
3. Pacing	92.9%	90%
4. Negative Touch	0%	0%
5. Non-Intrusiveness	86.4%	90%
6. Responsiveness	86.4%	85%

In comparison to the DANCE results from last year (Wang, 2017), NFP showed improvement on the *Positioning* subscale, as evidenced by proper positioning of more caregivers to read child’s communications. Although the result from last year already reached 99.3%, further improvement was made to increase the rate to 99.6% this year (Table 13). *Visual Engagement* is another category that demonstrated improvement. In last year, 85.6% of the caregivers had their visual attention directed toward a child. The number increased to 87.9% this year. On the *pacing* subscale, the NFP result was above the golden standard of 90%, which confirmed the tempo of caregiver-child interactions complementary to the child’s behavior, activity level, and needs. More importantly, the results showed child protection for having no rough touch by caregivers on the *Negative Touch* scale.

As a criterion-referenced assessment, DANCE data revealed room for improvement according to its golden standards. In the *Non-Intrusiveness* domain, caregivers were expected to avoid intruding upon child’s activity, emotional or physical space. In the *Responsiveness* category, the NFP outcomes were above the golden standards (Table 13). Hence, caregiver’s response to child’s state, affect, communication was supportive of child’s needs.

Beyond the cognitive aspect, DANCE components were identified near the golden standards¹⁶ on subscales of *Expressed Positive Affect*, *Caregiver's Affect Complements Child's Affect*, and *Verbal Quality* (Table 14). Despite the ceiling effect of 100% in these domains, NFP improved the result on *Expressed Positive Affect* from 98.41% in last year to 99.29% this year. On the *Verbal Connectedness* subscale, NFP caregivers surpassed the golden standard of 75%, which suggested effective verbal communication to facilitate their interactions with infants. In summary, the program impact on healthy parent-infant interaction has been supported by DANCE results in both cognitive and emotional domains (Tables 13 & 14).

Table 14: DANCE Results on Emotional Quality & Behavioral Regulation

Scale of Emotional Quality and Behavioral Regulation	NFP Result	Golden Standard
1. Expressed Positive Affect	99.29%	100%
2. Caregiver's Affect Complements Child's Affect	96.79%	100%
3. Verbal Quality	98.08%	100%
4. Verbal Connectedness	90.00%	75%

¹⁶ http://www.cittdesign.com/dance/sites/default/files/Practice5_19M_1_0.pdf

6. Coordination of Infant Medical Services

Prior to First 5 Kern, no organization offered systematic coordination of medical services for infants with serious health conditions in Kern County. The local needs were further entangled by social factors, including family poverty, low parent education, cultural isolation, and teenage pregnancy. In FY 2016-17, MVCCP and MVCCP KC received funding from First 5 Kern to implement “enhanced coordination of existing case management services to measurably improve long term outcomes for children, birth to 5 years of age, who are at risk of costly, lifelong medical and developmental issues” (Thibault, 2017, p. 3). Other organizations, such as Adventist Health, Kaiser Permanente, Kern Family Health Care, Lucile Packard Foundation for Children’s Health of Palo Alto, and Health Net, contributed funding to support MVCCP in the past. The leveraged public and private funds have subsidized First 5 Kern’s support for employing a full-time public-health nurse as a Care Coordinator to receive and track MVCCP’s 1,000 referrals in a central database.

Feedback from the 2016 MVCCP annual conference was gathered from 116 attendees. Results in Table 15 were based on a 10-point scale with 1 standing for poor conference quality and 10 for excellent quality. The average ratings were 8.21 or above, indicating positive conference quality across the *adequacy, utility, efficiency, and applicability* dimensions.

Table 15: MVCCP Conference Attendee Responses on a 10-Point Scale

Quality Indicator	Mean
Adequacy of the panelists’ mastery of their subjects	8.99
Utilization of appropriate teaching methods and materials	8.69
Efficiency of course mechanics (e.g. room, space, acoustics, handouts)	8.21
Applicability or usability of new information	8.88

In comparison to other programs in *Child Health*, the care coordination programs not only supported medically vulnerable children ages 0-5, but also promoted system building across service providers. According to Proposition 10, “A requirement of the state laws governing the county commissions is to ensure that money from the Children and Families Trust Fund is not used to replace or ‘supplant’ existing local funding for programs and services.”¹⁷ In Kern County, infants in rural areas often had limited healthcare support. Because most local communities belong to Medically Underserved Areas (MUA)¹⁸, MVCCP served the purpose of identifying medically vulnerable infants for case management and healthcare service in much-needed areas.

In Table 16, the Likert scale was used to code the feedback from MVCCP partners on seven statements. Responses in the “Neutral” category were scaled as 3. Answers of “Strongly Disagree” and “Strongly Agree” were represented by 1 and 5, respectively. Table 16 showed the average responses above 3 across 82 service providers. Hence, the overall ratings were consistently skewed toward positive responses.

¹⁷ <http://first5association.org/overview-of-proposition-10/>

¹⁸ <http://gis.oshpd.ca.gov/atlas/topics/shortage/mua/kern-service-area>

Table 16: Average Provider Ratings on A Five-Point Scale

	Statement	Mean
	Increased our program’s ability to network and collaborate directly with other organizations.	3.60
	Provided a place for us to bring some of our more difficult cases to help find solutions.	3.49
MVCCP	Increased our program’s visibility among other providers across the county.	3.34
	Provided key information that has saved us staff time handling cases.	3.28
	Enhanced our training and awareness of other services in the county.	3.70
	Provided us a place to present/explain how our services are delivered, clarifying any misunderstandings about them.	3.38
	Provided a place to advocate for services for children with special health care needs.	3.12

In summary, programs in *Child Health* were classified by *service types* (e.g., dental care, mental health, insurance application, parental education), *child conditions* (general support vs. special-needs assistance), *delivery methods* (group-based vs. home-based service), *facility capacities* (mobile service vs. community-based support), and *age groups* (infants, toddlers, & preschoolers). In justifying the result-based accountability across different dimensions, First 5 Kern (2016) maintained,

Evaluation is an important component of the Strategic Plan and the Proposition 10 implementation process in Kern County. Carefully tracked and reported information details program outcomes and the impact on the communities served. (p. 8).

Following the Commission guidance, program outcomes were triangulated in this section across different sources of data from children (ASQ-3), parents (ECBI), service providers (KCCDHN, HLP, & MVCCP), and preschool teachers (SESBIR). The service tracking and value-added assessment consistently indicated enhancement of service quality in *Child Health* across Kern County.

(II) Strengthening of Family Functioning

In 2017, First 5 Association of California developed a Strategic Messaging Guide. Instead of delimiting family support within home visiting services, the guide included “parent education and parent-child learning programs that strengthen families’ resilience, expand support systems, and reduce child abuse and neglect” (First 5 Association of California, 2017, p. 7). For reduction of child abuse and neglect, First 5 Kern funded Differential Responses (DR), Domestic Violence Reduction Project (DVRP), and Guardianship Caregiver Project (GCP) to address child environmental problems due to family instability. In service system building, Community Action Partnership of Kern (CAPK) received funding from First 5 Kern to offer 2-1-1 Kern County (2-1-1) and HMG service referrals. The mission of 2-1-1 was to connect families to medical facilities, family resource centers, legal assistance programs, and other community resources. HMG is a new program to monitor issues of child growth and establish collaboration across

community-based programs in health care, early care and/or education, and family support. In addition, with conformation to the Strategic Messaging Guide (First 5 Association of California, 2017), First 5 Kern sustained funding for 13 center-based programs to offer *general parenting, court-mandated parent education, and case management* services across Kern County.

Altogether, 18 programs were guided by a common goal of *Family Functioning* in First 5 Kern’s (2016) strategical plan to ensure that “All parents/guardians and caregivers will be knowledgeable about [1] early childhood development, [2] effective parenting and [3] community services” (p. 5). The three-fold needs were aligned with three report domains defined by the statewide glossary (see First 5 Association of California, 2013): [1] Community Resource and Referral, [2] Targeted Intensive Family Support Services, and [3] General Parenting Education and Family Support Programs. Table 17 showed a match between these service domains and the four objectives of *Family Functioning* in First 5 Kern’s (2016) strategic plan.

Table 17: Service Domains and Objectives in Family Functioning

Objectives in Family Functioning	Domain
1. Children and families will be provided with targeted and/or clinical family support services.	[2]
2. Parents/guardians will be provided culturally-relevant parenting education and supportive services.	[3]
3. Parents/guardians will be provided with educational services to increase family reading and/or literacy.	[3]
4. Parents/guardians and children will be provided social services	[1]

Capacity of Program Support in Family Functioning

In Family Functioning, *targeted and/or clinical supports* in Objective 1 are linked to service deliveries at both child (RI 2.1.1-2.1.3, 2.1.7-2.1.9, Ibid. 11) and family (RI 2.1.4-2.1.6, Ibid. 11) levels. Objectives 2-4 in Table 17 depend on implementation of education and social services for enhancement of early childhood parenting. Therefore, multiple result indicators were developed to evaluate the attainment of Objectives 2-4:

1. Court-mandated parent education, group parenting education, and educational workshops (RI 2.2.1-2.2.3, Ibid. 11) were assessed to reflect family support in Objective 2;
2. Reading strategy development and literacy workshops (RI 2.3.1, 2.3.2, Ibid. 11) were evaluated to address home education in Objective 3;
3. Program referrals and transportation services (RI 2.4.1 2.4.2, Ibid. 11) were adopted to support program outreach in Objective 4.

The alignment between RI designation and service description is presented in Table 18.

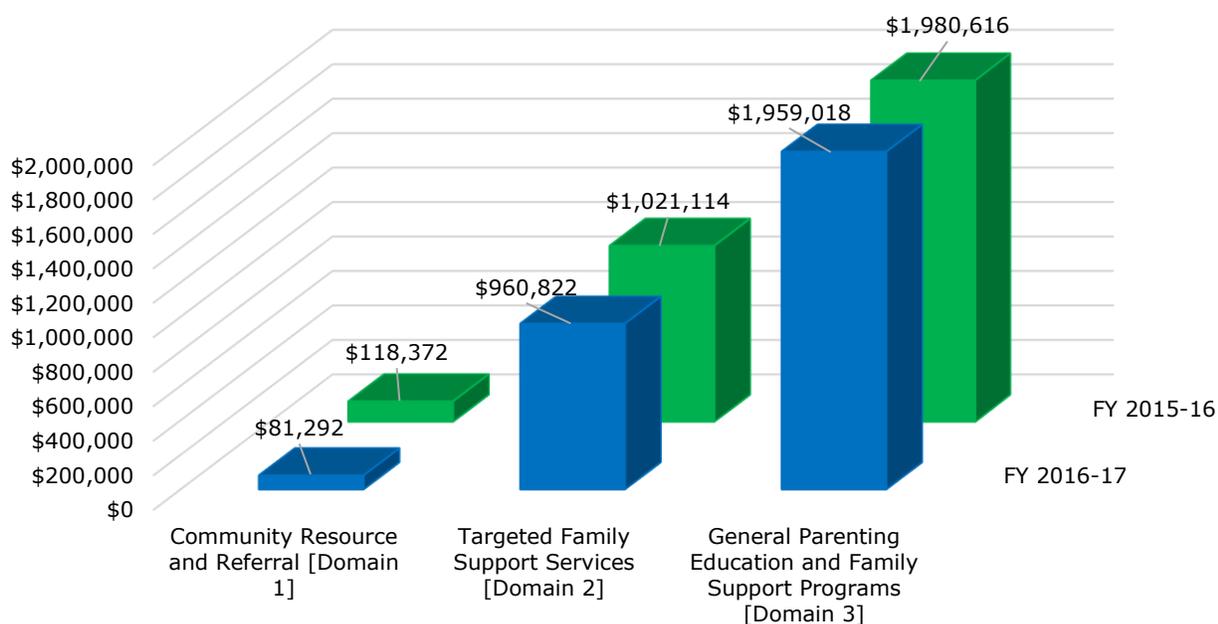
Table 18: Service Description and RI Designation in Family Functioning

Objective	Target Capacity	RI Designation
[1]	Targeted/Clinical Family Supports	Parent and Child Participation
[2]	Parent Education Offerings	Parent Learning Outcome
[3]	Reading Literacy Services	Parent Training Outcome

Objective	Target Capacity	RI Designation
[4]	Referral/Transportation Support	Family Service Access

In comparison, not all the domains contained the same number of programs. While 2-1-1 and HMG delivered services in Domain [1], Domain [2] included three programs, DR, DVRP, and GCP. Domain [3] had the largest funding (see Figure 13) for supporting 13 programs. The different emphases on parental services were well-justified because “Of all the things that influence a child’s growth and development, the most critical is reliable, responsive, and sensitive parenting” (Bowman, Pratt, Rennekamp, & Sektnan, 2010, p. 2). To sustain the service improvement, First 5 Kern had more program spending in FY 2016-17 than last year (Figure 13).

Figure 13: Funding Across Service Domains in Family Functioning



In *Community Resource and Referral* (i.e., Domain [1] of Figure 13), HMG coordinated data collection and analysis to detect gaps and barriers for quality improvement. As an innovative service model implemented across 17 states in the past, HMG typically served families under stress and/or lacking social support for young children to overcome communication barriers, service delay, as well as inadequate information on denial issues and transportation supports¹⁹. Without HMG support, these families could have been misguided to wrong service providers. Consequently, service gaps might occur to young children in poor health and with other important needs.

To facilitate the seamless service delivery, First 5 California (2015c) highlighted the

¹⁹ http://www.first5alameda.org/files/funding/HMG_developmental_supports.pdf

need to “Support sustainability of Family Resource Centers and other community hubs for integrated services for children and families” (p. 1). As Thompson and Uyeda (2004) observed,

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)

In FY 2016-17, center-based services were offered by all programs in Domains [2] and [3] of Figure 13. In addition, home visiting programs were sponsored by First 5 Kern for child protection against abuse and/or neglect. In combination with the referral services from 2-1-1 and HMG in Domain [1], the capacity building jointly created networking opportunities for families and programs to strengthen the link between *what is needed* and *what is available* in early childhood support.

Overview of Program Alignment with the Strategic Planning

Across a total of 18 programs in *Family Functioning*, access to referral services was documented by the number of consulting phone calls to 2-1-1 Kern County. In addition to online information dissemination, the toll-free phone support was available in either English or Spanish 24 hours a day, seven days a week. Throughout the year, the program responded to 10,490 unduplicated callers, including 2,840 new callers with children ages 0-5. The program referrals served an unduplicated count of 4,498 new children. In addition, 778 unduplicated callers completed inquiries on behalf of expectant mothers in their households. Ongoing referral supports were extended to 245 callers for Family Resources Center (FRC) access and 78 callers for prenatal care services. HMG offered 260 referrals since its introduction on 2/1/2017 for its network building among community partners. The strengthening of program support has addressed Domain [1], *Community Resource and Referral*, of the state report glossary (see Figure 13).

In Domain [2], *Targeted and/or Clinical Family Support Services*, it was reported that “the rate of substantiated child abuse/neglect in Kern County fell for the 6th straight year” (Nilon, 2015, p. i). In FY 2016-17, First 5 Kern funded DR, DVRP, GCP, and WSN to sustain the positive trend of early childhood protection. As a countywide program, DR differentiated reports of child abuse and neglect according to information from Child Protective Services (CPS). As a result, both investigative and non-investigative approaches have been taken through intensive home visitations to lower the recurrence rate of child abuse and neglect. DR case managers met weekly with service supervisors to discuss family assessments, care plans, service delivery strategies, as well as positive and negative factors regarding child development. Case closures were dependent on mitigation of risk factors that was confirmed by DR Supervisors.

Throughout this year, DR provided intensive case management services and home visits to 1,447 families that impacted 2,141 children ages 0-5. Increases of the service counts occurred from the baseline of 1,352 families and 1,934 children in last year. As the DR provider, “Kern County Network for Children [KCNC] serves many functions

benefiting children and families in Kern County.”²⁰ Its leadership roles were illustrated by six countywide projects (Table 19). The capacity building has led to creation of extensive partnerships with nine county agencies, 15 community-based organizations, 21 family resource centers, and five funders of local child services²¹.

Table 19: DR Roles in Strengthening Family Functioning

Roles	Projects
Administrative and Fiscal Agent	Promoting Safe and Stable Families
Administrative and Fiscal Agent	Child Abuse Prevention, Intervention, and Treatment
Administrative and Fiscal Agent	Community Based Child Abuse Prevention
Administrative and Fiscal Agent	Kern County Children’s Trust Fund
Administrative Agent	Foster Youth Services Program/AB490 Liaison Activities
Administrative Agent	County Accreditation of Local Community Collaborative

According to Kern County Network for Children [KCNC] (2017), “18,409 children were suspected as being abused or neglected, an average of 50 per day” and “51% of the Kern children who were victims of abuse were under the age of 5” (p. 3). The funding from First 5 Kern accounted for 21% of DR’s annual budget with an exclusive focus on supporting children ages 0-5. In the end, Kern County increased the *no recurrence of maltreatment* rate among infants and toddlers from 89% in 2014 to 91% in 2016 (KCNC, 2017).

One of DR’s key partners was DVRP that received First 5 Kern funding to provide a full range of legal assistance and representation for victims of domestic violence. KCNC (2017) noted that children ages 0 to 3 were most likely to experience severe injuries due to abuse or neglect. To support children across Kern County, DVRP offices were set in multiple communities, including Bakersfield, Delano, Frazier Park, Mojave, and Shafter, to expand services for court paper preparation, legal consulting, safety planning, victim representation, and resource referral.

Meanwhile, guardianship was needed to strengthen family support and/or reduce attachment problem, mental anxiety, and psychological depression among young children (Duke, Pettingell, McMorris, & Borowsky, 2010). With GCP assistance, grandparents and non-parent caregivers were adequately prepared to obtain guardianship for children in stable and loving homes. The new settlement was critical to discontinuation of physical, mental, and emotional harm to child victims of domestic violence. Other child protection services involved guardianship transitions under critical circumstances, such as parent incarceration or unemployment, substance or child abuse, child neglect or abandonment, physical or mental illness, parent divorce, and teen pregnancy. Through case managements, GCP supported medical homes, health insurance applications, dental services, mental health interventions, and preschool enrollments.

Both GCP and DVRP were affiliated with a non-profit organization, Greater Bakersfield Legal Assistance (GBLA). Along with GBLA’s launch of a Community Homeless Law Center Project, WSN sheltered mothers and children to further reduce the risk of

²⁰ <http://kern.org/kcnc/about/>

²¹ <http://kern.org/kcnc/links/>

victimization. In FY 2016-17, supportive services were offered by WSN through family counseling, group therapy, parent education, and medical or legal support. Altogether GCP, DVRP, and WSN supported 462 parents or guardians in Kern County, up from 364 parents or guardians in last year.

In combination, DR, DVRP, GCP, and WSN contributed to the alleviation of substantiated child abuse/neglect from multiple aspects, and thus, jointly reduced the burden of Child Protective Services (CPS) in foster care facilities. The workload reduction allowed CPS to distribute its limited resources to one fifth of the “children [who] were found to have been victims of abuse and neglect after investigation by CPS” (KCNC, 2016, p. 45).

In the third report domain of the state glossary, *General Parenting Education and Family Support Programs* were funded by First 5 Kern to provide case management and parent education in *Focus Area II: Family Functioning*:

1. Arvin Family Resource Center (AFRC)
2. Buttonwillow Community Resource Center (BCRC)
3. East Kern Family Resource Center (EKFRC)
4. Greenfield School Readiness Program (GSR)
5. Indian Wells Valley Family Resource Center (IWVFC)
6. Kern River Valley FRC Great Beginnings Program (KRVFC)
7. Lamont Vineland School Readiness Program (LVSFP)
8. McFarland Family Resource Center (MFRC)
9. Mountain Communities Family Resource Center (MFCRC)
10. Shafter Healthy Start (SHS)
11. Southeast Neighborhood Partnership Family Resource Center (SENP)
12. West Side Community Resource Center (WSCRC)

Three additional programs were funded in *Focus Area III: Child Development* to strengthen *Family Functioning* according to their Scope of Work-Evaluation Plan:

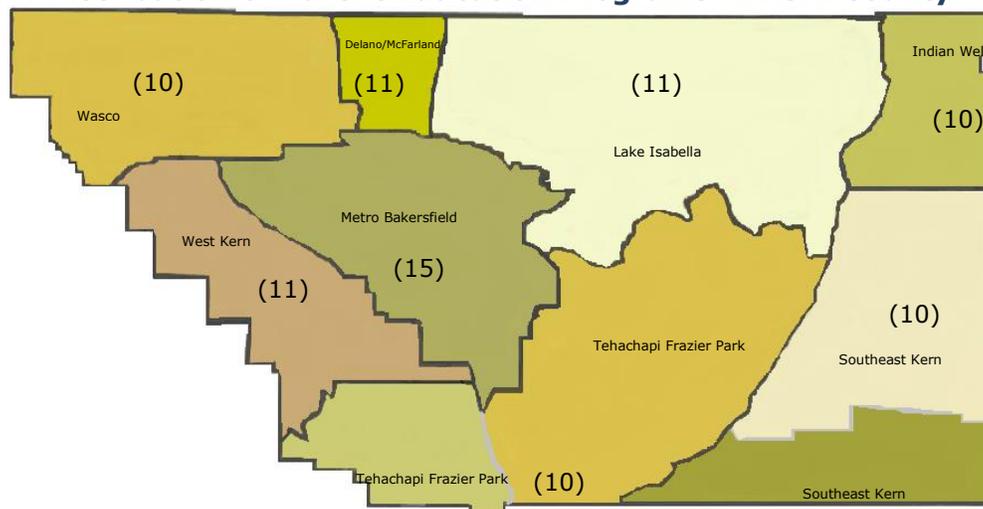
1. Delano School Readiness (DSR)
2. Lost Hills Family Resource Center (LHFRC)
3. Neighborhood Place Community Learning Center (NPCLC)

All these FRCs were set at central community locations to increase service accessibility. Resources from the National Association for the Education of Young Children (NAEYC) were employed to enrich culturally-relevant parent education and support services. IWVFC also offered transportation to serve 25 parents and/or guardians. All these programs were guided by the four objectives of First 5 Kern’s (2016) strategic plan to improve family-focused, culturally-relevant parent/guardian education and social services in *Family Functioning*. Due to the overlap of program supports between focus areas, parent education outcomes are presented in the next section. Another section is created in this chapter to aggregate result indicators on *Child Development*.

Outreach of Parental Education Across Kern County

In planning for countywide service outreach, the Kern Council of Governments (KCOG) designated nine subareas according to local housing development²². Due to the overlap of service coverage across different communities, a strong presence of 10 or more programs has been identified from *Focus Areas II* and *III* to extend parent education across various locations (Figure 14). The vast land availability in Kern County offered extensive spaces for housing development. At the county seat, the urban population in Bakersfield has surpassed the size of well-known cities like St. Louis in the 2010 census. While hard-to-reach areas have been addressed in the service deliveries, more programs were funded in Metro Bakersfield due to strong population demands (see Figure 14).

Figure 14: Distribution of Parent Education Programs in Kern County*



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

Depending on the program capacity, FRCs provided court-mandated parent education, nutrition instruction, financial training, school readiness preparation, nurse consultation, transportation support, and legal assistance. Besides First 5 Kern, nearly two-dozen partners were listed in FRC brochures for program referrals pertaining to (1) medical, dental, and mental health treatment, (2) child developmental assessment, (3) parent employment and education, (4) household utility and rental assistance, (5) domestic violence prevention, (6) family insurance application, (7) health screening, and (8) clothing, food, shelter, and other emergency/safety support.

Across the broad spectrum of early childhood support, researchers maintained that “investments in high-quality parenting education will be among the best investments any community can make” (Bowman, Pratt, Rennekamp, & Sektnan, 2010, p. 8). To model after the best practice, the Nurturing Parenting (NP) curriculum is employed in both court-mandated and non-court-mandated parent education settings. The NP materials on the *Infant, Toddler, and Preschooler* track are available in six languages, including English and Spanish. There is no minimum education requirement for program training. Due to its positive impact on improving parenting skills, the Departments of the Army and Navy utilized the NP program to enhance parenting skills for first-time parents in military bases

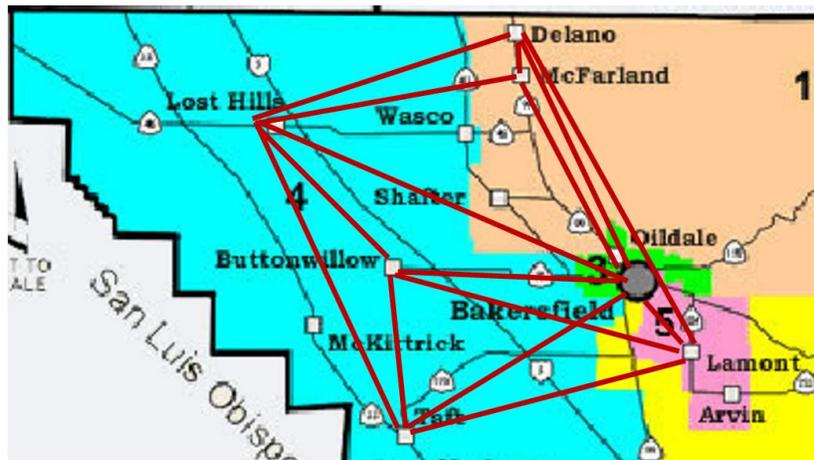
²² http://www.co.kern.ca.us/planning/pdfs/he/HE2008_Ch1.pdf

worldwide (Family Development Resources, 2015). NP has also been recognized as an effective approach by the Substance Abuse and Mental Health Services Administration (SAMHSA) and the National Registry for Evidence-based Parenting Programs (NREPP).

Stephen Bavolek (2000), the NP copyright owner, asserted that parenting patterns were learned in childhood and replicated later in life when children became parents. Consequently, negative experiences may engulf children in parenting models of abuse, neglect, exploitation, and victimization. Because of positive and negative parenting in the society, NP workshops were implemented with a clear focus on remediating five maltreatment patterns: (1) having inappropriate developmental expectations of children, (2) demonstrating a consistent lack of empathy towards meeting children’s needs, (3) expressing a strong belief in the use of corporal punishment and utilizing spanking as their principle means of discipline, (4) reversing the role responsibilities of parents and children, and (5) oppressing the power and independence of children by demanding strict obedience (Schramm, 2015).

In FY 2016-17, 10 NP workshops were offered by the seven FRCs that provided non-court-mandated parent education. A three-day training was offered by First 5 Kern to introduce NP concepts and procedures to the FRC staff. The coalition of seven FRCs covered a geographic area that housed the majority of Kern County population across different communities (Figure 15).

Figure 15: Coverage of the NP Workshop Sites across Kern County



Each of the 10 workshops lasted 120 minutes. A variety of topics were covered in the workshops to improve positive lifestyles, design appropriate expectations, strengthen mutual understandings, develop self-concepts, establish family values, and handle discipline issues. Specific goals have been set for these workshops in Table 20.

Table 20: Goals of Nurturing Parenting Workshops

Workshop	Goal
1	Increase parent’s knowledge of nurturing parenting and nurturing as a lifestyle
2	Increase parent’s awareness of appropriate expectations of children
3	Increase parents’ ability to promote healthy brain development in their children

Workshop	Goal
4	Help parents recognize and communicate their feelings and child feelings
5	Improve parent’s and children’s self-worth and self-concept
6	Help parents recognize and understand their feelings and child feelings
7	Increase parents’ skills in developing family morals, values, and rules
8	Increase parents’ understanding of the importance of praise
9	Increase parents’ awareness of other ways to discipline besides spanking
10	Increase parents’ ability to recognize and handle stress

A total of 1,217 participants attended 10 workshops with an average class size ranging from 5 to 40 across seven programs (Table 21). Workshops with the maximum number of participants were identified by the mode locations. The means and modes of the NP workshop attendee counts varied across NP workshop topics and program locations. Table 21 showed the most popular workshop on “increasing parent’s knowledge of nurturing parenting and nurturing as a lifestyle” that was attended by 149 parents in three programs.

Table 21: Means and Modes of NP Workshop Attendee Counts

Program	Mean	Mode	Workshops with the Mode Occurrence
AFRC	15	30	Increase parents’ ability to recognize and handle stress
BCRC	15	23	Increase parent’s knowledge of nurturing parenting and nurturing as a lifestyle Increase parent’s awareness of appropriate expectations of children
DSR	21	41	Increase parent’s knowledge of nurturing parenting and nurturing as a lifestyle
GSR	40	85	Increase parent’s knowledge of nurturing parenting and nurturing as a lifestyle
LVS RP	10	14	Increase parents’ ability to promote healthy brain development in their children
MFRC	5	14	Increase parents’ skills in developing family morals, values, and rules
WSCRC	15	22	Help parents recognize and understand their feelings and child feelings

Table 22 contained the percent of participants who would apply “some” or “a lot” of what they learned from these workshops²³. Seventy percent of the cells in Table 22 reached a rate of 100%. More importantly, the 100% rate appeared in multiple programs to confirm the practical utility of the contents in 10 workshops.

Table 22: Percent of “Some” or “A Lot” Responses to Workshop Applicability

Workshop	AFRC	BCRC	DSR	GSR	LVS RP	MFRC	WSCRC
1	100	100	100	98	100	-	100
2	100	100	87	100	100	-	56
3	93	90	100	90	100	83	63

²³ In the workshop questionnaire, categories “some” or “a lot” were worded as “somewhat likely” or “very likely” for Workshop 1 and “uncertain/strongly agree” or “strongly agree” for Workshops 3, 5, 7, and 9.

Workshop	AFRC	BCRC	DSR	GSR	LVS RP	MFRC	WSCRC
4	100	100	76	100	100	100	52
5	100	100	75	100	100	100	90
6	100	100	100	100	100	100	95
7	100	100	100	100	100	93	100
8	100	100	100	97	100	100	31
9	86	100	100	85	100	100	-
10	100	100	100	100	100	100	100

*Represents “no response” in the survey data.

Feedback from the first nine NP workshops were gathered from 1,138 participants. On a five-point scale with 5 representing the most positive result, the learning outcome was indicated by the average rating of NP performance from 3.25 in pretest to 4.22 in posttest across seven programs. The rating improvement across these workshops was significant at $\alpha=.0001$ [i.e., $t(1137)=26.88$, $p<.0001$] with a large effect size [Cohen’s $d=1.59>0.8$] for strong practical program impact. Details of the program-specific results were presented in Table 23.

Table 23: Improvement of Parent Confidence Ratings

Program	N	Pre-Rating	Post-Rating	t	p	Effect Size
AFRC	122	3.50	4.50	8.96	<.0001	1.63
BCRC	145	3.32	4.47	11.15	<.0001	1.86
DSR	198	3.21	4.24	12.94	<.0001	1.84
GSR	399	3.27	4.05	13.31	<.0001	1.33
LVS RP	89	2.81	3.87	6.15	<.0001	1.30
MFRC	35	2.97	3.83	3.69	.0008	1.27
WSCRC	150	3.34	4.48	13.91	<.0001	2.28

At end of of the 10th workshop, over 94.6% of the participants showed more confidence in helping children handle stress in positive ways, which was in agreement with positive findings from the first nine workshops across seven programs (Table 23).

In summary, FRC has fulfilled its role in parent education to help replace abusive parenting patterns with positive ones. Through the NP workshop offerings, First 5 Kern funding was employed to support an original goal of the state commission in *Family Functioning*, i.e., “Families and communities are engaged, supported, and strengthened through culturally effective resources and opportunities that assist them in nurturing, caring, and providing for their children’s success and well-being” (First 5 California, 2014, p. 7).

Establishment of Parenting Beliefs against Child Maltreatment

In FY 2016-17, court-mandated parent education was offered to promote changes of parental belief according to the positive norms for nurturing parenting. Samuelson (2010) noted, “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 assess the multiple changes, researchers identified a norm-referenced Adult-Adolescent Parenting Inventory-2 (AAPI-2) for measuring the program impact on psychological constructs that negatively undermined parent-child interactions (Berg,

2011; Moore & Clement, 1998). AAPI-2 incorporated assessment of five parent beliefs pertaining 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 education²⁴.

First 5 Kern funded court-mandated parent education at six FRCs: (1) East Kern Family Resource Center (EKFRC), (2) Indian Wells Valley Family Resource Center (IWVFRC), (3) Kern River Valley Family Resource Center (KRVFRC), (4) Neighborhood Place Community Learning Center (NPCLC), (5) Shafter Healthy Start (SHS), and (6) Southeast Neighborhood Partnership Family Resource Center (SENP). Bocanegra (2014) pointed out, “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” (p. 3). Hence, reverse of negative parental beliefs is not only crucial in *Family Functioning*, but also important in *Child Development*.

In First 5 Kern’s (2017) annual report to the state commission, NPCLC was highlighted as an exemplary program in *Focus Area III: Child Development*. While offering learning opportunities for parents, NPCLC incorporated two regular classes, “Little Learner” and “4 and 5 Ready to Strive”, for preparing school readiness skills for children from 18 months to five years²⁵. The service provider, North of the River Recreation and Park District, has been serving a large community of 215-square-miles for more than 60 years. Built on the long-term service commitment, NPCLC offered family referrals and expanded knowledge of developmental milestones and norms for parents.

In FY 2016-17, the AAPI-2 instrument was employed in a pretest and posttest setting to track responses of 107 parents across six programs that offered court-mandated parent education services. EKFRC was an exception for having only eight cases tracked this year. Sample sizes for the remaining five programs reached a double digit, and their results demonstrated effect sizes larger than 0.80 for strong intervention effects across the AAPI-2 constructs (Table 24).

Table 24: Impact of Court-Mandated Parent Education in Focus Areas II & III

Construct	Focus Area	Program*	Result
A. Expectations of Children	II	EKFRC	t(7)=2.15, p=.0685; Effect Size=1.63
		IWVFRC	t(19)=8.46, p<.0001; Effect Size=3.88
		KRVFRC	t(11)=2.30, p=.0422; Effect Size=1.39

²⁴ These nine other counties are Los Angeles, Madera, Sacramento, San Bernardino, Santa Barbara, Santa Cruz, Solano, Shasta, and Tuolumne.

²⁵ P. 4 of <http://files.constantcontact.com/c405ddb5001/b5acbee4-0f0b-41b0-a569-2a22781ae42f.pdf>.

		SENP	t(14)=5.92, p<.0001;	Effect Size=3.16
		SHS	t(28)=3.75, p=.0008;	Effect Size=1.42
	III	NPCLC	t(22)=8.70, p<.0001;	Effect Size=3.71
B. Parental Empathy	II	EKFRC	t(7)=2.85, p=.0246;	Effect Size=2.85
		IWVFRC	t(19)=7.79, p<.0001;	Effect Size=3.57
		KRVFRC	t(11)=6.68, p<.0001;	Effect Size=4.03
		SENP	t(14)=9.71, p<.0001;	Effect Size=5.19
		SHS	t(28)=12.21, p<.0001;	Effect Size=4.62
	III	NPCLC	t(22)=10.33, p<.0001;	Effect Size=4.40
C. Physical Punishment	II	EKFRC	t(7)=1.09, p=.3118;	Effect Size=0.82
		IWVFRC	t(19)=4.27, p=.0004;	Effect Size=1.96
		KRVFRC	t(11)=3.90, p=.0025;	Effect Size=2.35
		SENP	t(14)=3.97, p=.0014;	Effect Size=2.12
		SHS	t(28)=7.62, p<.0001;	Effect Size=2.88
	III	NPCLC	t(22)=8.83, p<.0001;	Effect Size=3.77
D. Parent-Child Roles	II	EKFRC	t(7)=-.30, p=.7760;	Effect Size=0.23
		IWVFRC	t(19)=5.11, p<.0001;	Effect Size=2.34
		KRVFRC	t(11)=1.42, p=.1826;	Effect Size=0.86
		SENP	t(14)=4.09, p=.0011;	Effect Size=2.19
		SHS	t(28)=4.11, p=.0003;	Effect Size=1.55
	III	NPCLC	t(22)=9.09, p<.0001;	Effect Size=3.88
E. Child Power & Independence	II	EKFRC	t(7)=1.02, p=.3424;	Effect Size=0.77
		IWVFRC	t(19)=3.15, p=.0053;	Effect Size=1.45
		KRVFRC	t(11)=2.40, p=.0351;	Effect Size=1.45
		SENP	t(14)=6.51, p<.0001;	Effect Size=3.48
		SHS	t(28)=2.96, p=.0104;	Effect Size=1.12
	III	NPCLC	t(22)=8.72, p<.0001;	Effect Size=3.72

*Program acronyms are listed in Appendix A.

Unlike other center-based services, court-mandated parent education abided by the legal requirement. It was the mandatory responsibility that strengthened the consistency of service outcomes in these five programs. Except for Construct D from KRVFRC, statistical testing showed significant improvement of parent beliefs at $\alpha=.05$ in Table 24. The results from NPCLC also confirmed statistically significant improvement of the parent constructs at $\alpha=.0001$. The average effect size from NPCLC reached 3.90, larger than the average results from other programs to justify its stronger practical impact in the AAPI-2 findings.

Restoration of Family Functioning for Child Protection

According to KCNC (2016), "588 infants were the victims of child abuse in Kern County, a rate of 40.5 per 1,000 infants. This rate among infants was nearly three times higher than Kern's overall rate of substantiated abuse and neglect" (p. 37). Hence, young children need more protective services in Kern County. In this funding cycle, First 5 Kern

funded four programs to support restoration of family functioning for early childhood protection. The result tracking is reported in this section to assess program effectiveness.

1. DR Service to Strengthen Child Protection

It was reported that “Of the children who died because of abuse or neglect, 95% were younger than five years old between 2011 and 2015” (KCNC, 2016, p. 44). To strengthen child protection, First 5 Kern funded DR service coverage across the county. The extensive program outreach was accomplished through partnership building between DR and 45 agencies at both county and community levels. With First 5 Kern funding as its seeds money, DR leveraged around 79% of its annual budget to sustain Child Protective Services (CPS) in Kern County.

In FY 2016-17, DR continued adopting the North Carolina Family Assessment Scale for General Services (NCFAS-G) to monitor improvement of family functioning on eight dimensions, *Environment, Parental Capabilities, Family Interactions, Family Safety, Child Well-being, Social/Community Life, Self-Sufficiency, and Family Health*. Built on the data tracking between pretest and posttest, Cronbach’s alpha index was computed from over 616 observations on the gain scores and the result reached .91 to confirm consistency of the measurement outcomes (Table 25).

Table 25: Impact of DR Services on the NCFAS-G Scales

Scale Domain	Results
Environment	t(608)=15.40, p<.0001; Effect Size=1.25
Parental Capabilities	t(612)=15.34, p<.0001; Effect Size=1.24
Family Interactions	t(610)=15.53, p<.0001; Effect Size=1.26
Family Safety	t(607)=14.48, p<.0001; Effect Size=1.18
Child Well-Being	t(605)=15.54, p<.0001; Effect Size=1.26
Social/Community Life	t(609)=14.16, p<.0001; Effect Size=1.15
Self-Sufficiency	t(611)=16.07, p<.0001; Effect Size=1.30
Family Health	t(605)=14.28, p<.0001; Effect Size=1.16

Due to the large sample size, statistical testing has been conducted to examine significance of the DR impact. Table 25 showed significant enhancement of family functioning across all eight domains of NCFAS-G assessment. All effect size values were larger than 0.8 (Table 25). According to Cohen’s (1988) criterion, these indices reconfirmed a strong practical impact from the program intervention.

2. DVRP Support to Reduce Domestic Violence

While legal procedures were established to serve adult victims from domestic violence, “increasing attention is now focused on the children who witness domestic violence” (Bragg, 2003, p. 5). DVRP implemented a comprehensive protocol to provide a full range of legal assistance for child protection. Upon case identification, DVRP assigned a supervising attorney and a paralegal 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. The service also included interpretation support for clients in 21

languages.²⁶ In FY 2016-17, DVRP supported 140 parents or guardians and 202 children in preventing domestic violence, child abuse and/or neglect.

At end of the DVRP services, 53 victims of domestic violence responded to a program survey indicating their agreement or strong agreement to the following six statements:

- My sense of safety and peace of mind have been restored;
- The child(ren) live in a safe environment;
- The child(ren) live in a stable environment;
- The child(ren) are no longer exposed to domestic violence;
- I know my rights and protections as a victim of domestic violence;
- The child(ren) in the household are not subjected to abuse and/or neglect.

Consistency of the positive responses were confirmed by a high reliability index (Cronbach's alpha=.98). Except for one *uncertain* answer, all respondents *agreed* or *strongly agreed* that "The child(ren) live in a stable environment".

3. GCP Services for Child Protection

Issues of domestic violence often led to divorce (Pollet, 2011). "When a child cannot be returned home and adoption is not in the child's best interests, then guardianship is considered to be a more permanent plan for a child" (KCNC, 2016, p. 50). GCP assisted caregivers to prevent abuse or neglect of children ages 0-5 through establishment of guardianship protection. The wide-ranging services include (1) representation of prospective caregivers in preparing and filing guardianship petitions, (2) responding to objections, (3) planning for mediations and guardianship hearings, and (4) completion of post-hearing letters and orders. In FY 2016-17, goals have been set for GCP to serve 180 guardians and 200 children. GCP surpassed these goals by serving 190 guardians and 260 children.

For more than a decade, the rate of child abuse/neglect in Kern County has been around 9.2% while the state rate was kept under 7%²⁷. It was reported that "37% of Kern County children were being raised by a single parent and 7% by their grandparents" (KCNC, 2016, p. i). To justify GCP's quality services in this much-needed region, exit survey data were gathered from 79 clients and all of them "strongly agreed" to the following conclusions:

- The child(ren) live in a stable environment;
- I am able to access medical services for the child(ren) in the household;
- The child(ren) in the household are not subjected to abuse and/or neglect.

In addition, all respondents "agreed" or "strongly agreed" that

- The child(ren)live in a safe environment;
- I am able to access mental health treatment for the child(ren) in the household;
- I am more knowledgeable about the duties, rights, and responsibilities of legal guardianship.

²⁶ <http://gbla.org/about-gbla/history/>

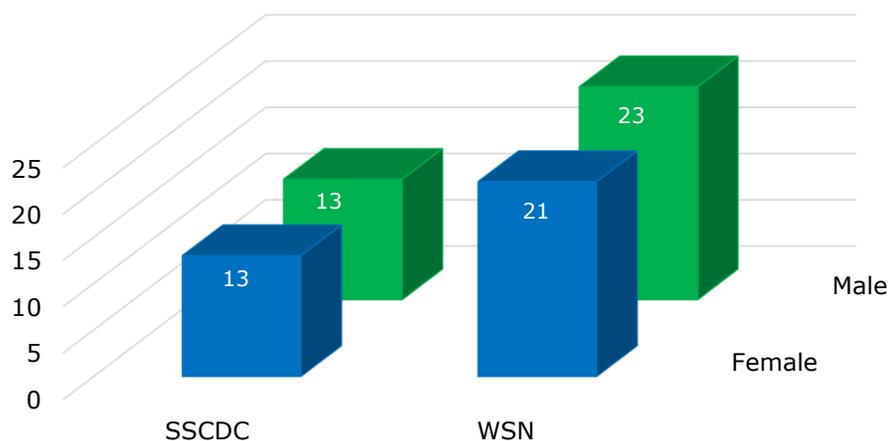
²⁷ www.Kidsdata.org.

4. Collaborative Interventions on Family Support

In the 21st century, one of the fastest growing segments of the homeless population comes from families with children (National Coalition for the Homeless, 2009). The issue is important because “Children who are homeless often demonstrate significant developmental delays in early childhood, which can contribute to later behavioral and emotional problems and poor performance in school” (American Institutes for Research, 2012, p. 8). Collaborative interventions are needed to support families with emotional disturbance. WSN is the primary program in *Family Functioning* to assist 44 parents or guardians in preventing domestic violence, child abuse and/or neglect. In FY 2016-17, the program collaborated along with RSNC and SSCDC in offering group therapies for 103 children. In particular, both WSN and SSCDC maintained a focus on early childcare and education for young children who experienced family instability. While SSCDC supported families through integrated services such as court visits, parent education, counseling, housing and job placement, WSN provided shelter, medical and legal accompaniments, counseling, group therapy and education for mothers and children who have experienced family violence.

ASQ-SE data were employed to track alleviation of emotional difficulties for 26 children in SSCDC and 44 children in WSN who had exposure to domestic violence and/or lived in homeless shelters. Figure 16 showed the case distribution across program and gender dimensions. Introduction of the gender factor in Figure 16 was based on the current literature on stronger needs for early childhood services by boys than girls under adverse circumstances (Garcia, Heckman, Leaf, & Prados, 2016).

Figure 16: ASQ-SE Data across Program and Gender Dimensions



Following a Technical Report of ASQ-SE²⁸, “Children were classified as ‘at risk’ on the ASQ:SE (further evaluation of their social-emotional status was indicated) if their scores were on or above the cutoff point” (p. 8). The ASQ-SE data analyses showed that females performed significantly below the threshold than males at $\alpha=.05$ [i.e., $t(68)=2.60$, $p=.0113$] regardless of the program affiliation. Hence, less negative impact occurred on the social-emotional status of girls under the adverse circumstances. To confirm the gender-specific outcomes on program effectiveness, the ASQ-SE data indicated that girls were significantly below the cutoff point [i.e., $t(33)=4.36$, $p=.0001$]. In contrast, ASQ-

²⁸ http://agesandstages.com/wp-content/uploads/2015/03/asqse_technical_report.pdf.

SE results from 36 boys were insignificantly different from the cutoff point [i.e., $t(35)=.75$, $p=.4564$].

In terms of the program difference, over 69% of the SSCDC sample performed below the cutoff point of ASQ-SE. WSN had over 77% of the children below the cutoff point. Hence, alleviation of emotional difficulties occurred for the majority of children in both programs. Statistical testing on the ASQ-SE outcomes showed insignificant differences between the two programs [$t(68)=1.30$, $p=.1976$].

5. Case Management Services for General Family Support

While intensive case management services were provided by DR, DVRP, GCP, and WSN for child protection and family assistance, First 5 Kern funded 20 programs to extend general case management support for children and families across focus areas. The results are reported in this section because the majority of these programs are affiliated in *Family Functioning* (Table 26).

Table 26: General Case Management Support across Twenty Programs*

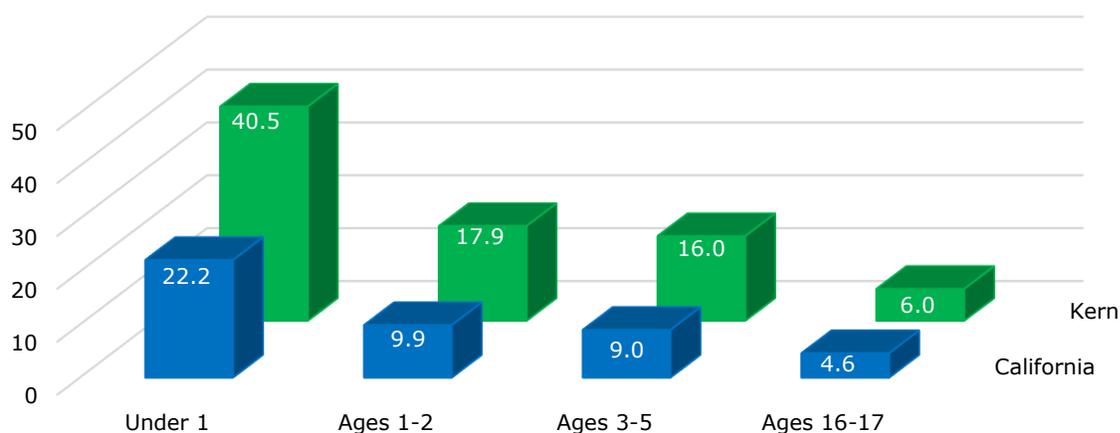
Focus Area	Program Acronym	Family Count		Child Count	
		Total	Target	Total	Target
Child Health	BIH	81	70	31	40
	KCCDHN	308	200		
	MVIP	68	55		
	NFP			57	50
	RSNC	30	30	30	30
	AFRC	41	40	64	40
	BCRC	21	20	30	20
	EKFRC	42	30	44	30
	GSR	32	30	41	30
	IWVFRC	42	40	68	40
Family Functioning	KRVFRC	53	50	65	60
	LVSFP	60	40	99	40
	MFRC	36	30	15	15
	MCFRC	18	17	19	17
	SHS	26	30	29	30
	SENP	50	40	74	40
	WSCRC	24	20	38	20
	DSR	31	25	15	25
Child Development	LHFRC	20	20		
	SPCSR	31	50	36	50

*Program full names are listed in Appendix A.

Except for NFP in *Child Health*, all programs in Table 26 delivered case management services at the family level, which justified more emphasis of the result reporting in *Family Functioning*. Altogether, 1,014 families and 755 children received general case management supports in FY 2016-17. In comparison to the designated target counts, the completed counts indicated expansion of case management services for additional 177 families and 178 children this year. A total of 95% of the programs reached or surpassed the service target for family case management and 82% of the programs attained or exceeded the support target for child case management.

In summary, Kern County’s *substantiated child abuse rate* for newborns under age 1 was more than twice of the rate across California. The corresponding gap was much smaller at ages 16-17 (Figure 17). “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” (Samuelson, 2010, p. 1). In this funding cycle, First 5 Kern sponsored court-mandated and non-court-mandated education at 13 FRCs across Kern County because “Parent education levels are also related to children’s academic achievement” (American Institutes for Research, 2012, p. 7). In addition, to assess effectiveness of child protection in adverse family environments, parent/guardian reports were employed to indicate program effectiveness after the DVRP and GCP interventions. The impact of DR and WSN was illustrated by the NCFAS-G results and the ASQ-SE outcomes, respectively. As a result, First 5 Kern funding has complied with a state stipulation on “Parental education and support services in all areas required for, and relevant to, informed and healthy parenting” (Proposition 10, p. 7).

Figure 17: Substantiated Child Abuse Rates per 1,000 Children



Source: 2016 KCNC Report Card

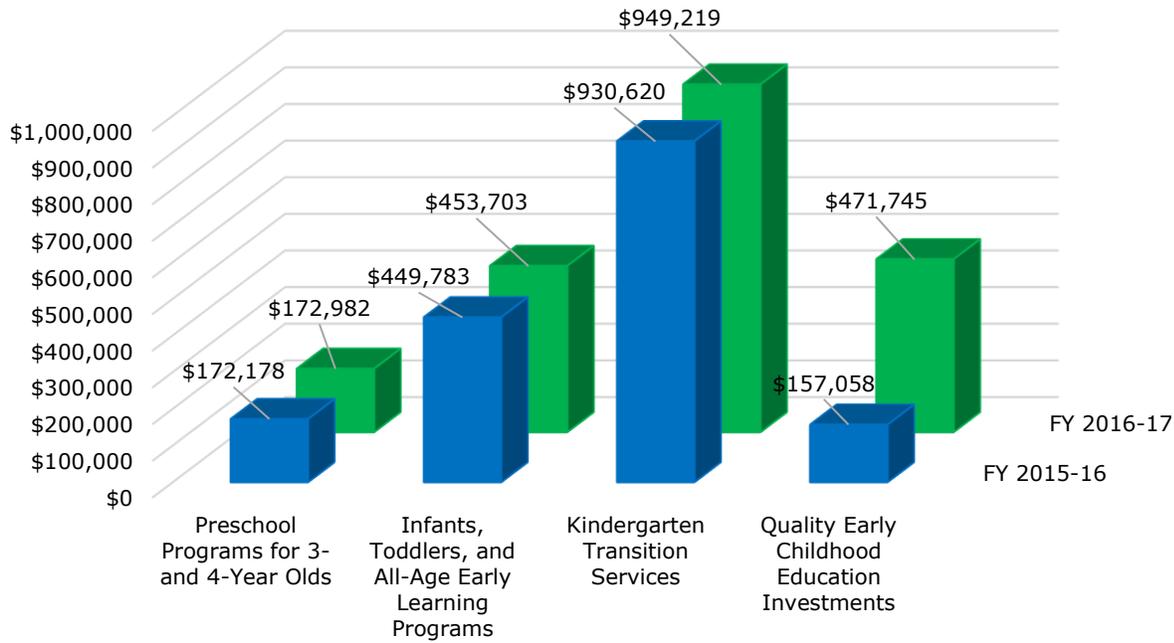
(III) Enhancement of Early Childhood Education

In the focus area of *Child Development*, four domains were identified by the state glossary (see First 5 Association of California, 2013) pertaining to First 5 Kern-funded services: [1] Preschool Programs for 3- and 4-Year-Olds, [2] Infants, Toddlers, and All-Age Early Learning Programs, [3] Kindergarten Transition Services, and [4] Quality Early Childhood Education Investments. In FY 2016-17, 10 programs provided services in these domains, and the total investment in the focus area of *Child Development* amounted to \$2,047,649.

In comparison to last year, substantial increases occurred in Domain [4] to accommodate a statewide project, *Improve & Maximize Programs so All Children Thrive* (IMPACT) (Figure 18). Because of the ongoing reduction of state revenue from tobacco tax, a recommendation was made by First 5 Association of California (2016) to switch the report emphasis to outcomes of service system building. Accordingly, IMPACT was designed to forge partnerships between First 5 California and local agencies on developing

and recognizing high-quality early learning services in much-needed communities²⁹. Due to the fact that IMPACT is not guided by the local strategic plan, outcomes in Domain [4] are excluded from this annual report on First 5 Kern funding.

Figure 18: First 5 Kern Funding in Child Development



Across the first three report domains, the total local funding increased from \$1,552,581 in FY 2015-16 to \$1,575,904 in FY 2016-17 (Figure 18). In Domain [1], South Fork Preschool (SFP) and Wind in the Willows Preschool (WWP) provided education services for three and four year-olds at rural communities of Lake Isabella and Mojave Desert. In Domain [2], Blanton Child Development Center (BCDC), Discovery Depot Child Care Center (DDCCC), and Small Steps Child Development Center (SSCDC) were funded to support early childcare for families with special needs. Five programs in Domain [3] were funded for preparing children for kindergarten transition:

1. Delano School Readiness (DSR)
2. Lost Hills Family Resource Center (LHFRC)
3. Neighborhood Place Parent Community Learning Center (NPCLC)
4. Ready to Start (R2S)
5. Supporting Parents and Children for School Readiness (SPCSR)

In retrospect, DSR, LHFRC, and SPCSR originated from a statewide School Readiness Initiative (SRI). SRI also sponsored development of Summer-Bridge classes across nine programs in *Family Functioning*:

1. Arvin Family Resource Center
2. Buttonwillow Community Resource Center

²⁹ http://www.cfc.ca.gov/programs/programs_impact.html

3. East Kern Family Resource Center
4. Greenfield School Readiness Program
5. Indian Wells Valley Family Resource Center
6. Lamont Vineland School Readiness Program
7. McFarland Family Resource Center
8. Shafter Healthy Start
9. West Side Community Resource Center

Due to the service overlap across focus areas, results from all Summer-Bridge programs are reported in this section to aggregate child development outcomes from the kindergarten transition services.

Furthermore, R2S was developed locally with support from Kern County Superintendent of Schools. The program sustainability was deeply grounded on solid private-public partnerships. In addition to First 5 Kern funding, R2S received more than \$800,000 contribution from Aera Energy since 2002 to hire a Program Coordinator, classroom coaches, preschool teachers, and instructional aides for the service delivery. To reciprocate the IRB support from California State University, Bakersfield (CSUB), R2S created internship opportunities for CSUB students to serve as classroom aides and gain practical experiences in early childhood development.

In summary, First 5 Kern’s support in *Child Development* has addressed two objectives of the local strategic plan: (1) Children will enter school prepared as a result of their participation in early childhood education and childcare services, and (2) Special population children (e.g. non-traditional hours and/or children with special needs) will have access to early childhood education and childcare services (First 5 Kern, 2016). Table 27 showed alignment between the first three domains of the statewide report glossary (see First 5 Association of California, 2013) and two objectives of *Child Development* in First 5 Kern’s (2016) strategic plan.

Table 27: Service Domain Alignment with Objectives of Child Development

Objectives in Child Development	Service Domain
1. School preparation from early childhood education and childcare services	[1-3]
2. Access to the program services by children with special needs	[2]

The dual objectives in Table 27 were designed to meet a goal that “Early childcare and education services will be accessible” (First 5 Kern, 2016, p. 6). Multiple result indicators have been specified in the strategic plan to link **Objective 1** to service outcomes of home-based, center-based, and Summer-Bridge programs (RI 3.1.1-3.1.3, Ibid. 11). **Objectives 2** targets on the service access by children with special needs (RI 3.2.1, 3.2.2, Ibid. 11) and/or during non-traditional hours (RI 3.2.3, Ibid. 11). The alignment between RI designation and service description is summarized in Table 28.

Table 28: Service Description and RI Designation in Child Development

Objective	Service Description	RI Designation
[1]	Home-Based, Center-Based, and Summer-Bridge Childcare and Education	Child Service Access
[2]	Accommodation of Children with Special Needs and During Non-Traditional Hours	Service Availability

Services in non-traditional hours were addressed by Special Start for Exceptional Children (SSEC) in the *Child Health* section of this chapter. Other service outcomes are examined in the following sections to analyze effectiveness of center-based, home-based, and Summer-Bridge programs, as well as the support services for children with special needs.

Capacity of Program Support in Child Development

Because most FRCs functioned as a one-stop hub in local communities (Thompson & Uyeda, 2004), multiple services are delivered by different programs across focus areas (see Tables 29-32). In Table 29, center-based service counts are listed for 19 programs in *Child Health*, *Family Functioning*, and *Child Development*. Except for Ready to Start (R2S) that is solely focused on Summer-Bridge education, all other programs in *Child Development* appeared in Table 29 for providing center-based education. In addition, half of the programs in *Family Functioning* offered child education services, and one program in *Child Health* organized education workshops to support healthy literacy development. These center-based programs reached or surpassed their target service counts, and offered education services for 1,081 children.

Table 29: Delivery of Early Education Services on Center-Based Platforms*

Focus Area	Program Acronym	Child Count	
		Total	Target
Child Health	HLP	121	80
	AFRC	25	25
	BCRC	20	20
	EKFRC	30	25
	GSR	81	75
Family Functioning	LVS RP	20	15
	MFRC	20	20
	MCFRC	12	12
	SHS	45	40
	WSCRC	34	25
Child Development	BCDC	32	25
	DSR	30	30
	DDCCC	61	50
	LHFRC	21	20
	NPCLC	329	166
	SSCDC	60	40
	SFP	31	24
	SPCSR	74	40
WSCRC	35	34	

*Program full names are listed in Appendix A.

To support service outreach, First 5 Kern funded home-based education in remote locations. East Kern FRC (EKFRC), Delano School Readiness (DSR), and Lost Hills FRC (LHFRC) are located near the border of Kern County. In FY 2016-17, these programs offered home-based education services for 98 children, exceeding the total target count of 50 children in Table 30.

Table 30: Delivery of Early Education Services on Home-Based Platforms*

Focus Area	Program Acronym	Child Count	
		Total	Target
Family Functioning	EKFRC	64	15
Child Development	DSR	14	15
	LHFRC	20	20

*Program full names are listed in Appendix A.

For children with special needs, ages 0-5 represent the most important period to close developmental gaps. Because a child’s brain undergoes dramatic growth at this stage, gaps in one area could impact child wellbeing in other areas. Hence, collaboration is needed across programs between *Child Health* and *Child Development*. The service integration has been promoted through First 5 Kern’s comprehensive supports across focus areas. For instance, LVS RP was highlighted for its effective services in the *Commission Annual Report to the State in FY 2016-17*. Besides assisting children from 149 families with health insurance applications, the program offered preschool learning activities to 20 children and sponsored a Summer-Bridge learning program to strengthen school readiness for 50 children (Wood-Slayton, 2017).

It should be further noted that services in *Child Health* were delivered for 1,016 children with *special needs* in MVIP and MVCCP programs [see Section (I) of this chapter]. In Table 31, a target was set to support a total of 70 children with special needs through home-based and/or center-based education. First 5 Kern-funded programs exceeded the target by serving 75 children. The commitment to special-need services fit a broad vision of First 5 California to “build a quality system of early care and education with access for all”³⁰.

Table 31: Counts of Children Receiving Special-Need Services

Service Type	Focus Area	Program Acronym	Child Count	
			Total	Target
Center-Based Service	Child Development	SFP	3	2
	Child Health	SSEC	41	37
Home-Based Service	Child Development	LHFRC	20	21
	Child Health	SSEC	12	10

*Program full names are listed in Appendix A.

In preparing for school readiness, First 5 Kern (2016) set a result indicator on *the number of children who participated in Summer Bridge center-based activities*. In FY 2016-17, programs in Table 32 served a total of 834 preschoolers. R2S was built on partnership support among First 5 Kern, the Kern County Superintendent of Schools Office, and Aera Energy³¹. The program was geared toward the needs of soon-to-be-kindergartners who were not exposed to preschool before. Due to Transitional Kindergarten and other policy impact from the state, the eligible student pool was shrinking in recent years. Meanwhile, external funding from Aera Energy was cut back for this program. Consequently, both EKFRC and R2S had service counts substantially below their annual targets. Excluding these two unique cases, the total enrollment target was set at 280 for the remaining 10 programs. The results surpassed that target for extending education services to 357 additional preschoolers (Table 32).

³⁰ http://ccfc.ca.gov/pdf/F5CAFOCUS_AUG2017.pdf

³¹ <http://kern.org/2015/10/ready-to-start/>

Table 32: Participant Counts in Summer-Bridge Programs

Focus Area	Program Acronym	Child Count	
		Total	Target
Family Functioning	AFRC	10	10
	BCRC	8	6
	EKFRC	6	15
	GSR	32	30
	IWVFC	13	14
	LVSRC	20	20
	MFRC	20	20
	SHS	25	25
Child Development	WSCRC	34	25
	DSR	38	30
	R2S	471	650
	SPCSR	157	100

*Program full names are listed in Appendix A.

In summary, result indicators in *Child Development* not only focused on the quality of home-based, center-based, and Summer-Bridge programs for early childcare and education, but also reflected great importance of program access by children *with special needs* and *in remote locations*. Following its strategic plan, First 5 Kern led countywide efforts to champion the wide-ranging support for service access across the vast valley, mountain, and desert communities.

Assessment of Program Outcomes in Early Childhood Education

While service counts have been treated as an important indicator in program evaluation, Albert Einstein cautioned that "not everything that counts can be counted".³² To track the improvement of program performance, pretest and posttest data have been gathered from several assessment instruments, including Ages and Stages Questionnaire-3 (ASQ-3), Child Assessment-Summer Bridge (CASB), Desired Results Developmental Profile (2015), Infant/Toddler View (DRDP-IT), and Desired Results Developmental Profile (2015), Preschool View (DRDP-PS). The instrument features are listed in Table 33 and employed by programs across different focus areas to support assessment data analyses in early childhood development.

Table 33: Instruments for Data Collections in Focus Areas II & III

Instrument	Feature	Population
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
CASB	Value-added assessment in child <i>Communication, Cognitive, Self-Help, Scientific Inquiry, Social Emotional and Motor</i> skills.	Ages 4-5
DRDP-IT	Indicators of <i>Approaches to Learning – Self-regulation, Cognition, Language and Literacy Development, Physical Development-Health, and Social and Emotional Development</i> .	Infant or Toddler
DRDP-PS	Indicators of <i>Approaches to Learning – Self-regulation, Cognition, History-Social Science, Language and Literacy</i>	Preschooler

³² www.quotationspage.com/quote/26950.html

Instrument	Feature	Population
	<i>Development, Physical Development-Health, Social and Emotional Development, and Visual and Performing Arts.</i>	

1. ASQ-3 Findings

ASQ-3 outcomes cover child growth indicators in *Communication, General Motor, Fine Motor, Personal-Social, and Problem Solving* domains. Among programs funded by First 5 Kern, 21 service providers tracked child growth against age-specific thresholds for 1,749 children during Months 2-60. In Section (I) of this chapter, ASQ-3 findings were reported for 179 children as service outcomes from BIH, MVIP, and NFP programs in *Child Health*. This section is devoted to reporting ASQ-3 findings from 1,091 children across 13 programs in Focus Areas II: Family Functioning and 479 children in five programs from Focus Areas III: Child Development (Table 34).

Table 34: Scope of ASQ-3 Data Collection in Focus Areas II & III

Focus Area	Program*	Months	Sample Size
II	AFRC	2-60	112
	BCRC	2-60	93
	EKFRC	2-60	65
	GSR	2-60	143
	IWVFRC	2-60	44
	KRVFRC	2-60	110
	LVS RP	2-54	134
	MC FRC	2-60	40
	MFRC	33-60	60
	SE NP	2-60	75
	SHS	48-60	122
	WSCRC	6-60	43
	WSN	2-60	50
III	BCDC	2-27	26
	DSR	36-60	18
	LHFRC	18-60	72
	NPCLC	2-60	211
	SPCSR	2-60	152

*Program acronyms are listed in Appendix A.

With a few exceptions, Table 35 showed 80% or more children surpassing ASQ-3 thresholds in *Communication (COM), Gross Motor (GM), Fine Motor (FM), Personal-Social (PerS), and Problem Solving (ProS)* domains. Multiple programs demonstrated 100% of the child performance above the thresholds in COM, GM, PerS, and ProS domains (see Table 35).

Table 35: Percent of Children with Performance Level above ASQ-3 Threshold

Focus Area	Program*	COM	GM	FM	PerS	ProS
	AFRC	94.6	85.7	79.5	92.9	92.0
	BCRC	96.8	92.5	89.2	95.7	98.9
	EKFRC	92.3	87.7	84.6	87.7	93.8
	GSR	98.6	94.4	86.7	98.6	98.6
	IWVFRC	97.7	93.2	88.6	95.4	97.7

Focus Area	Program*	COM	GM	FM	PerS	ProS
II	KRVFRC	92.7	79.1	85.5	90.0	96.4
	LVSRP	88.8	88.1	75.4	85.1	88.8
	MCFRC	98.3	88.3	70.0	95.0	93.3
	MFRC	98.3	88.3	70.0	95.0	93.3
	SENP	86.9	75.4	90.2	89.3	97.5
	SHS	98.7	97.5	81.0	96.2	94.9
	WSCRC	97.7	95.3	79.1	97.7	93.0
	WSN	90.0	84.0	86.0	86.0	86.0
III	BCDC	92.3	92.3	88.5	92.3	100
	DSR	100	88.9	88.9	100	88.9
	LHFRC	100	98.6	95.8	100	100
	NPCLC	91.9	91.9	67.8	91.5	94.8
	SPCSR	94.7	88.2	87.5	96.1	96.7

*Program acronyms are listed in Appendix A.

In addition, 61% or more children also showed FM development above the age-specific thresholds. According to Nelson (2015), “Many experts think that difficulties in fine motor skills (e.g., managing the fingers and wrist) are a reflection more of malfunctioning in the proximal areas of the upper limbs than of malfunctioning in other areas” (p. 2). The results in Table 35 supported incorporation of more child development activities to practice control of small muscles that were directly linked to improvement of FM skills.

Based on the performance assessment data, statistical testing has been conducted to examine whether the level of child development was significantly above the corresponding ASQ-3 thresholds. The test statistic from the method of single sample t test was listed in Table 36. All t values were significant at $\alpha=.0001$. According to the American Psychological Association (2001), “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). The effect size values in Table 36 were larger than .80, indicating a strong program impact across all five ASQ-3 outcome measures (see Cohen, 1988).

Table 36: Test Statistic (t) for Significant Results in Seventeen Programs

Focus Area	Program*	COM	GM	FM	PerS	ProS	Effect Size
II	AFRC	21.48	17.09	14.04	13.64	16.96	>2.58
	BCRC	19.91	23.86	21.06	22.39	22.37	>4.15
	EKFRC	12.80	18.88	18.76	12.30	12.64	>3.08
	GSR	30.09	37.75	24.33	28.35	31.96	>4.08
	IWVFRC	15.52	13.15	9.85	15.76	11.99	>3.00
	KRVFRC	17.35	15.18	13.79	15.88	18.20	>2.64
	LVSRP	12.74	17.90	13.14	10.32	13.56	>1.79
	MCFRC	15.31	19.66	15.84	16.75	18.20	>4.90
	MFRC	18.43	19.28	11.40	11.26	17.10	>2.97
	SENP	17.72	11.90	20.32	20.37	18.45	>2.16
	SHS	19.80	25.24	14.88	14.05	25.43	>3.18
	WSCRC	12.72	18.00	11.90	9.18	16.76	>2.83
	WSN	7.63	6.52	7.91	6.69	7.95	>1.86
	BCDC	9.82	10.98	7.94	11.19	11.20	>3.92

Focus Area	Program*	COM	GM	FM	PerS	ProS	Effect Size
III	DSR	6.49	10.36	10.34	3.51	9.45	>1.70
	LHFRC	39.67	33.21	30.17	32.56	26.25	>6.23
	NPCLC	22.51	31.34	17.05	21.84	26.52	>2.35
	SPCSR	22.39	25.37	23.37	22.05	27.26	>3.59

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 18 programs received First 5 Kern funding to support well-rounded child development. Despite sample size variations across service providers, the results unanimously indicated large effect sizes to confirm the strong practical program impact.

2. Child Assessment-Summer Bridge Results

In strengthening school readiness, First 5 California (2015b) indicated the need for funding “Programs of all types (e.g., classes, home visits, summer bridge programs) that are designed to support the kindergarten transition for children and families” (p. 58). In FY 2016-17, First 5 Kern funded Summer-Bridge programs to enrich early learning experiences of preschoolers prior to their kindergarten entry. The service outcomes were assessed by Child Assessment-Summer Bridge (CASB) data from 12 programs.

All the results in Table 37 showed improvement of cognitive skills in posttest. The effect size value demonstrated moderate to strong practical impacts on the CASB outcomes from around two thirds of the programs (i.e., effect size>.30). No effect size was computed for EKFC because of its small sample size (N=3). The service access, as represented by the pretest data, served 401 preschoolers, up from 374 children in last year (Table 37).

Table 37: Average Score Difference on CASB Cognitive Skills

Program	N	Pretest		N	Posttest		Effect Size
		Mean	Std Dev		Mean	Std Dev	
AFRC	20	39.65	24.63	15	57.47	23.12	.75
BCRC	20	58.65	25.09	14	66.43	23.25	.32
DSR	38	46.00	31.84	38	49.82	30.11	.12
EKFC	5	58.60	24.76	3	53.67	34.59	-
GSR	33	31.18	22.89	32	57.63	25.01	1.10
IWVFRC	14	48.64	17.42	11	77.00	15.65	1.71
LVSFP	20	26.10	16.36	20	29.10	19.61	.17
MFRC	20	22.65	13.75	20	28.65	15.09	.42
MCFRC	10	41.40	20.42	13	50.38	29.66	.35
SHS	26	47.46	31.54	24	51.54	29.72	.13
SPCSR	158	40.58	23.86	119	53.18	24.67	.52
WSCRC	37	28.41	14.07	34	46.32	9.65	1.48

*Program acronyms are listed in Appendix A.

The CASB results were tracked for four programs that served 223 children. Each of the programs accumulated over 30 cases to support statistical testing. Results in Table 38 indicated significant score differences between pretest and posttest across all CASB

indicators at $\alpha=.05$. Ninety-two percent of the effect sizes reached a level above .80 to show strong program impacts on these CASB outcomes. In particular, strong enhancement of motor, communication, inquiry, and cognitive skills was demonstrated by all the programs.

Table 38: Test of Average Score Difference on CASB Indicators

Program	N	CASB Indicator	Pretest Mean	Posttest Mean	t	P	Effect Size
DSR	38	Motor	3.95	4.37	3.42	.0015	1.12
		Social Emotion	4.45	4.76	2.51	.0165	.83
		Communication	3.61	3.97	3.03	.0045	1.00
		Self-Help	4.32	4.53	2.25	.0305	.74
		Inquiry	5.53	5.79	2.67	.0111	.88
		Cognitive	46.00	49.82	4.79	<.0001	1.57
GSR	32	Motor	3.58	4.69	4.45	.0001	1.60
		Social Emotion	3.85	4.97	4.48	<.0001	1.61
		Communication	4.18	4.81	3.07	.0044	1.10
		Self-Help	4.21	4.69	2.70	.0111	.97
		Inquiry	5.67	7.81	4.42	.0001	1.59
		Cognitive	31.18	57.63	6.94	<.0001	2.49
SPCSR	119	Motor	3.78	4.45	6.41	<.0001	1.18
		Social Emotion	4.76	4.99	4.15	<.0001	.76
		Communication	4.43	4.91	7.50	<.0001	1.38
		Self-Help	4.06	4.40	6.23	<.0001	1.15
		Inquiry	7.11	7.75	5.15	<.0001	.95
		Cognitive	40.58	53.18	17.17	<.0001	3.16
WSCRC	34	Motor	2.81	4.85	7.51	<.0001	2.61
		Social Emotion	1.19	4.91	13.00	<.0001	4.53
		Communication	4.30	4.94	3.35	.0020	1.17
		Self-Help	3.35	5.00	10.72	<.0001	3.73
		Inquiry	1.24	7.88	28.27	<.0001	9.84
		Cognitive	28.41	46.32	7.86	<.0001	2.74

For the result summary, CASB data were aggregated across multiple programs to tracking of performance improvement across 340 Summer-Bridge participants. The findings indicated significant enhancements of child preparation in the *Communication* [$t(339)=4.74$, $p<.0001$], *Cognitive* [$t(339)=15.35$, $p<.0001$], *Motor* [$t(339)=11.31$, $p<.0001$], *Self-Help* [$t(339)=8.01$, $p<.0001$], and *Social Emotional* [$t(339)=6.91$, $p<.0001$] domains of the CASB assessment across 12 programs.

3. Ready to Start Findings

It was reported that “California’s school children are falling behind on many educational standards; the roots of the achievement gap start long before children enter kindergarten” (American Institutes for Research, 2012, p. 1). To address the local needs in Kern County, the Ready to Start (R2S) Foundation administered a five-week school readiness program to serve *pre-kindergarten*, *four-year-old* children in Greenfield Union School District (GUSD), Panama-Buena Vista Union School District (PBVUSD), Rosedale Union Elementary School District (RUESD), and Standard Elementary School District (SESD). The program accommodated English learners and children with limited or no

transitional kindergarten experiences. R2S adopted a well-structured, rigorous curriculum to engage students in object counting, number recognition, shape identification, size arrangement, calendar planning, alphabet differentiation, color sorting and other supportive and social skills.

Through mandatory pretest and posttest assessments, R2S tracked kindergarten-readiness skill developments across four school districts. The R2S standard test designated a maximum of 24 points in the areas of Reading Readiness (0-10 points), Math Readiness (0-10 points) and Supportive Skills (0-4 points). The results indicated an increase of the total mastery level from 47.54% in the pretest to 78.97% in the posttest on *Reading Readiness*, *Math Readiness*, and *Supportive Skills*. The combined mean score across these domains increased from 11.41 to 18.95 within five weeks. The effect size was 1.71, indicating a strong practical impact on the kindergarten readiness indicators. The consistent pattern was reconfirmed by improvement of child performance at each of the school districts in Table 39.

Table 39: Comparison of Average Scores from R2S Pretest and Posttest

School District	N	Math		Reading		Social Skills	
		Pretest	Posttest	Pretest	Posttest	Pretest	Posttest
GUSD	192	5.03	8.08	4.74	7.22	2.28	3.59
PBVUSD	181	4.68	8.43	4.22	7.17	1.06	3.57
RUESD	60	5.50	9.23	5.32	7.83	2.30	3.55
SESD	29	5.67	8.45	5.27	7.72	1.57	3.59

As the program size varied across schools, both statistical testing and effect size computing were conducted to examine the mean score differences in each assessment domain. The statistical results indicated significant improvements in *math*, *reading*, and *social skills* at GUSD, PBVUSD, RUESD, and SESD. With the effect sizes larger than 0.80 across Table 40, R2S has demonstrated a strong program impact on kindergarten readiness.

Table 40: R2S t Test and Effect Size Results

School District	df	Math		Reading		Social Skills	
		t*	Effect Size	t*	Effect Size	t*	Effect Size
GUSD	198	22.65	3.22	20.27	2.88	14.93	2.12
PBVUSD	180	24.47	3.65	23.90	3.56	27.41	4.09
RUESD	59	16.21	4.22	12.70	3.31	10.19	2.65
SESD	28	7.50	2.83	8.27	3.13	6.74	2.55

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

4. Desired Results Developmental Profile-Infant/Toddler Indicators

To support infant and toddler development, First 5 Kern funded HLP in *Child Health* to educate parents developmental milestones and behavioral norms, as well as supporting parent-child interaction through its monthly workshops. Its impact on child development outcomes is examined in this section along with assessment findings from Blanton Child Development Center (BCDC) and Small Steps Child Development Center (SSCDC). BCDC

is designed to assist parenting teens in childcare and education. SSCDC works with victims of domestic violence to support early childhood development. In FY 2016-17, the *Desired Results Developmental Profile (2015) [DRDP (2015)]: Infant/Toddler (IT) View* was adopted as a formative assessment instrument to inform instruction and program improvement in early childhood support.

The IT view was part of a universal design for DRDP revision to represent the full continuum of child development from early infancy to kindergarten entry. In companion with the Preschool (PS) view, child competencies are rated in four categories, *Responding, Exploring, Building, and Integrating* to indicate if children were able to (1) differentiate responses, (2) explore objects, (3) build relationships, and (4) combine strategies for problem solving (California Department of Education, 2015). Depending on the IT performance at *Earlier, Middle, or Later* levels within these developmental categories, the local DRDP data were scaled for five indicators in *Approaches to Learning – Self-regulation* (ATL-REG), six indicators on *Cognition* (COG), five indicators in *Language and Literacy Development* (LLD), eight indicators in *Physical Development-Health* (PDHLTH), and five indicators in *Social and Emotional Development* (SED) (Table 41).

Table 41: Domain Coverage of DRDP (2015) Assessment-IT

Domain	Knowledge and Skill Indicators
ALT-REG	(1) Attention Maintenance, (2) Self-Comforting, (3) Imitation, (4) Curiosity and Initiative in Learning, (5) Self-Control of Feelings and Behavior.
COG	(1) Spatial Relationship, (2) Classification, (3) Number Sense of Quantity, (4) Cause and Effect, (5) Inquiry Through Observation and Investigation, (6) Knowledge of the Natural World.
LLD	(1) Understanding of Language, (2) Responsiveness to Language, (3) Communication and Use of Language, (4) Reciprocal Communication and Conversation, (5) Interest in Literacy.
PDHLTH	(1) Perceptual-Motor Skills and Movement Concepts, (2) Gross Locomotor Movement Skills, (3) Gross Motor Manipulative Skills, (4) Fine Motor Manipulative Skills, (5) Safety, (6) Personal Care Routines: Hygiene, (7) Personal Care Routines: Feeding, (8) Personal Care Routines: Dressing.
SED	(1) Identity of Self in Relation to Others, (2) Social and Emotional Understanding, (3) Relationships and Social Interactions with Familiar Adults, (4) Relationships and Social Interactions with Peers, (5) Symbolic and Sociodramatic Play.

Although these programs gathered pretest data gathering for 40 children, only around a quarter of the original sample was tracked in the posttest assessment. Nonetheless, the results showed significant improvement of child performance in ATL-REG, LLD, PDHLTH, and SED dimensions at $\alpha=.05$. Effect sizes for DRDP Indicators in Table 42, including the one for COG, larger than .80 to suggest strong practical program impacts.

Table 42: Results from DRDP-IT Matched Cases Across Three Programs

Domain	df	t	P	Effect Size
ALT-REG	11	2.68	.0216	1.62
COG	11	2.18	.0517	1.31
LLD	11	3.40	.0059	2.05
PDHLTH	11	2.64	.0228	1.59

Domain	df	t	P	Effect Size
SED	11	2.30	.0420	1.39

Following the DRDP manual, two measures were constructed to assess *Early Childhood Development* and *Physical Development/Health*. According to the California Department of Education (2015), “These measures should be used if they assist teachers and service providers in planning a child’s learning activities and supports, and documenting progress” (p. 4). The results in Table 43 demonstrated large (i.e., Effect Size>0.8) and significant (p<.05) enhancements on both indicators of the infant and/or toddler development.

Table 43: Results from DRDP-IT Matched Cases Across Three Programs

Domain	df	t	P	Effect Size
Early Childhood Development	10	5.59	.0002	3.54
Physical Development/Health	11	2.40	.0353	1.45

5. Desired Results Developmental Profile-Preschool (PS) Summary

Programs like HLP and SSCDC, albeit their different affiliations in focus areas of *Child Health* and *Child Development*, do not confine service coverages within infant and toddlers. Along with DSR, DDCCC, SFP, SSEC, and WWP, these programs supported child development in preschool settings. The support for children ages 0-5 matches a profound service call from Proposition 10, i.e., “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 assess the outcome of child development in preschool programs, the DRDP instrument contains two versions: Fundamental View and Comprehensive View. The indicator structure for Comprehensive View is listed in Table 44. Fundamental View is a simplified version that does not include HSS, VPA, and Indicators 8-11 for Cognition (COG). The number of levels on each indicator depends on the competencies that are appropriate for the developmental continuum. Categorizations are adopted to differentiate early, medium, and later phases of the four stages, *Responding*, *Exploring*, *Building*, and *Integrating*, in the result rating.

Table 44: Domain Coverage of DRDP (2015)-PS Assessment

Domain	Knowledge and Skill Indicators
ALT-REG	(1) Attention Maintenance, (2) Self-Controlling, (3) Initiation, (4) Curiosity and Initiative in Learning, (5) Self-Control of Feelings and Behavior, (6) Engagement and Persistence, (7) Shared Use of Space and Materials.
COG	(1) Spatial Relationships, (2) Classification, (3) Number Sense of Quantity, (4) Number Sense of Math Operations, (5) Measurement, (6) Patterning, (7) Shapes, (8) Cause and Effect (9) Inquiry Through Observation and Investigation, (10) Documentation and Communication of Inquiry, (11) Knowledge of the Natural World.
LLD	(1) Understanding of Language, (2) Responsiveness to Language, (3) Communication and Use of Language, (4) Reciprocal Communication and Conversation, (5) Interest in Literacy, (6) Comprehension of Age-Appropriate Text, (7) Concepts about Print, (8) Phonological Awareness, (9) Letter and Word Knowledge, (10) Emergent Writing.

Domain	Knowledge and Skill Indicators
PDHLTH	(1) Perceptual-Motor Skills and Movement Concept, (2) Gross Locomotor Movement Skills, (3) Gross Motor Manipulative Skills, (4) Fine Motor Manipulative Skills, (5) Safety, (6) Personal Care Routines: Hygiene, (7) Personal Care Routines: Feeding, (8) Personal Care Routines: Dressing, (9) Active Physical Play, (10) Nutrition.
SED	(1) Identity of Self in Relation to others, (2) Social and Emotional Understanding, (3) Relationships and Social Interactions with Familiar Adults, (4) Relationships and Social Interactions with Peers, (5) Symbolic and Sociodramatic Play.
HSS	(1) Sense of Time, (2) Sense of Place, (3) Ecology, (4) Conflict Negotiation, (5) Responsible Conduct as a Group Member.
VPA	(1) Visual Art, (2) Music, (3) Drama, (4) Dance.

In comparison, preschoolers are more mature than infants/toddlers in language development. DRDP includes four indicators of English language development (ELD), *Comprehension of English*, *Self-Expression in English*, *Understanding and Response to English Literacy Activities*, and *Symbol, Letter, and Print Knowledge in English*. The ratings were scaled on seven points, (1) Discovering Language, (2) Discovering English, (3) Exploring English, (4) Developing English, (6) Building English, and (7) Integrating English.

In FY 2016-17, HLP employed DRDP PS Fundamental View to track performance of 32 preschools under a pretest and posttest setting. Significant improvement was found at $\alpha=.0001$ across the DRDP scales of *Approaches to Learning-Self-Regulation* (ATL-REG) [t(31)=5.03, p<.0001], *Social and Emotional Development* (SED) [t(31)=7.76, p<.0001], *Language and Literacy Development* (LLD) [t(31)=12.60, p<.0001], *Cognition* (COG) [t(31)=9.74, p<.0001], and *Physical Development-Health* (PD-HLTH) [t(31)=6.63, p<.0001]. All the effect sizes were larger than .80 to confirm strong practical program impacts on these DRDP domains. Another special domain, *English-Language Development* (ELD), was assessed for 12 English language learners, and the result was significant at $\alpha=.001$ [i.e., t(11)=4.59, p=.0008] with an effect size equal to 2.77 for strong program impacts.

The DRDP PS instrument for Comprehensive View was employed in pretest and posttest data collections by six programs. Although not all the DRDP data were completely missing across all six programs, data tracking between the pairs of pretest and posttest measurements has shown extensive sample attrition. Consequently, inadequate data were retained for a complete analysis of the DRDP outcomes at the program level, particularly in SSEC that did not end up with any data from the result tracking. The missing data pattern is tabulated in Table 45.

Table 45: Sample Sizes of DRDP PS Comprehensive View in Six Programs

Program	Source	ALT-REG	COG	ELD	HSS	LLD	SED	VPA	PDHLTH
DSR	Pretest	31	30	7	0	30	30	0	0
	Posttest	29	29	6	0	29	29	0	0
	Tracked Pair	29	29	6	0	29	29	0	0
DDCCC	Pretest	28	25	7	1	25	25	0	25
	Posttest	17	17	7	1	17	17	0	17
	Tracked Pair	7	7	3	0	7	7	0	7

Program	Source	ALT-REG	COG	ELD	HSS	LLD	SED	VPA	PDHLTH
SSCDC	Pretest	13	13	13	3	13	13	3	13
	Posttest	7	7	7	2	7	7	2	7
	Tracked Pair	6	6	6	0	6	6	0	6
SFP	Pretest	47	27	1	27	27	27	27	27
	Posttest	7	17	0	16	17	17	16	17
	Tracked Pair	16	16	0	15	16	16	15	16
SSEC	Pretest	0	0	0	0	0	0	0	0
	Posttest	4	4	3	0	4	4	0	4
	Tracked Pair	0	0	0	0	0	0	0	0
WWP	Pretest	40	22	24	0	22	22	0	22
	Posttest	24	24	24	0	24	24	0	24
	Tracked Pair	24	16	17	0	16	16	0	16

With exclusion of SSEC, the DRDP data were aggregated across the remaining five programs to confirm significant improvement of child performance across the domains of DRDP Comprehensive View at $\alpha=.005$ (Table 46). All the effect sizes were larger than .80 to indicate strong practical impacts on the DRDP outcomes.

Table 46: Results From DRDP-PS Matched Cases Across Five Programs

Domain	df	t	P	Effect Size
ALT-REG	81	4.98	.0001	1.11
COG	73	5.96	.0001	1.40
ELD	31	3.05	.0046	1.10
HSS	14	53.57	.0001	28.63
SED	73	12.85	.0001	3.01
VPA	14	13.21	.0001	7.06
PDHLTH	44	6.17	.0002	1.86

In summary, all the positive outcomes in *Child Development* supported First 5 Kern’s well-construed position statement, i.e., “The overall purpose of Early Childcare and Education activities is to provide children with a developmentally appropriate learning environment and learning activities to better prepare children and families for entering kindergarten” (p. 17). To enhance school readiness, childhood support has to start early and encompass programs in *Child Health, Family Functioning, and Child Development*.

Within the first three years of child birth, DRDP-IT and ASQ-3 data were tracked in this report to show strong and significant program impact under a pretest and posttest setting. In addition, the support for kindergarten transition was demonstrated by positive findings from the CASB, DRDP-PS, and R2S evaluation results (see Tables 37, 38, 39, 40, 46). Based on the outcome aggregation, effectiveness of local service deliveries has been substantiated to “ensure that children enter kindergarten physically, mentally, emotionally and cognitively ready to learn” (First 5 Kern, 2015a, p. 2).

While First 5 Kern played an indispensable role to fill service gaps and generate extensive program results in this chapter, Proposition 10 funding was intended to provide seed money for service system building. For instance, Edelhard (2013) reported that “Caring Corner opened in 2003 with \$360,000 in seed money from First 5 Kern, which exists because of voter-approved Proposition 10, the Children and Families Act” (p. 1). In

this funding cycle, First 5 Kern (2015a) has surpassed the state expectation by insisting that “Funded organizations will leverage resources as a result of capacity building and sustainability efforts” (p. 14). Upon receiving First 5 Kern funding, all service providers were informed the expectation to apply for at least two external grants per year. As a result, 10 programs in *Child Health*, 17 programs in *Family Functioning*, and eight programs in *Child Development* jointly raised \$3,016,788 in FY 2016-17, which was equivalent to 36.5% of the total annual investment from Proposition 10 (Table 47).

Table 47: Fund Leverage and Proposition 10 Investment in FY 2016-17

Focus Area	Programs	Leveraged Fund	Proposition 10 Investment
Child Health	BIH, CHI KC, KCCDHN, KVAP, MAS, MVCCP, MVCCP KC, MVIP, NFP, SAS	\$855,793.95	\$2,343,786.44
Family Functioning	2-1-1, AFRC, BCRC, DR, EKFC, GCP, GSR, HMG, IWWFRC, KRVFRC, LVSFP, MCFRC, MFRC, SENP, SHS, WSCRC, WSN	\$2,040,876.93	\$2,883,649.63
Child Development	BCDC, DDCCC, LHFRC, NPCLC, R2S, SFP, SSCDC, WWP	\$310,429.73	\$1,063,919.63

In conclusion, results-based accountability has been addressed in this chapter through extensive analyses of the outcome data from AAPI-2, ASQ-3, ASQ-SE, BCBH, CASB, DANCE, DRDP, ECBI, Sutter-Eyberg, NCFAS-G, and R2S assessments. Besides the approach of directly demonstrating the positive impact from Proposition 10, First 5 Association of California (2009) suggested that “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 enhance sustainability of local programs for children ages 0-5 and their families. Based on the data tracking across 42 programs, First 5 Kern has addressed its goals and objectives in *Child Health*, *Family Functioning*, and *Child Development*. Additional results are aggregated in Chapter 3 to delineate First 5 Kern’s contribution as a whole unit in the community to facilitate the local service system building.

Chapter 3: Effectiveness of Service Integration

While *Child Health*, *Family Functioning*, and *Child Development* are the focus areas to address specific service needs in Kern County, the fourth focus area, *Systems of Care*, is mandatory for partnership building across programs. 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). The need for *Systems of Care* was reaffirmed by the Health Resources and Services Administration (2014) to close service gaps in local communities.

Following the state statute, two result domains, *Organizational Support* and *Public Education and Information*, were identified from the annual report glossary (First 5 Association of California, 2013) to describe First 5 Kern’s support in the service system building. Within the current funding cycle, First 5 Kern increased its investment in Focus Area 4 from \$843,728 in last year to \$937,810 this year. The money was used to fund organizations in Table 48 to meet the following needs:

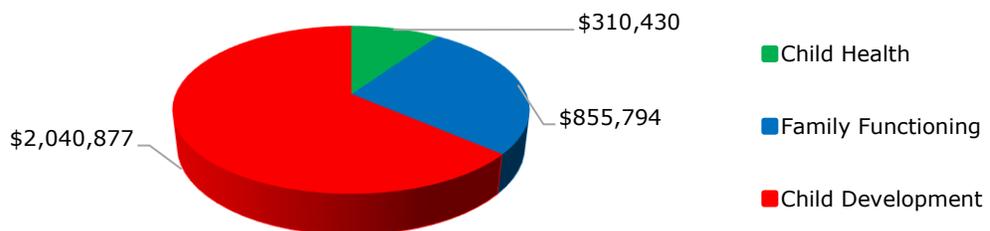
- Educational materials on health education and disease prevention for rural families;
- School clothing for underserved children;
- Campaigns for public awareness on *Safely Surrendered Baby*, *Kaitlyn’s law*, and *Advancing Parenting*;
- Promotion of safe sleeping for child protection;
- Assistance in the foster care system for children ages 0-5.

Table 48: Events and Organizations Sponsored by First 5 Kern

Recipients	Events
Kern County Department of Human Services	Purple Ribbon Month (Kaitlyn’s Law)
Kern Association for the Education of Young Children	Kern Development Conference
Advancing Parenting	Advancing Parenting Campaign
Kern Partnership for Children and Families	Foster Children 0-5 Public Awareness
Kern County Department of Human Services	Safely Surrender Baby Outreach
The Rotary Club of Taft Foundation	The 17 th Annual Health Fair
Kern County Department of Public Health Services	Safer Sleeping Education Project
Assistance League of Bakersfield	Operation School Bell

The community engagement has facilitated partnership building to enhance local program sustainability. In FY 2016-17, the leveraged fund from the community in the first three focus areas has been plotted in Figure 19. The total amount was three times more than First 5 Kern investment in Focus Area 4.

Figure 19: Leveraged Funds across Program-Affiliated Focus Areas



To evaluate the strength of program networking among local programs, an Integration Service Questionnaire (ISQ) was employed to gather partnership data across service providers at *Co-Existing, Collaboration, Coordination, and Creation* (4C) levels (see the 4C model from Wang, Ortiz, & Schreiner, 2013). A computer software package, *Netdraw*, was adopted to support the social network analyses in *Child Health, Family Functioning, and Child Development*. The focus on partnership connection fits a policy agenda advocated by First 5 Association of California (2017), i.e., “Invest in and improve coordination across systems of care to efficiently connect young children to early intervention” (p. 5).

Enhancement of Early Childhood Supports Through Service Integration

In recent years, due to the ongoing state revenue decline, First 5 Association of California (2016) discussed suggestions to reduce the scope of early childhood services because “number of children served is dropping anyway (in relation to Prop 10 revenue)” (p. 1). To meet the Annual Report (AR) requirement, it was suggested that “Purpose of AR data IS NOT to show that F5s are reaching massive amounts of children” (First 5 Association of California, 2016, p. 1). Nonetheless, a core spirit of Proposition 10 is local control. In Kern County, demands for early childhood services are increasing due to population growth. Local program support needs to be sustained because no other foundations are ready to replace First 5 Kern to fill service gaps in this region. Instead of making a choice between *direct services for children* and *partnership building for service providers*, First 5 Kern worked with service providers to avoid abending the existing contractual agreements on the annual service targets for children ages 0-5 and their families.

Attainment of Service Targets through Partnership Building

In supporting partnership building, First 5 Kern (2016) upheld its mission for “empowering our providers through the integration of services with an emphasis on health and wellness, parent education, and early childcare and education” (p. 1). Due to the public campaign against tobacco consumption, Proposition 10 investment in Kern County decreased from \$10,035,157 in last year to \$9,116,942 this year. To meet the local needs in early childhood services, First 5 Kern increased program spending across all four focus areas in FY 2016-17. For the local fund protection, First 5 Kern sustained its support for service providers by offering confidentiality trainings to ensure compliance of local data collection to federal, state, and county laws and regulations. A total of 76 program staff received the training this year.

The service system building facilitated attainment of program targets across focus areas. In *Child Health*, as reported in Chapter 2, CMIP increased the number of immunization clinics from 153 in last year to 171 this year. KCCDHN offered dental screenings for 4,912 children this year, an increase from 4,289 children in last year. The capacity of medical home services also increased from 1,015 children in last year to 1,201 children this year. Hence, First 5 Kern-funded programs have jointly supported children to “have an early start toward good health (First 5 Kern, 2016, p. 6).

In *Family Functioning*, local programs surpassed several annual service targets. For instance, GCP increased its service count from 200 children in last year to 260 children this year. In collaboration with DVRP and WSN, GCP also increased its service coverage

from 364 parents in last year to 462 parents this year. DR raised its capacity from serving *1,352 families and 1,934 children* in last year to *1,447 families and 2,141 children* this year. As a result, child protection services have been strengthened through the partnership building in Kern County.

In *Child Development*, 10 Summer Bridge programs in Table 32 served an additional 77 preschoolers beyond their designated target of 280 children. Special-need services also surpassed the annual targets in Table 31. Home-based education services were delivered to 98 children while the target was set at 50 (Table 30). Center-based education services were offered to 1,081 children across 19 programs, exceeding the target of 766 children in Table 29. Although “Too often child health is viewed as separate and distinct from early childhood care and learning” (Bruner, 2009, p. 1), the ongoing partnership building has effectively integrated program services to support early childcare and education.

In summary, “The parent-child relationship has long been seen as a critical source of influence on child health and adjustment across multiple developmental domains” (Wilson & Durbin, 2013, p. 249). Through First 5 Kern funding, barriers between focus areas have been eliminated and parent education was included in the SOW-EP for eight programs (i.e., BIH, CMIP, HLP, KCCDHN, KVAP, MAS, NFP, & RSNC) in *Child Health*. In addition, FRCs in *Family Functioning* and *Child Development* also offered Nurturing Parenting programs in both court-mandated and non-court-mandated settings. Altogether, collaborations at the program level supported First 5 Kern’s (2016) goal in Focus Area 4 to assure that “A well-integrated system of services for children and families will exist” (p. 7).

Articulation of Program Supports on Service Integration

Following Proposition 10, efforts have been made by programs in Kern County 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)]. To sustain the system building, 33 articulation meetings were held at 11 program sites for 124 service providers to establish and/or review a standardized transition plan for strengthening school readiness. As a result, program staff, parent educators, preschool teachers, and district supervisors had a chance to meet and discuss gaps in preschool education. The amendment of service gaps fit the *Organizational Support* domain of the state report glossary.

The other domain of Focus Area 4 is *Public Education and Information*. With First 5 Kern funding, local programs offered workshops below to correspondingly address Result Indicators 4.1.2, 4.1.3, 4.2.1, 4.2.2, 4.2.3, 4.3.1, and 4.4.1 of the local strategic plan (First 5 Kern, 2016):

- MAS held seven workshops to inform parents/guardians of health and wellness services;
- BIH, CHI KC, KCCDHN, MVCCP, MVIP, and HMG designated trainings and/or other educational services for 188 employees in child health and wellness support;
- CMIP, DVRP, and GCP participated in 18 collaborative meetings;
- One hundred, thirty-seven service providers from 16 programs attended collaborative meetings;

- DDCCC and SSCDC offered six trainings and/or other educational services in parent education and supportive services;
- BCDC, DDCCC, SSCDC, and WWP provided trainings and/or other educational services in early childcare and education;
- MVCCP organized 224 providers to attend educational events on early childhood topics.

To justify results-based accountability, School Readiness Articulation Survey (SRAS) data were gathered from 137 classroom teachers, school administrators, and community members to assess the impact of local services on child development. In conforming to the value-added assessment, past responses were tracked across 137 stakeholders from the last year to compare changes in the percent of “agree” and “strongly agree” responses. The results showed increases of the positive ratings across eight items of the SRAS instrument (Table 49).

Table 49: Percent of “Agree” or “Strongly Agree” Responses to SRAS Items

SRAS Items	2015-16	2016-17
Children in the community have an early start toward good health	56.25	60.58
Parents in the community know about early childhood learning	37.50	43.80
Parents in the community know about good parenting	18.05	38.69
Parents in the community know about community resources	59.73	70.08
Early education programs do a good job teaching children	81.25	87.59
Early education programs in the community provide quality childcare	77.77	89.78
Community programs integrate services for children and families	77.78	86.86
Overall, children in the community are well prepared for kindergarten	52.78	64.96

In summary, First 5 Kern followed its strategic plan to address all four objectives of service integration:

1. Through *workshops of MAS and trainings of BIH, CHI KC, KCCDHN, MVCCP, MVIP, and HMG*, First 5 Kern fulfilled its Objective 1 to enhance “*Community health improvement efforts that support integration of services for the health and wellness of children and their families*” (First 5 Kern, 2016, p. 7);
2. Supportive services in parent education and collaborative meetings met the requirement of Objective 2 to strengthen “*Community supportive services improvement efforts that support integration of services for parent education and support services*” (First 5 Kern, 2016, p. 7);
3. BCDC, DDCCC, SSCDC, and WWP trainings and 33 articulation meetings addressed Objective 3 for sustaining “*Community improvement efforts that support integration of services for early childcare and education*” (First 5 Kern, 2016, p. 7);
4. Educational events organized by MVCCP facilitated attainment of Objective 4 to forge “*Community strengthening efforts that support education and community awareness*” (First 5 Kern, 2016, p. 7).

The SRAS data tracking further confirmed the fact that more survey respondents *agreed or strongly agreed* this year to a conclusion, “*Overall, children in the community are well prepared for kindergarten*” (see Table 49).

Capacity of Network Connections for Partnership Building

In the current research literature, Social Network Analyses (SNA) were considered as a useful tool to “examine indicators of service integration” (Gillieatt et al., 2015, p. 338). In particular, Cross, Dickman, Newman-Gonchar, and Fagen (2009) confirmed that “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). In this section, the SNA approach is taken to investigate network strengths and partnership structures for service integration.

Justification of Model Selection for Partnership Evaluation

Among 42 programs receiving support from First 5 Kern, HMG did not start until February, 2017. As a result, patterns of the partnership building is built on analyses of the ISQ data from 41 programs. Since each service provider may collaborate with the remaining 40 partners, the network could contain a total of 1,640 (or 40x41) links. Because MVCCP CK did not indicate its partnership status with KVAP, the total partnership count was 1,639 this year. In addition to the large quantity of links, complication also hinged on differences in the network strength. In this section, a *Co-Existing, Collaboration, Coordination, and Creation* (4C) model is described for ranking the network strength across focus areas (Wang, Ortiz, & Schreiner, 2013).

It was reported that “Evaluating interagency collaboration is notoriously challenging because of the complexity of collaborative efforts and the inadequacy of existing methods” (Cross et al., 2009, p. 310). To reflect network improvement, a valid model needs to include multiple levels for differentiating the collaborative efforts. In the research literature, Project Safety Net of Palo Alto (2011) suggested a five-level model for network categorization. But the model treated “formal communication” as a characteristic for a *Cooperation* category. Because communications could be described as *frequent, prioritized, and/or trustworthy*, the model did not resolve the entanglement of these overlapping features across multiple categories.

Alternatively, opposite to the lack of mutual exclusiveness was an issue of incomprehensiveness. As First 5 Fresno (2013) acknowledged,

During this time period the coordination and collaboration (highest levels of interaction) decreased from 42% to 38%. It is speculated that decrease in direct funding, staff turn-over, and other economic pressures resulted in organization becoming more insular thus decreasing their collaboration with other organizations. (p. 102)

Treating *Coordination* and *Collaboration* as the highest levels of interaction might have inadvertently left no room for partnership improvement. Consequently, the Fresno model inherited two problems for the network analysis: (1) It did not conform to Bloom’s taxonomy that labeled creation as another level above integration (Airasian & Krathwohl, 2000), and (2) It downplayed adequacy of *Co-Existing* partnerships for program referrals.

To amend these issues, service integration was conceived with a hierarchical structure in the 4C model from the context of institutional learning. The model itself was grounded on a well-established SOLO [Structure of the Observed Learning Outcome]

taxonomy (Atherton, 2013; Biggs & Collis, 1982) that defined four levels of learning outcomes above the pre-structure baseline (see Smith, Gorden, Colby, & Wang, 2005). Each level has been clearly delineated with specific benchmarks (Table 50).

Table 50: Alignment Between SOLO Taxonomy and the 4C Model

SOLO	The 4C Model
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

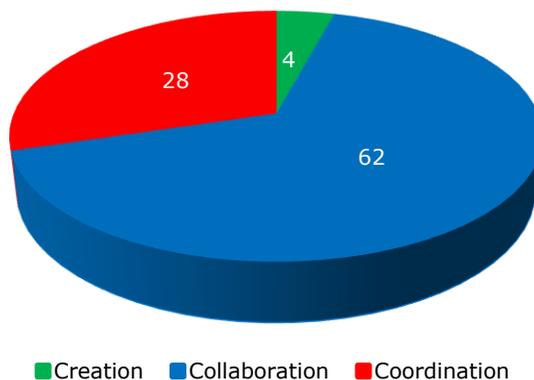
The alignment in Table 50 illustrated a one-to-one match between the SOLO taxonomy from research literature and the 4C model for institutional service integration. Therefore, like the SOLO categorization, the 4C model incorporated levels of classification that were both comprehensive and mutually exclusive. The SOLO taxonomy has been employed in various profound studies, including a validity study of the national board certification (see Smith, Gorden, Colby, & Wang, 2005). Built on this solid foundation, the 4C model was presented at the 2013 annual meeting of the National Association for the Education of Young Children (NAEYC) in Washington, DC (Wang, Ortiz, & Schreiner, 2013) and the 2015 annual meeting of the American Educational Research Association in Chicago (Wang, Ortiz, Maier, & Navarro, 2015). More recently, the evaluation team incorporated the 4C model in an article for publication in a nationally-refereed journal, *Evaluation and Program Planning* (Wang et al., 2016).

In summary, Tom Angelo (1999), a former director of the National Assessment Forum, maintained, “Though accountability matters, learning still matters most” (¶. 1). In combination, the 4C model was developed to address both *summative accountability* of service integration and *formative learning* through program networking.

Evaluation of Network Strength across Focus Areas

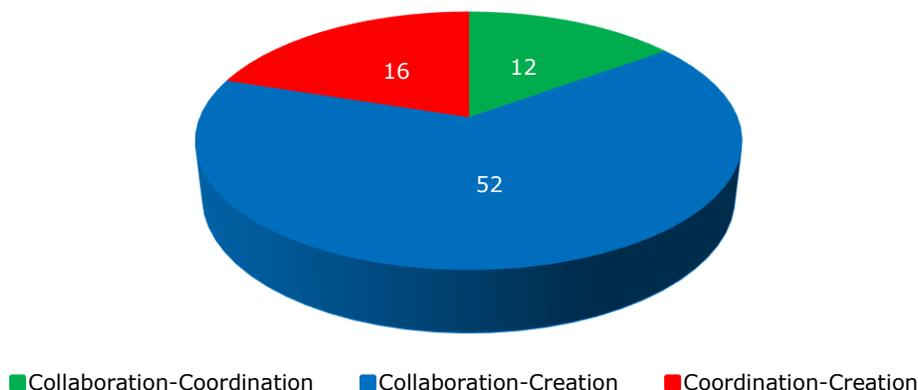
Reciprocal links are based on reconfirmation of the network strength between service providers. Because “reciprocation rate is inversely related to the barrier level in these networks” (Singhal et al., 2013, p. 1), analyses of the reciprocal partnerships are designed to facilitate elimination of service barriers and amendment of system gaps. Following the 4C model, partnership strength at the *Co-Existing* level does not demand outreach efforts. Thus, active partnership building should be based on confirmed links at a higher level. As shown in Figure 20, a total of 94 reciprocal links were confirmed by partners at a mutually-agreed level above program co-existence. The partnership counts of 62, 28, and 4 across *Collaboration*, *Coordination*, and *Creation* levels also suggested conformation of the network to the 4C hierarchy.

Figure 20: Number of Confirmed Links above the Co-Existing Level



Besides symmetric ratings in the reciprocal network, the ISQ data showed 80 additional links that were viewed with different strengths by their partners across *Collaboration*, *Coordination*, and *Creation* levels (Figure 21). The asymmetry results were not widespread since most of the links were rated by partners at adjacent levels. In Figure 21, 85% of the reciprocal links were ranked as *collaboration-coordination* or *coordination-creation* by their partners. More importantly, much fewer reciprocal links involved partnership *creation* than *collaboration*, which reconfirmed the support for a hierarchical structure of partnership building in the 4C model.

Figure 21: Number of Confirmed Links Involving Different C Levels



For program relations at the *Co-Existing* level, no partnership building is needed to maintain the connections. Therefore, the number of *Co-Existing* relations was proportional to the number of programs per focus area (Table 51). Among 1,100 links ranked at the *Co-Existing* level, the ISQ data indicated 463 reciprocal relations. Hence, a good portion of the program co-existence status was ranked above the *Co-Existing* level by the linked partners. While the asymmetry could lead to network changes, the partnership counts across the combination of *Collaboration*, *Coordination*, and *Creation* levels were less than the number of corresponding links at the *Co-Existing* level (see Table 51). Hence, First 5 Kern (2016) has correctly placed an emphasis on service integration in its strategic plan.

Table 51: Features of Mutual Partnership Across Focus Areas

Strength	Focus Area	Partnership Count
Co-Existing	Child Health (CH)	54
	Family Functioning (FF)	76
	Child Development (CD)	35
	Between CH and FF	107
	Between CH and CD	72
	Between FF and CD	120
Coordination	Child Health (CH)	18
	Family Functioning (FF)	52
Coordination	Child Development (CD)	4
Creation	Between CH and FF	61
	Between CH and CD	21
	Between FF and CD	16

Beyond program co-existence, the network structure depends on service characteristics. For instance, *Family Functioning* (FF) contains programs for child protection services, such as DR, DVRP, GCP, and WSN, across Kern County. In contrast, nearly all programs in *Child Development* (CD) delimit their service coverage within a local community. Thus, programs in CD are more self-contained like other FRCs in FF to keep more *Co-Existing* links between CD and FF and less reciprocal links at the *Collaboration*, *Coordination*, or *Creation* levels. Because a large portion of the CH programs offered countywide services, more links have been confirmed at the *Collaboration*, *Coordination*, and *Creation* levels between programs in CH and other programs in different focus areas (Table 51).

In summary, following First 5 Kern’s (2016) strategic plan on service integration, program networking has been strengthened across different focus areas. This pattern fit a general trend on multiple service needs in early childhood support. As Nichols and Jurvansuu (2008) observed, “There is currently movement internationally towards the integration of services for young children and their families, incorporating childcare, education, health and family support” (p. 117). Although a desired feature of the system building is to maintain strong and active service integrations, stronger partnerships, such as the ones at the *Collaboration*, *Coordination*, and *Creation* levels, are more difficult to establish because of their demands on active program outreach beyond the co-existence of service providers.

Examination of Network Strength Across Service Providers

During service outreach, partnership development may involve different roles between initiators (the “I” perspective) and collaborators (the “me” perspective). Under the 4C model, a referral link could unilaterally occur from one organization to another, and thus, the network structure did not have to be confined within reciprocal links. As Kuhnt and Brust (2014) acknowledged, lack of reciprocal partnerships “is only found in relations of exploitation maintained through asymmetries of power” (p. 1). Asymmetric links could arise from stronger networks at the *Collaboration*, *Coordination*, and *Creation* levels to break the equilibrium of coexistence (Carmichael & MacLeod, 1997). Therefore, 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). In this section, both unilateral and reciprocal links are articulated to assess the partnership strength across focus areas.

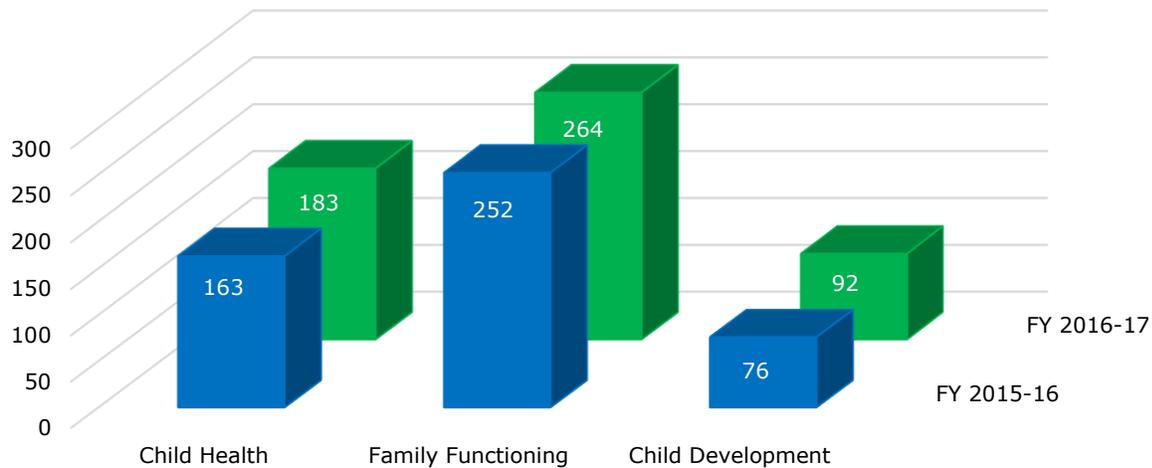
Following the 4C model, network strength was ranked ascendingly with 1 for *Co-Existing*, 2 for *Collaboration*, 3 for *Coordination*, and 4 for *Creation*. As the programs varied in their service scopes, around 37% (or 264/720) of the FF links were ranked above the *Co-Existing* level. Programs in other focus areas showed a slightly lower proportion, i.e., 23% (or 92/400) for CD and 35% (or 183/519) for CH. Results in Table 52 indicated increases of the network strength after excluding a large portion of the partnership at the *Co-Existing* level.

Table 52: Average Rank of Network Strength Across Focus Areas

Focus Area	Network with Co-existence		Network without Co-existence	
	Link Count	Link Strength	Link Count	Link Strength
Child Health	519	1.54	183	2.52
Family Functioning	720	1.50	264	2.36
Child Development	400	1.38	92	2.59

In comparison to last year, Figure 22 showed more partnerships this year beyond the *Co-Existing* level. Hence, more program outreach occurred in FY 2016-17 to build stronger partnerships across *Child Health*, *Family Functioning*, and *Child Development*.

Figure 22: Increase of Partnership Count Beyond the Co-Existing Level



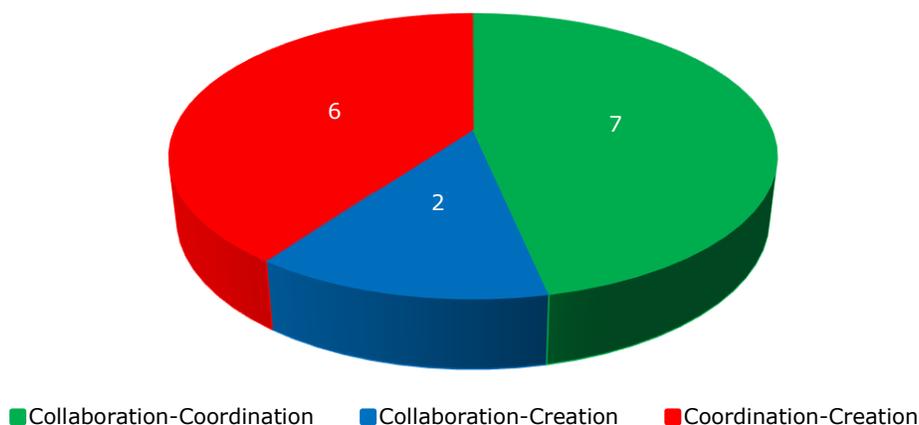
Provan, Veazie, Staten, and Teufel-Shone (2005) noted that “In the academic literature, network analysis has been used to analyze and understand the structure of the relationships that make up multiorganizational partnerships” (p. 603). Each focus area contains multiple programs. The network analysis indicated that local community-based programs, such as the ones in CD, seemed to have achieved less partnership counts beyond the *Co-Existing* level. Meanwhile, the local emphasis has led programs in CD to establish stronger partnership links than other programs in focus areas of CH or FF (Table 52).

Features of Primary Partnership Building for Service Integration

In collecting the ISQ data, service providers indicated their primary partners in each focus area while rating the network strength with all First 5 Kern-funded programs. Because programs were allowed to identify multiple primary partners, a total of 164 links were suggested by 41 programs with exclusion of HMG for its late start in FY 2016-17. In the primary partner network, 140 links were ranked at the *Collaboration*, *Coordination*, or *Creation* level for active partnership construction beyond program coexistence. However, *Co-Existing* relations could become part of the primary partnerships, such as in referral services between 2-1-1 and other programs.

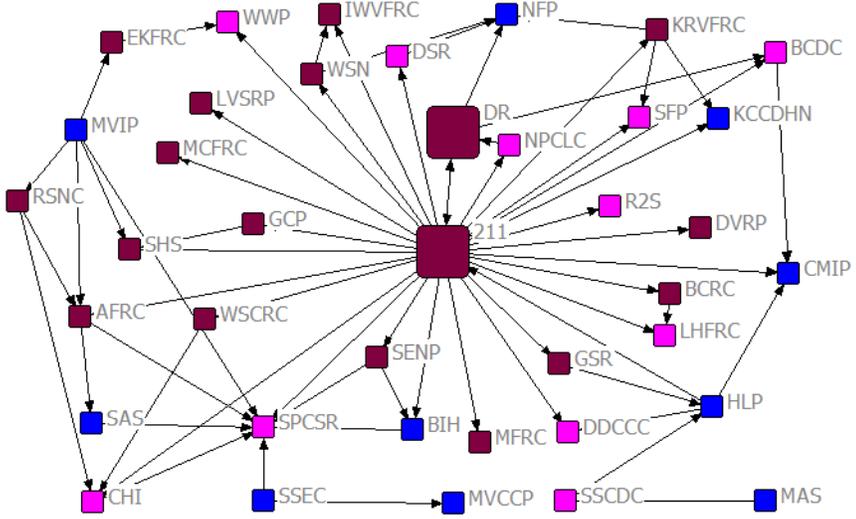
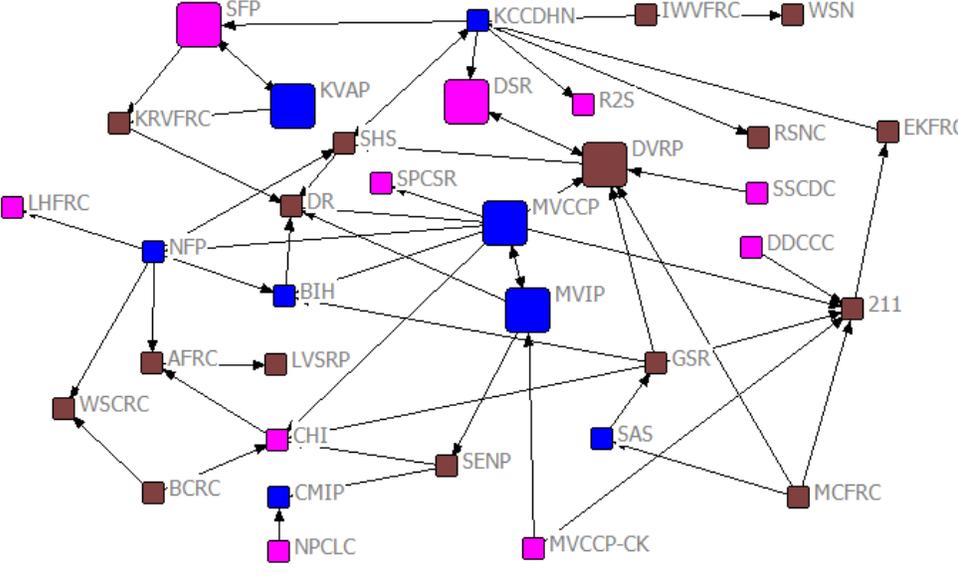
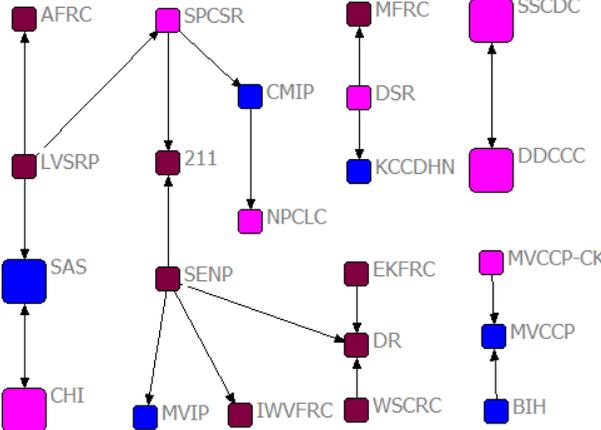
Researchers found that “reciprocal links play a more important role in maintaining the connectivity of directed networks than non-reciprocal links” (Zhu et al., 2014, p. 5). Among the 140 partnership links, 21 pairs of partners were reciprocally connected beyond the level of program co-existence. Fifteen of the reciprocal links were ranked asymmetrically with different strengths by programs, but 87% of the mutual ratings were at adjacent levels, such as *Collaboration-Coordination* and *Coordination-Creation* connections in Figure 23. Only two links were recognized at a *Collaboration-Creation* level. Hence, the rating indicated high consistency in the strength assessment by the mutual partners. A network is expected to have strong sustainability due to the elimination of misunderstandings on the partnership strength (Cesar & Hidalgo, 2008).

Figure 23: Number of Primary Partner Links Involving Different C Levels



A *Netdraw* software was employed to plot the partnership links in Table 53. To differentiate service providers, nodes with pink color were used to label programs in *Child Development*. Purple and Blue colors were employed to represent programs in *Family Functioning* and *Child Health*, respectively. The networks in Table 53 indicated program involvement across these three focus areas. The results also showed 65 links at the *Collaboration* level, 55 links at the *Coordination* level, and 20 links at the *Creation* level, which was expected from the hierarchical structure of partnership strength in the 4C model.

Table 53: Structure of Primary Partner Links Beyond the Co-Existing Level

Level	Network Pattern
<p>Collaboration (65 links as plotted by small nodes for 63 unilateral links and large nodes for one pair of reciprocal links)</p>	
<p>Coordination (55 links as represented by small nodes for 49 unilateral links and large nodes for three pairs of reciprocal links)</p>	
<p>Creation (20 links as illustrated by small nodes for 16 unilateral links and large nodes two pairs of reciprocal links)</p>	

Confirmed links by mutual partners are represented by reciprocal arrow lines in the network plots. One reciprocal link was identified between 2-1-1 and DR at the *Collaboration* level. To increase service access, referral support played an important role in the networking through the extensive 2-1-1 connections. Likewise, DR collaborated with referral agencies to access reports of child abuse and neglect from Child Protective Services (CPS). In general, "Networks that are highly centralized can spread information and resources effectively from the influential members" (Ramanadhan et al., 2012, p. 3). With 2-1-1 located at the center of the *Collaboration* network in Table 53, the partnership building has complemented the existing service system with external support from CPS.

In the *Coordination* network, three reciprocal links were identified to address local service needs. In *Child Health*, MVCCP and MVIP were countywide programs to serve medically vulnerable children. In *Family Functioning*, DVRP offered countrywide support for victims of domestic violence, including children ages 0-5. DSR was reciprocally linked to DVRP to serve children and families in Delano, the second largest city of Kern County near the north border. While DVRP is affiliated with Greater Bakersfield Legal Assistance (GBLA) in Bakersfield, the partnership coordination demonstrated network building for program outreaching between major cities in Kern County. The third reciprocal link connected KVAP and SFP in a remote South Fork community. Due to the geographic isolation, service coordination between them and KRVFRC extended the program coverage in *Child Health*, *Family Functioning*, and *Child Development* to the traditionally-underserved community.

At the *Creation* level, one of the reciprocal links occurred between Discovery Depot Child Care Center (DDCCC) and SSCDC. DDCCC is the first licensed child care center at a homeless shelter across California. Similarly, SSCDC is licensed to provide early childcare and education to children whose mothers are victims of domestic violence. Because "Domestic violence and homelessness are likely to occur together" (Olsen, Rollins, & Billhardt, 2013, p. 7), the partnership creation offered support for integrated services such as court visits, parent education, counseling, housing and job placement to improve the living environment for children ages 0-5. The other reciprocal link in the partnership creation connected Community Health Initiative of Kern County (CHI KC, aka., CHI in Table 53) and Successful Application Stipend (SAS). Both programs were designed to reduce barriers of insurance enrollment. The partnership offered a platform for enrolling entities to support child access to regular, preventive healthcare through health insurance.

In summary, the reciprocal links in the *Collaborative* network was identified from one focus area (i.e., DR and 2-1-1 in *Family Functioning*). In the *Coordination* network, mutual partnerships were expanded to multiple focus areas and/or different locations (i.e., KVAP-SFP, MVCCP-MVIP, DSR-DVRP). Partnerships at the *Creation* level strengthened the systematic service deliveries for both general (e.g., CHI-SAS) and special (e.g., SSCDC-DDCCC) populations. Although "reciprocity is a common property of many network" (Garlaschelli, & Loffredo, 2004, p. 4), non-reciprocated links are often remarkably high (e.g. Shulman, 1976; Antonucci & Israel, 1986). Most links in Table 53 were unilateral in nature, regardless of the strength at a *Collaboration*, *Coordination*, or *Creation* level. Krebs (2011) cautioned, "What really matters is where those connections lead to – and how they connect the otherwise unconnected!" (¶. 4). For instance, WSN served homeless populations with special needs and LHFRC is located at a hard-to-reach community. Despite their single and non-reciprocal links at the *Coordination* level, the program

network incorporated “*consumer-oriented and easily accessible*” features through the linkages to WSN and LHFRC. The Health and Safety Code of California has the *consumer-oriented and easily-accessible* expectations as the dual conditions for service integration (see Proposition 10, p. 10).

As postulated by an axiom that the whole could be larger than the sum of its part, results in this chapter showed mutual support between First 5 Kern and local agencies to sustain service capacity building for young children and their families across Kern County (see Table 48; Figure 19). Through value-added assessment, the SRAS data confirmed a high approval rating on a conclusion that “Community programs integrate services for children and families” (Table 49). The network analyses revealed reciprocal partnerships to support service outreach across focus areas of *Child Health, Family Functioning, and Child Development* (Figures 20 & 21; Table 51). The ISQ data also showed the network coverage of primary partners for service integration *in remote areas* and *for special-need children* (Figure 23; Table 53). In comparison to last year, increases of the total partnership count occurred this year beyond the *Co-Existing* level (Figure 22). To “facilitate turning the curve on result indicators” according to First 5 Kern’s (2016) strategic plan, aggregated findings of child wellbeing and family conditions are presented in Chapter 4 to delineate improvement of service outcomes between the adjacent years.

Chapter 4: Turning the Curve

Proposition 10 stipulates incorporation of results-based accountability (RBA) to justify the state investment in local programs. The RBA model contains three key questions: (1) How much has been done? (2) How well did the service providers do? (3) Was anyone better-off? (Friedman, 2011). After the commission introduction in Chapter 1, assessment data were analyzed in Chapter 2 to describe how much has been done by First 5 Kern-funded programs in *Child Health, Family Functioning, and Child Development*. Chapter 3 included information on how well the system building accomplished a goal to make the program supports *consumer-oriented* and *easily-accessible* in local communities. This chapter is focused on the third question to summarize contributions of the state funding to improvement of child wellbeing and family strength across Kern County.

For the purpose of tracking key result indicators on the time dimension, the Family Stability Rubric (FSR) is employed to collect data on improvement of family conditions at 16 program sites. Meanwhile, results from the Core Data Elements (CDE) survey are examined across 29 programs to compare indicators of child wellbeing between last year and this year. Alignments of the FSR and CDE findings are provided at the end of this chapter to link empirical findings to focus areas of *Child Health, Family Functioning, and Child Development*. In alignment with First 5 Kern's (2016) strategic plan, "a results-based accountability framework was employed to facilitate turning the curve on those result indicators that most accurately represent the developmental needs of Kern County's children ages prenatal through five and their families" (p. 3). Hence, *Turning the Curve* is chosen as the governing theme for Chapter 4 to aggregate the outcomes of program support across different service providers.

Following the IRB report timeline, the FSR information was collected quarterly to monitor conditions of local families that received First 5 Kern-funded services in various communities. Because permanent health records, such as full-term pregnancy and low birth weight, did not change at the individual level, these indicators were gathered in the CDE data to evaluate the attribute distributions in local child population between adjacent years. Allen (2004) pointed out, "Value-added assessment generally involves comparing two measurements that establish baseline and final performance" (p. 9). Accordingly, the CDE and FSR data analyses are employed to articulate assessment results at different time points to evaluate improvement of child health and development in Kern County.

Strengthening of Family Functioning in FY 2016-17

For more than a decade, the rate of child abuse/neglect in Kern County has been around 9.2% while the state rate was kept under 7%³³. As the poverty rate has been identified as the single best predictor of child abuse and neglect³⁴, Census Bureau confirmed that 36% of children under five-years-old lived below the poverty line in Kern County (2016 data in Form S1701). In contrast, the corresponding poverty rate across the state was 21%. Consequently, more children in Kern County lived at or near the bottom level of Maslow's (1954) hierarchy, which made *food, childcare, and housing* core components of family functioning. The household conditions were tracked by multiple

³³ Kidsdata.org.

³⁴ https://community.babycenter.com/post/a56771938/choosing_to_have_children_while_living_in_poverty_immoral?cp=5

indicators in the FSR database. “Once these lower-level needs have been met, people can move on to the next level of needs, which are for safety and security” (Cherry, 2013, ¶. 2). Therefore, additional indicators of *job security* and *transportation* are analyzed at the family level within the first six months of First 5 Kern support. The period setting was intended to avoid widespread ceiling effects in the trend description.

Food Needs

The U.S. Department of Agriculture (USDA) classified home food spending at four levels, *thrifty plan*, *low-cost plan*, *moderate-cost plan*, and *liberal plan*. For children ages 0-5, a thrifty plan could cost around half of the liberal plan³⁵. The family food spending could be a time-dependent variable 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). At the program entry, 202 out of 323 families indicated stress on food spending, which was equivalent to an average of 16.8 families per program. The result tracking across 12 programs showed reduction of the average family count to 11.3 and 8.3 in months 3 and 6, respectively. One program did not display the family stress since end of the first quarter. Although no program money was given to families for food purchase, First 5 Kern funding supported early childhood services to save childcare expenditure for families.

Table 54: Number of Families with Stress on Food Spending

Program*	Initial	3 rd Month	6 th Month
AFRC	15	10	4
EKFRC	7	3	1
GSR	20	13	12
IWVFRC	15	8	7
KRVFRC	19	11	5
LVSRP	26	24	20
LHFRC	12	11	9
RSNC	21	16	12
SHS	18	0	0
SENP	20	14	9
SPCSR	19	19	17
WSCRC	10	6	4

*Program acronyms are listed in Appendix A.

Nutrition Considerations

Golden (2016) asserted that “addressing health and nutrition needs in the early years of life has important effects on children’s long-term development” (p. 3). At the program entry in FY 2016-17, 28 families indicated unmet nutrition needs, rendering two families per program as the baseline indicator. The average figure decreased to 0.9 and 0.6 per program in the third and sixth month, respectively. Except for the site of LVSRP, the nutrition concern was eliminated within half a year across all the programs (Table 55). Ensuring proper nutrition is important for young children because “The first three years of life are a period of dynamic and unparalleled brain development” (Liu, 2014, p. 3).

³⁵ <https://www.cnpp.usda.gov/sites/default/files/CostofFoodFeb2015.pdf>

Table 55: Number of Families with Unmet Nutrition Needs

Program*	Initial	3 rd Month	6 th Month
BCRC	0	0	0
EKFRC	2	0	0
GSR	1	0	0
IWVFRC	1	0	0
KRVFRC	2	0	0
LVS RP	9	9	8
LHFRC	0	0	0
MFRC	2	1	0
MCFRC	1	1	0
RSNC	0	0	0
SHS	0	0	0
SENP	4	2	0
SPCSR	1	0	0
WSCRC	5	0	0

*Program acronyms are listed in Appendix A.

Free/Reduced Lunches

Researchers adopted the count of free/reduced lunches as an indicator of family poverty (Brown, Kirby, & Botsko, 1997). In FY 2016-17, the average count of free/reduced lunch recipients was aggregated across 336 families that received services from 13 programs. At the initial stage of service access, 207 families reported needs for free or reduced lunches for some children in the households, adding up to an average of 16 families per program. In month 3, the number dropped to an average of 11 families per program. In month 6, the average number was below seven per program. One program showed no report of free/reduced lunches in the midyear. The consistent change in Table 56 portrays a positive trend on child wellbeing because “poverty adversely affects structural brain development in children” (p. 1).

Table 56: Number of Families Needing Free/Reduced Lunches

Program*	Initial	3 rd Month	6 th Month
AFRC	30	22	10
BCRC	15	10	3
DSR	15	10	9
EKFRC	13	2	1
GSR	18	14	12
IWVFRC	6	5	5
KRVFRC	15	14	4
LVFRC	27	26	23
MCFRC	3	2	1
RSNC	24	21	16
SHS	21	6	0
SENP	16	8	3
WSCRC	4	2	2

*Program acronyms are listed in Appendix A.

Unmet Housing Needs

Researchers found strong links between housing conditions and child development (Dockery, Kendall, Li, & Strazdins, 2010). In Kern County, local wildfire destroyed many

homes and caused Governor Brown to declare a state of emergency this year. First 5 Kern funded programs in these communities. The FSR data tracking within the first six months showed that the number of families in temporary facilities decreased across 13 programs. Based on the information from 313 households, an average of 3.08 families per program reported the living condition issue at the initial stage of service access. The average count dropped to 1.15 in third month and 0.31 in sixth month. Within half a year, 11 programs showed no families in temporary facilities (Table 57). The FSR indicator has a broad impact on other considerations because “The shortage of affordable housing confines many low-income families to substandard, overcrowded, and/or unsafe housing and creates a financial burden that can inhibit their ability to meet basic needs like food, utilities and health” (Sanders & Sorrells, 2016, p. 3).

Table 57: Number of Families Living in Temporary Facilities

Program*	Initial	3rd Month	6th Month
AFRC	3	1	1
BCRC	1	0	0
DSR	1	0	0
EKFRC	2	1	0
GSR	1	0	0
IWVFRC	7	1	0
LHFRC	0	0	0
MCFRC	2	1	0
RSNC	0	0	0
SHS	3	0	0
SENP	13	10	3
SPCSR	6	1	0
WSCRC	1	0	0

*Program acronyms are listed in Appendix A.

Burden on Housing Expenditure

Although house prices in Kern County are not as high as the coast regions of California, the local income is also much lower than the average income across the state. Consequently, “unaffordable housing affects children most during early childhood via its adverse impact on the family's ability to access basic necessities” (Dockery, Kendall, Li, & Strazdins, 2010, p. 2). In FY 2016-17, FSR data were gathered to track economic conditions across 284 households that received services from 11 First 5 Kern-funded programs. Upon the program entry, the results indicated a total of 136 families facing spending cut due to housing cost. During the first six months, the average number of families carrying this burden decreased from the initial 12.36 per program to 7 families per program. By the midyear, the average index reduced to 3.91 (Table 58). Alleviation of the burden on housing expenditure directly supported family financing. As Schumacher (2016) reported, “Parents with low- and moderate-incomes often struggle to stay afloat, balancing the soaring cost of child care against the high price of housing and other expenses” (p. 1).

Table 58: Number of Families Cutting Spending Due to Housing Cost

Program*	Initial	3rd Month	6th Month
AFRC	19	17	9
BCRC	11	8	1
EKFRC	14	1	1

Program*	Initial	3rd Month	6th Month
IWVFRC	6	4	2
KRVFRC	17	8	3
LVSRP	12	11	6
MCFRC	5	3	1
RSNC	14	11	10
SHS	10	0	0
SENP	17	9	5
WSCRC	11	5	5

*Program acronyms are listed in Appendix A.

Unmet Medical Insurance Needs

Young children are more vulnerable for lacking skills of self-protection. The American Institutes for Research (2012) reported that “Children without health insurance are less likely to get the medical care they need” (p. 15). To evaluate program support on child wellness, First 5 Kern gathered health insurance data from 373 families across 14 programs. At the program entry, the issue of *unmet insurance need* was reported by an average of 4.71 families per program. In months 3 and 6, the mean family count dropped to 2.07 and 1.50, respectively. The number of families with unmet insurance support was eliminated within half a year across seven of the programs in Table 59.

Table 59: Number of Families without Medical Insurance

Program*	Initial	3rd Month	6th Month
AFRC	5	0	0
BCRC	4	2	1
DSR	3	3	0
GSR	6	2	1
IWVFRC	3	0	0
KRVFRC	2	0	0
LVSRP	8	4	3
LHFRC	4	3	2
MFRC	8	7	7
RSNC	4	3	2
SHS	4	0	0
SENP	3	0	0
SPCSR	8	5	5
WSCRC	4	0	0

*Program acronyms are listed in Appendix A.

Stress on Medical Premium/Copay

Medical premium was designed to make people more sensitive to the service costs (McKinnon, 2016). However, copayment could add stress to families in poverty, particularly the ones with young children. First 5 Kern gathered FSR data from 294 respondents across 12 programs. On average, the number of families with stress on medical premium was 9.2 per program at the beginning. In months 3 and 6, the average number dropped to 6.9 and 4.5, respectively. Despite the premium hike with the Obama Care in FY 2016-17, three of the programs indicated no copayment stress in the midyear (Table 60).

Table 60: Number of Families with Stress on Medical Premium/Copay

Program*	Initial	3rd Month	6th Month
AFRC	3	2	1
BCRC	8	6	2
DSR	8	7	7
EKFRC	8	0	0
IWVFRC	2	1	0
KRVFRC	23	14	5
LHFRC	10	9	7
MFRC	18	16	14
MCFRC	3	3	0
RSNC	10	10	7
SPCSR	13	12	9
WSCRC	4	3	2

*Program acronyms are listed in Appendix A.

Job Security

The impact of housing affordability and healthcare expenditure largely depends on employment incomes, and the impact is more severe for young children because “Children who experience poverty during their preschool and early school years have lower rates of school completion than children and adolescents who experience poverty only in later years” (Brooks-Gunn & Duncan, 1997, p. 55). Based on the tracking of FSR data across 12 programs, unemployment issues were reported by an average of 6.3 families per program upon the initial family access to First 5 Kern-funded early childhood services. The number reduced to 3.0 families at end of the first quarter and 1.8 in the midyear. This positive change impacted 290 families in FY 2016-17. The responses in four programs indicated no issue of unemployment at the sixth month (Table 61).

Table 61: Number of Families with Unemployment Issue

Program*	Initial	3rd Month	6th Month
DSR	7	4	4
GSR	9	4	4
IWVFRC	8	3	3
KRVFRC	15	7	2
LHFRC	1	0	0
MFRC	6	6	1
MCFRC	3	2	0
RSNC	2	1	0
SHS	5	0	0
SENP	7	4	4
SPCSR	5	2	1
WSCRC	8	3	2

*Program acronyms are listed in Appendix A.

Unmet Childcare Needs

Young children often have parents in the labor force. Thus, childcare services are important for supporting parent employment. In particular, “Kern County children aged 0 to 5 years had a higher rate of injuries from falls than any other age group” (KCNC, 2016, p. 29). First 5 Kern funded center-based and home-based childcare services to

address the countywide needs. While center-based programs delivered childcare services for a group of 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). In either case, program effectiveness is reflected by a decreasing number of households with unmet childcare needs. Results in Table 62 were derived from the FSR survey of 295 families across 12 programs. At the program entry, an average of 2.8 families indicated unmet childcare needs. The result declined to 1.1 and 0.3 families per program in months 3 and 6, respectively. No family reported unmet childcare needs in nine programs by midyear. The improvement of childcare support has helped local families make ends meet and allow them to avoid difficult choices about where to leave their children while at work.

Table 62: Number of Families with Unmet Childcare Needs

Program*	Initial	3 rd Month	6 th Month
AFRC	5	1	1
BCRC	2	0	0
DSR	2	2	0
EKFRC	7	1	0
IWVFRC	2	1	0
KRVFRC	5	3	1
LHFRC	0	0	0
MFRC	2	2	0
MCFRC	1	0	0
RSNC	0	0	0
SHS	2	0	0
WSCRC	5	3	1

*Program acronyms are listed in Appendix A.

Availability of Convenient Childcare

Most young children are born to young parents who have a long career path prior to retirement. To support the job commitment, service providers are needed to “offer convenient childcare resources to those who need to attend job trainings, interviews, school meetings” (United Way, 2016, p. 27). It was reported that “Kern County licensed childcare providers and programs have the capacity to serve 18% of the estimated child care need of working parents countywide” (KCNC, 2016, p. 6). Therefore, improvement of the community capacity building is reflected by reduction on the number of families *in need of convenient childcare providers*. Based on responses of 379 parents across 15 programs in FSR assessment, 136 families, or an average of nearly 9.1 families per program, indicated no convenient childcare provider at the program beginning. The average number was reduced to 5.7 in the first quarter and 3.5 in the second quarter of FY 2016-17. One third of the programs showed zero family counts for having the shortage of convenient childcare in the sixth month (Table 63).

Table 63: Number of Families without Convenient Childcare Providers

Program*	Initial	3 rd Month	6 th Month
AFRC	21	12	6
BCRC	2	0	0
DSR	12	9	9
EKFRC	10	1	1
GSR	8	3	3

Program*	Initial	3 rd Month	6 th Month
IWVFRC	6	5	0
KRVFRC	17	11	5
LVS RP	17	17	11
LHFRC	1	1	0
MCFRC	2	0	0
RSNC	4	3	1
SHS	5	0	0
SENP	10	4	2
SPCSR	12	12	10
WSCRC	9	7	5

*Program acronyms are listed in Appendix A.

Missing Work/School Due to Childcare

It was reported that “most early childhood interventions focus on outcomes for the participating child and do not attempt to assess effects on their parent(s)” (Karoly, 2012, p. 13). Inevitably, childcare needs often conflicted with job commitments and professional development opportunities for parents and other family members. As a result, parents or other family members might have to miss work or school due to lack of childcare, which could reduce job security and cause family instability. In FY 2016-17, nine programs showed improvement on the issue of *missing work or school due to childcare* across 240 families. On average, the issue was reported by 4.4 families per program at the starting point. At end of the first and second quarters, the number was reduced to 1.8 and 0.6, respectively. Two thirds of the programs showed elimination of this issue within six months (Table 64).

Table 64: Number of Families Missed Work/School for Childcare

Program*	Initial	3 rd Month	6 th Month
DSR	3	1	0
EKFRC	4	1	0
IWVFRC	5	2	0
KRVFRC	3	2	0
MFRC	4	3	1
RSNC	2	0	0
SHS	3	0	0
SENP	12	4	3
WSCRC	4	3	1

*Program acronyms are listed in Appendix A.

Unmet Transportation Needs

Many poor families lack the resources to pay for essential transportation. Consequently, family members had to miss work or school (Schroeder & Stefanich, 2001). The transportation issue is more severe in Kern County for covering a service area of 8,161.42 square miles. Based on FSR data in FY 2016-17, 55 out of 281 families reported *unmet transportation needs* prior to their service access to 11 programs. The number dropped from the initial 5 families per program to 2.3 families per program at end of the first quarter. At midyear, five programs showed no transportation issue, rendering less than 1.3 families per program *with unmet transportation needs* (Table 65).

Table 65: Number of Families with Unmet Transportation Needs

Program*	Initial	3 rd Month	6 th Month
AFRC	5	2	1
BCRC	2	0	0
DSR	3	2	1
IWVFRC	7	3	3
KRVFRC	10	5	1
LHFRC	0	0	0
MFRC	5	0	0
RSNC	2	1	0
SHS	3	0	0
SENP	12	7	4
WSCRC	6	6	4

*Program acronyms are listed in Appendix A.

Missing Work/School Due to Transportation

The lack of transportation support also impacts child service access. Unfortunately, “In rural areas, public transportation options are scarce and have limited hours of service” (Waller, 2005, p. 2). To assess the impact on family functioning, Table 66 contains the number of families with members *missing work or school due to transportation*. The results from 12 programs showed that 53 out of 292 families reported this transportation issue before receiving First 5 Kern-funded services. The average family count decreased from the initial 4.4 families per program to 1.8 in month 3. At midyear, the average number dropped to 0.9 families. Eight out of 12 programs reported no families *missing work or school for transportation reasons*.

Table 66: Number of Families Missed Work/School for Transportation

Program*	Initial	3 rd Month	6 th Month
AFRC	3	0	0
BCRC	1	0	0
DSR	7	5	1
IWVFRC	2	0	0
KRVFRC	7	4	1
LHFRC	0	0	0
MFRC	5	2	0
MCFRC	3	0	0
RSNC	2	0	0
SHS	2	0	0
SENP	16	6	5
WSCRC	5	4	4

*Program acronyms are listed in Appendix A.

Burden of Transportation Expenditure

In FY 2016-17, FSR data were tracked during the first six months to indicate the number of families *with financial burden for transportation*. A total of 262 respondents provided information across 11 programs. The initial figure showed 91 families with the financial burden before service access, which corresponded to 8.3 families per program with this issue. The average number dropped to 4.5 and 3.0 per program in months 3 and 6, respectively. Two of the programs should zero family count by midyear (Table 67).

Table 67: Number of Families with Financial Burden for Transportation

Program*	Initial	3rd Month	6th Month
BCRC	6	2	1
DSR	8	7	3
EKFRC	13	2	0
GSR	7	4	4
IWVFRC	13	9	6
KRVFRC	8	7	3
MCFRC	3	1	1
RSNC	5	3	3
SHS	4	0	0
SENP	17	10	8
WSCRC	7	5	4

*Program acronyms are listed in Appendix A.

In summary, First 5 Kern-funded programs made extensive contributions to improvement of child wellbeing in FY 2016-17. By saving family expenditures on early childhood support, the entangled issues of *food supply, childcare, job security, housing, and transportation* have been alleviated within the first six months of program service. Although “Housing affordability in Kern County is increasingly more difficult and more families are accessing safety net food programs” (Golich, 2013, p. i), the FSR findings in Tables 54-67 demonstrated improvement of family functioning in FY 2016-17. First 5 Kern support is particularly important for low-income families because “lack of economic opportunity and resources create a strain on families and can affect children’s emotional, social, cognitive, and physical development and thus their readiness for school” (California Home Visiting Program, 2011, p. 52).

Improvement of Child Wellbeing Between Adjacent Years

While individual characteristics, such as birth weight and ethnicity, were time invariant, result tracking is still needed to reflect the ongoing change of local service population each year. More specifically, five-year-olds from last year have reached age 6 this year and newborns within the past 12 months have been added to the service population. Therefore, information on child wellbeing should be updated in the annual report to evaluate the change of key CDE indicators across service providers.

According to First 5 California (2016b), “First 5 Child Health services are far-ranging and include prenatal care, oral health, nutrition and fitness, tobacco cessation support, and intervention for children with special needs” (p. 15). Indicators of child health and development included *breastfeeding, home reading, and preschool attendance*. In addition, child protection was illustrated by additional services in *dental care, immunization, and smoke prevention*. Improvements of child wellbeing are summarized in this section to document the impact of First 5 Kern on CDE indicators between adjacent years.

Insurance Coverage

Smith et al. (2009) noted, “Many families may qualify for insurance but because of a lack of information, they do not access it” (p. 6). More importantly, “the need [was] not just to enroll children in health insurance but to retain them once enrolled” (Inkelas et al.,

2003, p. x). To meet the service needs, First 5 Kern (2016) identified seven Result Indicators in its strategic plan:

- Number of families assisted with health insurance applications
- Number of children successfully enrolled into a new health insurance program
- Number of children who were successfully enrolled into a health insurance program and received well-child check-ups
- Number of children successfully renewed into a health insurance program
- Number of children with an established medical home
- Number of children with an established dental home
- Number of families referred to a local enrollment agency for health insurance application assistance

The strategic plan implementation has resulted in an increase in the percent of insurance coverage across 21 programs (Table 68). More specifically, the average percent of children *with insurance coverage* increased from 93.6% in last year to 98.4% this year across these programs that served a total of 2,169 children in FY 2016-17. Nine programs achieved a rate of 100% insurance coverage in Table 68, an increase from six programs with the ceiling effect last year (see Wang, 2017, p. 85).

Table 68: Percent of Children with Insurance Coverage

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Covered Children	N	Percent of Covered Children
BCDC	28	92.9	27	96.3
BCRC	25	64.0	41	97.6
DR	886	96.2	938	97.4
DSR	91	94.5	100	99.0
EKFRC	55	96.4	81	100
GSR	90	98.9	111	99.1
HLP	56	89.3	68	98.5
IWVFRC	31	90.3	45	100
KRVFRC	19	100	48	100
LVS RP	38	86.8	46	95.7
LHFRC	30	100	17	100
MFRC	62	93.5	56	98.2
NPCLC	183	92.9	179	96.6
NFP	31	100	16	100
RSNC	32	93.8	27	100
SFP	23	100	23	100
SENP	42	95.2	43	100
SSEC	14	100	8	100
SPCSR	50	92.0	205	94.6
WIW	23	95.7	23	100
WSN	39	92.3	67	92.5

*Program acronyms are listed in Appendix A.

Well-Child Checkup

Well-child checkups normally started a few days after children were born. The purpose was to ensure healthy growth during ages 0-5. The checkup visits also provided opportunities to foster communication between parents and doctors on a variety of health

care topics, including safety, nutrition, normal development, and general health care (Medi-Cal Managed Care Division, 2013). In FY 2016-17, 16 programs indicated an increase in the percent of children with an *annual well-child checkup visit*, up from 12 programs in last year (see Wang, 2017, p. 89). Table 69 showed that the rate of well-child visit increased in these programs from 81.7% to 91.5% between the adjacent years. These programs jointly served 1,823 children this year.

Table 69: Percent of Children with Annual Well-Child Checkup

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Children	N	Percent of Children
AFRC	52	88.5	101	90.1
BCRC	25	72.0	41	92.7
DR	886	83.7	938	88.1
EKFRC	55	89.1	81	93.8
HLP	56	89.3	68	97.1
KRVFRC	19	94.7	48	95.8
MVIP	34	85.3	52	94.2
NFP	31	71.0	16	93.8
RSNC	32	90.6	27	92.6
SSCDC	29	62.1	47	78.7
SENP	42	52.4	43	97.7
SSEC	14	92.9	8	100
SPCSR	50	84.0	205	91.2
WSCRC	68	85.3	58	86.2
WIW	23	91.3	23	95.7
WSN	39	74.4	67	76.1

*Program acronyms are listed in Appendix A.

Dental Care

Because “children with poor dental health are almost three times as likely to miss school as their peers” (American Institutes of Research, 2012, p. 14), dental care is directly related to school readiness. First 5 Kern (2016) designated Result Indicator 1.1.6, “Number of children with an established dental home”, to tackle this issue. Table 70 showed the percent of children *with annual dental checkups* across 19 programs. On average, the percent across these programs increased from 45.2% in last year to 51.0% this year. Although no children were born with a complete set of teeth, infants were recommended to have the first dental visit by the first birthday.³⁶ Hence, dental care is generally applicable to most children ages 0-5. A total of 1,895 children benefited from this improvement in FY 2016-17.

Table 70: Percent of Children with Annual Dental Checkups

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Children	N	Percent of Children
BIH	36	0	21	9.5
BCDC	28	17.9	27	18.5
BCRC	25	48.0	41	63.4
DR	886	38.3	938	45.6
DSR	91	68.1	100	75.0

³⁶ <http://www.aapd.org/assets/2/7/GetItDoneInYearOne.pdf>

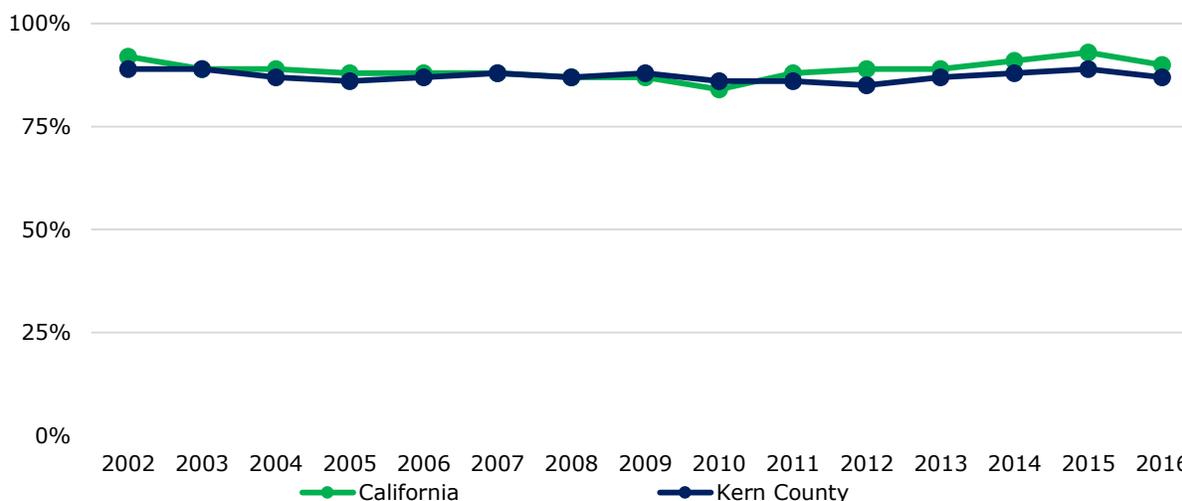
Program*	FY 2015-16		FY 2016-17	
	N	Percent of Children	N	Percent of Children
DDCCC	54	20.4	37	29.7
EKFRC	55	41.8	81	53.1
IWVFRC	31	41.9	45	53.3
KRVFRC	19	26.3	48	29.2
LVS RP	38	52.6	46	56.5
LHFRC	30	63.3	17	76.5
MFRC	62	77.4	56	85.7
MCFRC	19	47.4	26	57.7
RSNC	32	65.6	27	66.7
SSCDC	29	27.6	47	46.8
SFP	23	39.1	23	43.5
SENP	42	95.2	43	39.5
SPCSR	50	58.0	205	85.4
WSN	39	30.8	67	34.3

*Program acronyms are listed in Appendix A.

Immunization

For nearly 15 years, Kern County and the entire state had a comparable rate of immunization completion for kindergartners. In preparation for the kindergarten entry, First 5 Kern funded CMIP to provide immunizations across the county. Since its purchase of a service mobile unit in 2012, CMIP contributed to an increase of the immunization completion rate in Kern County (Figure 24).

Figure 24: Trend of Immunization Completion in Kern County and California



Source: American Community Survey data with 2016 result

Table 71 listed the percent of children who completed *all immunizations* across 19 programs, up from 11 programs last year (see Wang, 2017). The average percent per program increased from 83.8% in last year to 90.4% this year. This improvement impacted a total of 1,971 children in Kern County after the last fiscal year. The support from immunization clinics has been treated as an important Result Indicator in First 5 Kern’s (2016) strategic plan.

Table 71: Completion of All the Recommended Immunizations

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Children	N	Percent of Children
BIH	36	50.0	21	52.4
BCRC	25	88.0	41	97.6
DR	886	76.7	938	78.7
EKFRC	55	76.4	81	82.7
HLP	56	92.9	68	97.1
IWVFRC	31	74.2	45	93.3
LVSRR	38	89.4	46	95.7
LHFRC	30	100	17	100
MFRC	62	91.9	56	94.6
MVIP	34	73.5	52	76.9
NPCLC	183	89.6	179	92.2
NFP	31	90.3	16	93.8
RSNC	32	93.8	27	96.3
SSCDC	29	82.8	47	91.5
SFP	23	91.3	23	100
SENP	42	73.8	43	84.0
SSEC	14	85.7	8	100
SPCSR	50	86.0	205	97.6
WSCR	68	86.8	58	93.1

*Program acronyms are listed in Appendix A.

Preschool Attendance

Preschools were designed to foster young child’s social and emotional growth (Robison-Frankhouser, 2003). According to First 5 California (2013), “Preschool attendance is correlated with improved kindergarten readiness and kindergarten readiness is associated with long-term achievement” (p. 17). In Table 72, program information was gathered to track the percent of children *participating in preschool activities* on a regular basis. On average, the rate increased from 23.6% in last year to 30.9% this year. This positive change benefited 823 children since their third birthday across 14 programs this year, up from 10 programs in FY 2015-16 (see Wang, 2017).

Table 72: Regular Attendance of Preschool Since the Third Birthday

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Children	N	Percent of Children
AFRC	52	5.8	101	11.9
DSR	91	35.2	100	42.0
GSR	90	15.6	111	24.3
HLP	56	35.7	68	41.2
IWVFRC	31	29.0	45	35.6
LVSRR	38	36.8	46	37.0
MFRC	62	1.6	56	8.9
MVIP	34	0	52	1.9
RSNC	32	78.1	27	81.5
SHS	24	20.8	57	21.1
SSCDC	29	13.8	47	34.0
SFP	23	43.5	23	56.5
WIW	23	4.3	23	17.4

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Children	N	Percent of Children
WSN	39	10.3	67	19.4

*Program acronyms are listed in Appendix A.

Home Reading

Robison-Frankhouser (2003) reported, “For many years, researchers have supported the concept that when parents and caregivers devote time to reading books to young children, they contribute to early literacy success” (p. 39). Furthermore, “language proficiency and early literacy development are strong indicators for later school success” (American Institutes of Research, 2012, p. 2). Therefore, home reading activities were tracked in Table 73 between adjacent years. Eleven programs demonstrated increases in the percent of children who had *two or more home-reading activities* per week. On average, the percent across these programs increased from 51.8% in last year to 61.9% this year. This progress impacted 571 children in FY 2016-17.

Table 73: Children Being Read to Twice or More Times in Last Week

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Children	N	Percent of Children
BIH	36	16.7	21	23.8
BCDC	28	32.1	27	51.9
GSR	90	75.6	111	79.3
HLP	56	53.6	68	55.9
LHFRC	30	43.3	17	52.9
NPCLC	183	78.1	179	81.6
NFP	31	19.4	16	31.3
SENP	42	50.0	43	69.8
SSEC	14	71.4	8	87.5
WSCRC	68	64.7	58	69.0
WIW	23	65.2	23	78.3

*Program acronyms are listed in Appendix A.

Prenatal Smoking

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). It has been 50 years since publishing of the 1964 Surgeon General’s report that linked smoking to lung cancer and other deadly diseases (U.S. Department of Health and Human Services, 2014). “Secondhand smoke puts young children at risk for respiratory illnesses, including Sudden Infant Death Syndrome (SIDS), middle ear infections, impaired lung function, and asthma” (American Institutes for Research, 2012, p. 14). For child protection, First 5 Kern was an active supporter for the local anti-smoking campaign. Across 14 programs funded by First 5 Kern, the proportion of *mother smoking during pregnancy* declined from 10.8% in last year to 3.6% this year. Four of the programs showed no smoke issue in FY 2016-17. These 14 programs provided services for 911 newborns this year. The reduction of tobacco consumption not only facilitates disease prevention, but also curtails family dental care cost. It was reported that “the smoking of cigarettes and use of other tobacco products affects oral health by causing dental disease” (Secretary of State's Office, 2016, p. 134).

Table 74: Percent of Mothers Smoking During Pregnancy

Program*	FY 2015-16		FY 2016-17	
	N	Percent	N	Percent
AFRC	54	1.9	98	1.0
BCDC	35	14.3	23	0
DSR	94	5.3	100	5.0
EKFRC	65	21.5	76	5.3
GSR	93	6.5	110	2.7
HLP	57	8.8	69	2.9
LHFRC	30	6.7	17	0
LVSRP	56	7.1	48	0
MVIP	37	10.8	56	5.4
SFK	25	8.0	23	4.4
SSEC	13	16.4	8	0
SPCSR	218	2.3	201	2.0
WIW	23	17.4	22	4.6
WSCRC	77	24.7	60	16.7

*Program acronyms are listed in Appendix A.

Full-Term Pregnancy

Prenatal care extends support for full-term pregnancy. Preterm pregnancy is a critical issue because about 15% of premature infants have permanent disabilities (Thibault, 2017). It was revealed that “The average first-year medical costs are about 10 times greater for preterm infants than full-term infants” (Wasson & Goon, 2013, p. 28). Hence, resource savings from full-term pregnancy are much needed for sustaining the government funding for early childhood support. Table 75 showed that the rate of *full-term pregnancy per program* increased from 79.5% in last year to 88.4% this year across 13 service providers. Altogether, these programs served 1,703 children in FY 2016-17. One program showed 100% full-term pregnancy this year.

Table 75: Increase of Full-Term Pregnancy Between Two Adjacent Years

Program*	FY 2015-16		FY 2016-17	
	N	Percent	N	Percent
DDLCCC	53	75.5	36	86.1
DR	893	84.6	890	86.4
EKFRC	65	76.9	76	85.5
HLP	54	94.7	69	95.7
MFRC	64	90.6	56	92.9
NPCLC	195	92.3	171	94.7
NFP	32	71.9	15	86.7
RSNC	27	70.4	27	88.9
SSCDC	30	70.0	47	78.7
SENP	45	77.8	47	87.2
SSEC	13	53.9	8	75.0
SPCSR	218	87.6	201	91.6
WSCRC	77	87.0	60	100.0

*Program acronyms are listed in Appendix A.

Low Birth Weight

Although prenatal care could help increase full-term pregnancies, “For a variety of reasons, high-risk mothers may delay or avoid prenatal care” (Wasson & Goon, 2013, p. 28). A full-term infant weighing less than 5 pounds, 8 ounces at birth is considered a low birth weight (LBW). LBW has been identified as a potential cause for medical complications (Ponzio, Palomino, Puccini, Strufaldi, & Franco, 2013). Recent research also linked LBW to low educational attainment and high prevalence of socio-emotional and behavioral problems in later years (Chen, 2012). To address this issue, First 5 Kern supported *Systems of Care* to offer a combination of education, prevention, and intervention services in prenatal care. Table 76 showed reduction of the average LBW rate from 12.2% in last year to 7.9% this year in 12 programs. These programs served a total of 1,820 children this year. One program showed no LBW issue in FY 2016-17.

Table 76: Proportion of Cases for Decreasing Low Birth Weight

Program*	FY 2015-16		FY 2016-17	
	N	Percent	N	Percent
AFRC	54	7.4	98	5.1
DR	893	10.3	890	9.9
DSR	94	6.4	100	6.0
EKFRC	65	21.5	76	11.8
LVS RP	56	3.6	48	2.1
NPCLC	195	6.6	171	6.4
NFP	32	25.0	15	13.3
SSCDC	30	26.7	47	19.2
SENP	45	13.3	47	6.4
SPCSR	218	10.1	201	8.9
WSCRC	77	6.5	60	0
WSN	47	8.5	67	6.0

*Program acronyms are listed in Appendix A.

When LBW occurred in poor families, scientists 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”.³⁷ Consequently, Kern County was ranked at sixth and eighth positions across the state for LBW and obesity.³⁸ Because “More babies were born at low birth weight” in Kern County (Golich, 2013, p. i), the resource savings from LBW reduction helped sustain First 5 Kern support for children ages 0-5.

Breastfeeding

Mother’s milk has been found from a meta-analysis to support cognitive development of infants with LBW (Anderson et al., 1999). Kirkham, Harris, and Grzybowski (2005) concurred that “Breastfeeding is the best feeding method for most infants” (p. 1308). Built on the consensus from research communities, the 2015 Children’s State Policy Agenda included a target to increase the breastfeeding rate (First 5 California, 2015c).

³⁷ <http://www.sciencedaily.com/releases/2011/03/110310070311.htm>

³⁸ <http://www.kidsdata.org>

The U.S. federal government set a national objective in 2011 to have at least 46% of children breastfed in the first three months.³⁹ In Table 77, all programs surpassed the national objective in FY 2016-17. The average breastfeeding rate across 15 programs increased from 64.0% in last year to 76.7% this year. This change supported healthy growth of 825 children in Kern County. Furthermore, the improvement has enhanced the nurturing parenting process as “Babies benefits from the closeness [with mothers] during breastfeeding” (Robison-Frankhouser, 2003, p. 28).

Table 77: Increase in Breastfeeding Rate Between Two Adjacent Years

Program*	FY 2015-16		FY 2016-17	
	N	Percent	N	Percent
AFRC	54	72.2	98	72.5
BIH	38	63.2	21	81.0
BCRC	33	63.6	38	89.5
DDLCCC	53	54.7	36	61.1
KRVFRC	23	56.5	44	59.1
LVS RP	56	71.4	48	72.9
MFRC	64	67.2	56	85.7
MVIP	37	70.3	56	89.3
MCFRC	20	65.0	23	87.0
SENP	45	53.3	47	80.9
SSEC	13	69.2	8	87.5
SPCSR	218	69.7	201	71.1
WIW	23	78.3	22	90.9
WSCRC	77	52.0	60	68.3
WSN	47	53.2	67	53.7

*Program acronyms are listed in Appendix A.

Prenatal Care

It was generally agreed that “the concept of early childhood health may begin with prenatal health” (Chen, 2012, p. 2). In FY 2016-17, “Number of pregnant women referred to prenatal care services” was listed as Result Indicator 1.1.2 in First 5 Kern’s (2016) Strategic Plan. Programs were funded to provide education and service access to pregnant mothers. As a result, the average rate of *monthly prenatal care* increased from 88.8% in the last year to 94.9% this year across 14 programs that served 791 families (Table 78). Five of the programs reached 100% this year.

Table 78: Percent of Mothers Receiving Prenatal Care

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Mothers	N	Percent of Mothers
BCDC	35	100	23	100
BCRC	33	93.9	38	94.7
DDLCCC	53	90.6	36	94.4
HLP	57	79.0	69	82.6
LHFRC	30	90.0	17	94.1
MFRC	64	89.1	56	100
MCFRC	20	85.0	23	95.7
NPCLC	195	86.7	171	91.2

³⁹ www.kidsdata.org/export/pdf?cat=46

Program*	FY 2015-16		FY 2016-17	
	N	Percent of Mothers	N	Percent of Mothers
NFP	32	100	15	100
RSNC	27	96.3	27	100
SENP	45	82.2	47	97.9
SSEC	13	76.9	8	100
SPCSR	218	84.4	201	87.6
WSCRC	77	89.6	60	90.0

*Program acronyms are listed in Appendix A.

In summary, the CDE data analyses revealed improvement of child wellbeing since the last fiscal year. Besides alleviation of healthcare issues pertaining to *preterm pregnancy, low birth weight, prenatal care, and prenatal smoking* at the child level, enhancement of family functioning supported *breastfeeding, well-child checkup, up-to-date immunizations, and insurance coverage*. Progress in early childhood education was demonstrated by expansion of *home reading activities and preschool learning opportunities*. As indicated by the result patterns in Tables 68-78, value-added assessments have shown better service outcomes this year to substantiate an assertion in First 5 Kern’s (2016) Strategic Plan, i.e., “Working in partnership with its service providers in communities throughout Kern County, it [the Commission] has been able to positively impact the lives of thousands of children and their families” (p. 8).

In the RBA model, *Turning the Curve* is a key concept for “Defining success as doing better than the current trend or trajectory for a measure” (Lee, 2013, p. 10). In this chapter, FSR and CDE results were systematically summarized to report ongoing improvement of child wellbeing and family support across different program sites. The data tracking confirmed the positive impact of First 5 Kern-funded services on the time dimension. Based on the evidences *within this fascial year and/or between adjacent years*, improvements of service outcomes are reflected on 16 aspects.

Within FY 2016-17, improvements were made on six aspects:

1) Screening of Child Development

- Twenty-one programs tracked developmental growth of 1,749 children in months 2-60. Child performance was found significantly above the age-specific thresholds across all Ages and Stages Questionnaire-3 (ASQ-3) domains;

2) Assessment of Parent Education

- Pretest and posttest data were gathered from 89 families across six court-mandated parent-education programs. The results showed strong effect sizes (i.e., Cohen’s $d > .80$) from Adult-Adolescent Parenting Inventory-2 (AAPI-2) findings;

3) Enhancement of Child Protection

- The Differential Response (DR) program demonstrated strong and significant impact on child protection. DR data tracked over 600 children across Kern County;

4) Satisfaction of Parent Workshops

- On a five-point scale with "5" representing the most positive result, effectiveness of 10 Nurturing-Parenting workshops was indicated by improvement of the average rating from 3.25 in pretest to 4.22 in posttest across 1,138 responses in seven programs;

5) Strengthening of Preschool Preparation

- Ready to Start conducted pretest and posttest assessments to show improvement of preschool preparation among 362 children in four school districts. The effect size was 1.71, indicating its strong practical impact on kindergarten readiness;

6) Effect on Childcare Support

- First 5 Kern monitored stability of 295 families across 12 programs. At the program entry, an average of 2.8 families indicated unmet childcare needs. The quarterly data tracking showed the number decreases to 1.1 and 0.3 families per program in months 3 and 6, respectively. No family reported unmet childcare needs in nine programs by midyear.

In comparison to last year, programs improved services on 10 aspects:

1) Offering of Home Reading Activities

- The number of children being read to twice or more times per week was tracked for 604 families in 14 programs. The rate increased from 58.9% in last year to 70.2% this year;

2) Expansion of Prenatal Care Coverage

- The percent of mothers receiving prenatal care increased across 14 programs from 88.8% in last year to 99.3% this year across 791 families. Five of the programs reached 100% this year;

3) Implementation of Well-Child Checkup

- The proportion of families having annual well-child checkup increased across 16 programs from 81.7% in last year to 91.5% this year. These programs jointly completed Core Data Elements surveys for 1,823 children in FY 2016-17;

4) Increase of Full-Term Pregnancy

- The percent of full-term pregnancy increased from 79.5% in last year to 88.4% this year across 13 programs. Altogether, these programs served 1,703 newborns this year;

5) Decline of Low-Birth Weight

- The rate of low-birth weight decreased from 12.2% in last year to 7.9% this year in 12 programs. These programs served a total of 1,820 children in FY 2016-17;

6) Expansion of Breastfeeding

- The average breastfeeding rate across 15 programs increased from 64.0% in last year to 76.7% this year. This change supported healthy growth of 825 children in Kern County;

7) Increase of Preschool Involvement

- The rate of children regularly attending preschool events increased from 23.6% in last year to 30.9% this year. This positive change benefited 823 children since their third birthday across 14 programs in FY 2016-17;

8) Fulfillment of Immunization Requirements

- The percent of children receiving all immunizations increased across 19 programs from 83.8% in the last year to 90.4% this year. This improvement impacted a total of 1,971 children in Kern County after the last fiscal year;

9) Monitoring of Dental Care

- The proportion of children with annual dental checkups across 19 programs. On average, the percent across these programs increased from 45.2% in last year to 51.0% this year. A total of 1,895 children benefited from this change in FY 2016-17;

10) Reduction of Prenatal Smoking

- The rate of prenatal smoking was reduced from 10.8% in last year to 3.6% this year across 14 programs. The result impacted 911 newborns this year.

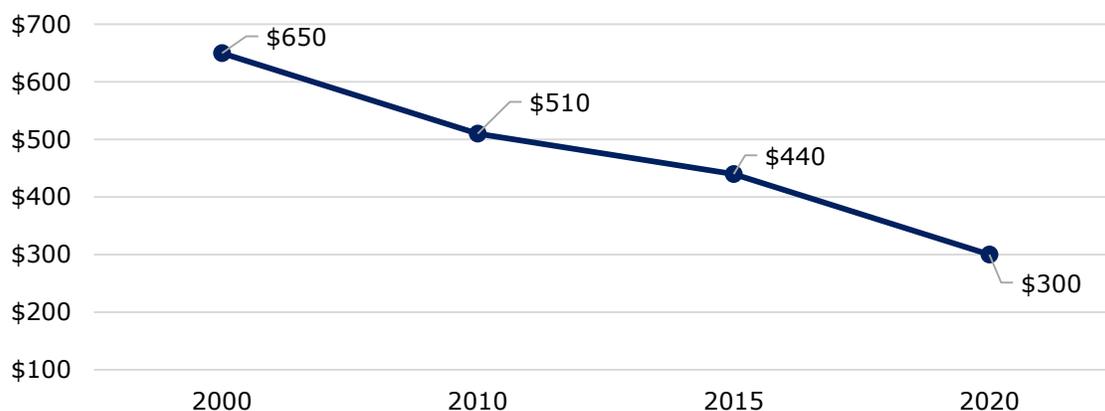
Due to economic inflation, population growth, and minimum wage increase, effort on *Turning the Curve* was expected for First 5 Kern and its service providers to maintain stability of early childhood support in Kern County. While the result aggregation in Tables 54-78 suggested effective service collaboration across multiple programs, findings from each of the 16 aspects were derived from Result Indicators of First 5 Kern (2016) Strategic Plan to address specific service outcomes in *Child Health* [Points II3, II4, II5, II6, II8, II9], *Family Functioning* [Points I2, I3, I4] and *Child Development* [Points I1, I5, I6; II1, II2, II7, II10]. In combination of the information across Chapters 2-4, the three-fold RBA questions have been addressed to support Proposition 10 funding in local programs across Kern County.

Chapter 5: Conclusions and Future Directions

Since inception of Proposition 10, First 5 California was given the authority of “Providing technical assistance to county commissions in adopting and implementing county strategic plans for early childhood development” (Health and Safety Code, Section 130125). Despite the emphasis on local control, the state commission identified four focus areas as the mandatory service categories for Proposition 10-funded programs (Ibid. 6). To address the statute requirement, Chapter 2 was devoted to extensive analyses of program data across Focus Areas 1-3 and Chapter 3 was designated for delineating evidences of service integration in Focus Area 4. The ongoing improvement of child wellbeing and family strength was tracked by trend data in Chapter 4. Triangulation of the assessment findings consistently confirmed an evaluation conclusion, i.e., First 5 Kern has funded “local programs that promote early childhood development for children ages 0 to 5 in the areas of health and wellness, early childcare and education, parent education and support services, and integration of services” (First 5 Kern, 2016, p. 1).

While the needs for early childhood support has been expanding in Kern County, the state revenue from Proposition 10 showed an ongoing trend of declining due to less tobacco consumption. In comparison to the per-child investment from Proposition 10 in 2000, over half of the state funding has been depleted by 2017 (Figure 25). In FY 2016-17, the California Budget & Policy Center (CBPC) reported that “By significantly boosting the price of cigarettes and other tobacco products, Proposition 56 is expected to immediately reduce tobacco consumption.”⁴⁰

Figure 25: Decline of Proposition 10 Revenue in California



The statewide trend inevitably impacted Proposition 10 funding at the county level, imposing a common challenge for county commissions to sustain early childhood support across California. To strengthen the commission partnership building, a nonprofit membership organization, First 5 Association of California, was established for advocating a coherent agenda of early childhood services across California's 58 counties.⁴¹ Recently, the organization suggested reduction of local funding on direct services. As Moira Kenney (2016), the organization’s Executive Director, maintained,

⁴⁰ <http://www.first5ventura.org/wp-content/uploads/2016/01/ReportCommissionStaffNov2016.pdf>

⁴¹ <https://www.linkedin.com/company/first5associationofcalifornia>

If we continue to conduct “business as usual” and focus the majority of our spending on individual direct services, we would only be able to help a relatively small number of families and children for a limited time. Working this way is like addressing the problem leaf by leaf instead of curing it at the root. (p. 5)

While the state statute did not rank the importance among the focus areas for direct or indirect services, this new proposal remains non-mandatory in nature. As a result, Kenney (2016) acknowledged the challenge of suggesting the “New role for many First 5 commissions, with some fearing backlash against moving from programs to systems” (p. 7).

Under the current setting for mandatory county reporting, *Annual Report Form-2* (AR-2) must be completed for recognition of direct service programs in at least two focus areas. First 5 Association of California (2016) reaffirmed that “Annual Report (AR) is statutory requirement of Proposition 10” (p. 1). Unless changes occurred at the state level on the AR2 requirement, exemplary performance in a single focus area (i.e., Focus Area 4: Systems of Care) is inadequate to meet the statutory demand for annual reporting.

At the local level, First 5 Kern also needs to continue honoring the current funding commitment to direct services according to its contractual agreements service providers for the entire funding cycle. In line with the reporting and funding requirements, features of two exemplary programs are described in this chapter to illustrate the feasibility of treating direct services and system building as complementary, instead of competing, domains. Past recommendations are subsequently reviewed to assess ongoing progress since the last annual report. Future directions are discussed in a *New Recommendation* section to sustain service improvement next year.

Highlight of Exemplary Programs in FY 2016-17

In gathering the information for AR-2, the state commission requires three report components: (1) Most Recent Compelling Service Outcome, (2) Benchmark/Baseline Data, and (3) Outcome Measurement Tool (First 5 California, 2016b). Based on thorough examination of evaluation data across 42 programs, Lamont Vineland School Readiness Program (LVSRP) was chosen to illustrate impressive results from *Improved Family Functioning* and Neighborhood Place Community Learning Center (NPCLC) was selected to demonstrate exceptional outcomes of *Improved Child Development*.

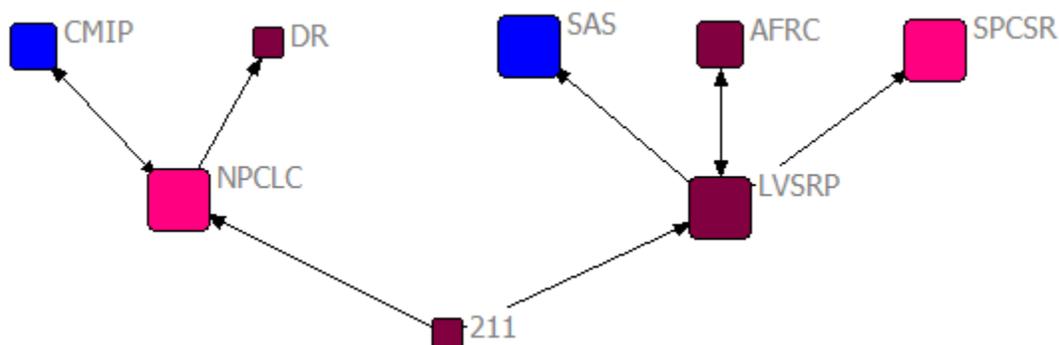
Albeit the program affiliation differences between focus areas, both LVSRP and NPCLC offered early childhood education services on center-based platforms. The compelling service outcome was represented by their service deliveries beyond annual targets. In FY 2016-17, NPCLC served 329 children, almost doubled its target of 166 children in early childhood support. LVSRP also incorporated early childhood education in its scope of work-evaluation plan, and served 20 children, surpassing its target of 15 children in Table 29.

In addition, benchmark/baseline data were gathered to assess the program impact on child development and parent education. LVSRP and NPCLC demonstrated child developments in *Communication, Gross Motor, Fine Motor, Personal-Social, and Problem Solving* categories significantly above the corresponding thresholds on the ASQ-3 scale (see Table 36). Other outcome measurement tools were program-specific, including (1)

AAPI-2 to show NPCLC effectiveness in court-mandated parent education (Table 24) and (2) NP Workshop Survey to confirm utility of parent training in LVSRP (Table 22). In combination, LVSRP offered case management support for 159 parents or children, far above its combined target of 80 clients (see Table 26). Direct services from NPCLC also increased the program visibility to help leverage nearly \$20,000 from the local community (Table 46). The external funding is equivalent to nearly 10% of the program investment from First 5 Kern, and thus, demonstrated “collaboration with other agencies, organizations and entities with similar goals and objectives to enhance the overall efficiency of provider systems” (First 5 Kern, 2015b, p. 3).

In complementing direct services with system building, LVSRP and NPCLC actively networked with other service providers beyond the *Co-Existing* level (Figure 26). The partnership development spanned across programs in *Child Health*, *Family Functioning*, and *Child Development*. As represented by the largest node size in Figure 26, half of the programs were connected at the *Creation* level. The network also incorporated collaborative connection with programs of referral (2-1-1) and child protection (DR) services. At the *Coordination* level, reciprocal links were confirmed between NPCLC and a countywide child immunization program (i.e., CMIP), as well as between LVSRP and a neighboring FRC (i.e., AFRC).

Figure 26: Network Structure of LVSRP and NPCLC in FY 2016-17



Node Color for Program Affiliation: Pink – Child Development, Blue – Child Health, Purple – Family Functioning

In summary, this section recapped evidences of effective services from two exemplary programs. More findings about these programs can be found in Chapter 2 (i.e., Tables 22, 23, 26, 29, 32, 34-37 for LVSRP; Tables 24, 29, 34-36 for NPCLC). The extensive results showed that LVSRP and NPCLC not only offered exceptional early childhood supports through direct services, but also contributed to service integration across different focus areas for enhancement of *Systems of Care*.

Past Recommendations Revisited

Based on the statutory demand of Proposition 10, “county commissions are required to report annual expenditure and service data on their programs to First 5 California” (First 5 California, 2013, p. 33). In the last annual report, three recommendations were made for First 5 Kern to:

1. Enhance the program result tracking for justification of the result-based accountability;
2. Monitor the per-service cost for each contractor to justify less service delivery during budget reduction;
3. Ensure a comprehensive coverage of all result indicators during the local data gathering.

These recommendations were built on considerations of reporting both *annual expenditure* and *service data* for local programs. The first recommendation hinged on case tracking of the service data to retain adequate information for justification of the result-based accountability. The third recommendation focused on variable coverage in the database to address all result indicators in the local strategic plan. In between, the second recommendation integrated examination of annual expenditure to justify less service delivery because of budget reduction at the commission level.

In FY 2016-17, the First 5 Kern evaluation staff implemented biannual reviews of assessment data in the data management system. The new practice allowed staff to offer timely feedback to programs on any missing or incomplete assessments, which enhanced the program result tracking for justification of the result-based accountability. Thus, First 5 Kern has addressed the first recommendation from the 2015-16 annual report.

In the new funding cycle of FY 2015-2020, reduction of program funding has caused adjustment on the scope of work for most service providers last year. Past service counts and program expenditures have been exported from the data management system to monitor changes in *per-service cost* for each contractor to clarify less service delivery due to budget reduction. The trend data were employed in a cost-benefit analysis (CBA) project. Phase I results have been reviewed and accepted for presentations at two professional conferences:

Sun, J., Wang, J., & Ives, K. (2018, March). *A cost-benefit analysis of early childhood education programs through Proposition 10 funding in California*. Paper accepted for presentation at the 2018 annual meeting of the American Society for Public Administration (ASPA), Denver, CO.

Wang, J., Sun, J., & Maier, R. (2018, January). *A cost-benefit analysis of Proposition 10 funding in early childhood development*. Paper presented at the 2018 Hawaii International Conference on Education, Honolulu, Hawaii.

The effort to articulate annual expenditure with service data has adequately met the second recommendation from the last annual report.

In FY 2016-17, First 5 Kern staff conducted 12 countywide Town Hall meetings to gather feedback from stakeholders regarding the needs of children and families in Kern County. The results of each meeting have been reviewed to assist analyses of the result indicators in the current strategic plan. With incorporation of the indicator consideration in local data gathering, First 5 Kern has tackled the variable dimension of data collection to fulfill the third recommendation.

In summary, all three recommendations were met through ongoing improvement of First 5 Kern support this year. The commission has complied to the statutory mandate

on data collection for demonstrating achieved results according to the local strategic plan. Public hearings were conducted annually to facilitate the strategic plan revision.

New Recommendations

FY 2016-17 is the year that marks passage of Proposition 56, *the California Healthcare, Research and Prevention Tobacco Tax Act of 2016*, to increase tobacco tax from \$.87 to \$2.87 per pack of cigarettes. The taxation on cigarettes started on April 1, 2017, but e-cigarette tax did not occur until July 1, 2017. With the unprecedented impact of Proposition 56 on state revenue appropriation for Proposition 10, new recommendations are adduced in this section to sustain First 5 Kern support in next fiscal year.

Prior to the enactment of Proposition 56, First 5 Association of California already urged First 5 county commissions to “move away from investing in direct services/programs and increasingly invest in systems that support children” (First 5 Association of California, 2016, p. 1). Meanwhile, not all county commissions seemed to agree that moving away from direct services can be an effective approach for the system building. For instance, First 5 Fresno (2013) speculated that “**decrease in direct funding**, staff turn-over, and other economic pressures **resulted in organization becoming more insular thus decreasing their collaboration with other organizations**” (p. 102). More importantly, the state statute did not portray a competitive role between direct services and system building, and Form AR2 remains as a required document for highlighting exemplary direct services in each county prior to transmitting the state funds to local commissions in the following year.

Despite the statutory commitment since inception of First 5 Kern, the recent proposal for decreasing direct service funding was based a persistent trend of revenue decline that cannot be reversed by the state commission or other state agencies. In preparation for potential changes that might occur in near future, **the first recommendation is to encourage First 5 Kern to monitor the existing statewide debate on reducing funding for direct services while maintaining its contractual agreement with service providers for the entire funding cycle**. As a key stakeholder on behalf of the youngest children in Kern County, the county commission needs to continue soliciting local input for strategic planning, and participating in statewide meetings pertaining to the fund administration, including the ones organized by its membership organization, First 5 Association of California.

In Proposition 10, services in *Child Health, Family Functioning, Child Development, and Systems of Care* were listed together and treated as complementary categories (California Health and Safety Code, Section 130125). While the first three focus areas had primary emphases on direct services for program recipients (i.e., children and families), the fourth focus area dealt with service providers. One way to protect the program funding is to revisit the requirements of Outcome-Based Accountability (a.k.a., Result-Based Accountability) from Proposition 10. For documenting effectiveness of program support, service providers are expected to justify service deliveries on (1) how much has been done and (2) how well they performed each year. In Kern County, more than a dozen instruments, including AAPI-2, ASQ-3, ASQ-SE, BCBH, CASB, CDE, DANCE, DRDP-IT, DRDP-PS, ECBI, FSR, GBLA Client Survey, ISQ, NCFAS-G, R2S Scorecard, SRAS, and SESBIR, were employed by one or more programs for the data tracking. In this report, information pertaining to Tables 9, 11, 12, 22, 24, 26, 32, 37, and 45 revealed lack of

case matching between pretest and posttest assessments for a few programs. Hence, **the second recommendation is to request the Commission's attention on information gathering amongst programs with data tracking issues to offer guidance for future improvement.** This recommendation may help streamline the data gathering and allow programs to devote more energy to direct services for local children ages 0-5 and their families.

In addition, the wellbeing of young children and their families is a focus of the Result-Based Accountability. Form AR-2 is used by the state commission to document the most recent compelling service outcomes from at least two exemplary programs in *Child Health, Family Functioning, and Child Development*. The program selection cannot be delimited to a single focus area. It is unlikely that the state commission will change this requirement next year. For the current funding cycle, First 5 Kern (2015a) strategically set its 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, 2016, p. 1). This mission statement not only covered service integration for system building, but also recognized emphasis on direct service outcomes to meet the state report mandate. To meet the statutory requirement for Proposition 10, **the third recommendation is to continue countywide implementation of the current mission statement unless and until statutory changes occur in the annual report structure across the state.** In coping with the revenue decline, First 5 Kern has set a good model in FY 2016-17 to leverage fund through partnership collaborations. As a result, the leveraged funds in eight programs even surpassed the total annual investment from the county commission (see 2-1-1, BCDC, BIH, CHI KC, HMG, KVAP, MVCCP KC, & WSN findings in Table 47). Any inadvertent changes to the mission statement might cause confusion among local service providers and lead to unexpected difficulty in exemplary program recognition for state reporting.

References

- Airasian, P., & Krathwohl, D. (2000). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. Boston, MA: Allyn and Bacon.
- Allen, M. (2004). *Assessing academic programs in higher education*. Bolton, MA: Anker.
- American Institutes for Research (2012). *Condition of children birth to age five and status of early childhood services in California: Synthesis of recent research*. Washington, DC: Author. Retrieved from <http://www.cde.ca.gov/sp/cd/ce/documents/airmetanalysis.pdf>.
- American Psychological Association (2001). *Publication manual of the American Psychological Association* (5th ed.). Washington, DC: Author.
- Anderson, J.W., Johnstone, B. M., & Remley, D. T. (1999). Breastfeeding and cognitive development: A meta-analysis. *American Journal of Clinical Nutrition*, 70, 525–535.
- Angelo, T. (1999, May). Doing assessment as if learning matters most. *American Association for Higher Education Bulletin*, pp. 1-2.
- Antonucci, T. C. and Israel, B. A. (1986). Veridicality of social support: A comparison of principal and network members' responses. *Journal of Consulting and Clinical Psychology*, 54, 432–437.
- Atherton, J. S. (2013). *Learning and teaching: SOLO taxonomy*. Retrieved from <http://www.learningandteaching.info/learning/solo.htm>.
- Barlow, J., Kirkpatrick, S., Wood, D., Ball, M., & Stewart-Brown, S. (2007). *Family and parenting support in Sure Start Local Programmes*. London: University of London.
- Bavolek, S. (2000). *Nurturing Parenting Programs (NCJ 172848)*. Rockville, MD: NCJRS Photocopy Services.
- Biggs, J., & Collis, K. (1982). *Evaluating the quality of learning: The SOLO taxonomy*. New York: Academic Press.
- Bocanegra, R. (2014). *Assembly concurrent resolution No. 155*. Retrieved from http://leginfo.legislature.ca.gov/faces/billNavClient.xhtml?bill_id=201320140ACR155.
- Bowman, S., Pratt, C., Rennekamp, D., & Sektnan, M. (2010). *Should we invest in parenting education?* Retrieved from http://www.oregoncf.org/Templates/media/files/grants/Early%20Childhood/should_we_invest_ped.pdf.
- Bragg, H. (2003). *Child protection in families experiencing domestic violence*. Retrieved from <https://www.childwelfare.gov/pubpdfs/domesticviolence.pdf>.
- Brooks-Gunn, J., & Duncan, G. (1997). The effects of poverty on children. *The Future of Children*, 7(2), 55-71.
- Brown Armstrong Accountancy (2015). *Kern County Children and Families Commission: Financial statements with independent auditor's report*. Bakersfield, CA: Author.
- Brown Armstrong Accountancy (2017). *Kern County Children and Families Commission: Financial statements with independent auditor's report*. Bakersfield, CA: Author.
- Brown, B., Kirby, G., & Botsko, C. (1997). *Social indicators of child and family well-being: A profile of six state systems*. Retrieved from <https://www.irp.wisc.edu/publications/sr/pdfs/sr72.pdf>.
- Bruner, C. (2009). *Connecting child health and school readiness*. Retrieved from http://www.buildinitiative.org/files/IssueBrief_Bruner_Feb09_Final.pdf.

- Burchinal, P., Kainz, K., Cai, K., Tout, K., Zaslow, M., Martinez-Beck, I., & Rathgeb, C. (2009). *Early Care and education quality and child outcomes*. Washington, DC: Office of Planning, Research and Evaluation. Retrieved from https://www.acf.hhs.gov/sites/default/files/opre/early_ed_qual.pdf.
- Burns, T., & Jefferson, W. (2016). *QRIS in Kern County - An impact on quality*. Retrieved from <http://first5kern.org/wp-content/uploads/sites/21/2014/08/Backup-040615.pdf>
- California Department of Education (2015). *DRDP (2015) for use with infants and toddlers*. Sacramento, CA: Author.
- Carmichael, H., & MacLeod, W. (1997). *Gift giving and the evolution of cooperation (Boston College Working Papers in Economics)*. Retrieved from <http://ideas.repec.org/p/boc/bocoec/338.html>.
- Cesar, C., & Hidalgo, A. (2008). The dynamics of a mobile phone network. *Physical A: Statistical Mechanics and its Applications*, 387(12), 3017–3024.
- Chen, J. (2012). *Early childhood health and inequalities in children's academic and behavioral outcomes*. Chicago, IL: The University of Chicago (UMI Dissertations Publishing, ProQuest No. 3499715).
- Cherry, K. (2013). *The five levels of Maslow's hierarchy of needs*. Retrieved from <http://psychology.about.com/od/theoriesofpersonality/a/hierarchyneeds.htm>.
- Child Care Inc. (2012). *Finding a child care professional to work in your home*. NY: Author (ERIC Reproduction Service No. ED532629).
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Cross, J., Dickman, E., Newman-Gonchar R., & Fagen, J. M. (2009). Using mixed method design and network analysis to measure development of interagency collaboration. *American Journal of Evaluation*, 30(3), 310–329.
- Dockery, A., Kendall, G., Li, J., & Strazdins, L. (2010). *Housing and children's development and wellbeing: A scoping study*. Retrieved from https://www.researchgate.net/profile/Alfred_Dockery/publication/238745893_Housing_and_children%27s_development_and_wellbeing_A_scoping_study/links/0c960529eb0f2afb4b000000/Housing-and-childrens-development-and-wellbeing-A-scoping-study.pdf.
- Duke, N. N., Pettingell, S. L., McMorris, B. J., & Borowsky, I. W. (2010). Adolescent violence perpetration: Associations with multiple types of adverse childhood experiences. *Pediatrics*, 124(4), e778-e786.
- Edelhard, C. (2013). *Tobacco-tax money shrinking -- as intended*. Retrieved from http://www.bakersfield.com/news/tobacco-tax-money-shrinking----as-intended/article_73293ed4-b71e-5aae-93ed-5608a489f060.html
- Family Development Resources (2015). *Nurturing Parenting programs and over 30 years of evidence*. Retrieved from <http://nurturingparenting.com/nppsevidence.html>.
- First 5 Association of California (2009). *Healthy children ready for school*. Sacramento, CA: Author.
- First 5 Association of California (2013). *FIRST 5 annual report glossary definitions*. Retrieved from <http://first5association.org/wp-content/uploads/2013/08/AR-Glossary-Definitions-080913.pdf>.
- First 5 Association of California (2016). *Annual report redesign workday* (5.17.16). Retrieved from <http://intranet.first5association.org/files/managed/Document/1890/5.17.16%20Meeting%20Notes%20-%20Annual%20Report%20Redesign%20Workday.pdf>.

- First 5 Association of California (2017). *2017 Advocacy Day talking points*. Sacramento, CA: Author.
- First 5 California (2005). *Statewide evaluation framework*. Sacramento, CA: Author.
- First 5 California (2010). *Guidelines for implementing the California Children and Families Act*. Sacramento, CA: Author.
- First 5 California (2013). *First 5 California 2011-2012 annual report*. Sacramento, CA: Author.
- First 5 California (2014). *First 5 California strategic plan*. Sacramento, CA: Author. Retrieved from https://www.cafc.ca.gov/about/pdf/commission/resources/F5CA_Strategic_Plan.pdf.
- First 5 California (2015a). *2013-14 annual report*. Retrieved from http://www.cafc.ca.gov/pdf/annual_report_pdfs/Annual_Report_13-14.pdf.
- First 5 California (2015b). *First 5 California 2013-2014 annual report*. Sacramento, CA: Author.
- First 5 California (2015c). *2015 Children's State Policy Agenda*. Retrieved from <http://www.cafc.ca.gov/pdf/about/leg/2015%20Children's%20State%20Policy%20Agenda.pdf>.
- First 5 California (2016a). *Annual Report Guidelines: Fiscal Year 2016-17*. Retrieved from https://www.cafc.ca.gov/pdf/research/reporting_tools/AR/Annual%20Report%20Guidelines%20FY%2016-17.pdf.
- First 5 California (2016b). *Investing in a quality system for California's children*. Retrieved from http://www.cafc.ca.gov/pdf/annual_report_pdfs/Annual_Report_15-16.pdf.
- First 5 Fresno (2013). *State Annual Report: Fiscal Year 2012-2013*. Retrieved from <http://first5fresno.org/wp-content/uploads/2014/05/FY-2012-2013-State-Annual-Report.pdf>.
- First 5 Kern (2015a). *First 5 Kern strategic plan*. Retrieved from <http://first5kern.org/wp-content/uploads/sites/21/2014/12/StratPlan201415.pdf>.
- First 5 Kern (2015b). *First 5 Kern strategic plan 2015-20 revised*. Retrieved from <http://first5kern.org/wp-content/uploads/sites/21/2014/12/strategicplanbooklet201520we.pdf>.
- First 5 Kern (2016). *First 5 Kern strategic plan: 2016-17*. Bakersfield, CA: Author.
- Friedman, M. (2005). *Trying hard is not good enough: How to produce measurable improvements for customers and communities*. Victoria, B.C.: Trafford.
- Friedman, M. (2009). *Results-Based Accountability producing measurable improvements for customers and communities*. Retrieved from <http://www.oecd.org/site/progresskorea/44120813.pdf>.
- Friedman, M. (2011). *Turning the curve*. Retrieved from <http://www.fiscalpolicystudies.com/PDF%20files/Outcomes%20UK%20TurningTheCurveNewsletter1%5B2%5D.pdf>.
- García, J., Heckman, J., Leaf, D., & Prados, M. (2016). *The life-cycle benefits of an influential early childhood program*. Retrieved from <http://heckmanequation.org/content/resource/lifecycle-benefits-influential-early-childhood-program>.
- Garlaschelli, D., & Loffredo, M. (2004). *Patterns of link reciprocity in directed networks*. Retrieved from <http://arxiv.org/pdf/cond-mat/0404521.pdf>.
- Gearhart, R. (2016). A note on Kern County healthcare. *Kern Economic Journal*, 18, 13.

- Gillieatt, S., Fernandes, C., Fielding, A., Hendrick, A., Martin, R., & Matthews, S. (2015). Social network analysis and social work inquiry. *Australian Social Work*, 68(3), 338-351.
- Golich, L. (2013). *Welcome*. Retrieved from http://kerncares.org/wp-files/kerncares.org/2013/04/2013ReportCard_pv.pdf.
- Governor's Budget Office (2016). *Demographic information*. Retrieved from <http://www.ebudget.ca.gov/2016-17/pdf/BudgetSummary/DemographicInformation.pdf>.
- Health Resources and Services Administration (2014). *Early Childhood Comprehensive Systems*. Retrieved from <http://mchb.hrsa.gov/programs/earlychildhood/comprehensivesystems/>.
- Heckman, J. (2012). *Invest in early childhood development: Reduce deficits, strengthen the economy*. Retrieved from <https://heckmanequation.org/resource/invest-in-early-childhood-development-reduce-deficits-strengthen-the-economy/>.
- Heckman, J. (2014). *A reanalysis of the Nurse Family Partnership Program: The Memphis randomized control trial*. Chicago, IL: The University of Chicago.
- Inkelas, M., Halfon, N., Uyeda, K., & Stevens, G. (2003). *The health of young children in California: Findings from the 2001 California Health Interview*. Los Angeles, CA: UCLA Center for Health Policy Research Survey.
- Karoly, L. (2012). Toward standardization of benefit-cost analysis of early childhood interventions. *Journal of BenefitCost Analysis*, 3(1), 1-45.
- Kenney, M. (2016, December). *Advocacy and system building*. Presentation made at the National League of Cities and the Center for the Study of Social Policy's Early Childhood-LINC All Sites meeting in Washington, D.C.
- Kern County Network for Children (2016). *2016 report card*. Retrieved from http://kerncares.org/wp-content/uploads/sites/22/2016/06/2016ReportCard_WEB.pdf.
- Kern County Network for Children (2017). *Our children, our community*. Bakersfield, CA: Author.
- Kirk, R., & Martens, P. (2014). *Family assessment, family functioning, and caregiver engagement in family preservation and reunification programs, and the relation of these and other factors to reunification service outcomes*. Buhl, ID: National Family Preservation Network.
- Kirkham, C., Harris, S., & Grzybowski, S. (2005). Evidence-based prenatal care: General prenatal care and counseling issues. *American Family Physician*, 71, 1307-1316.
- Krebs, V. (2011). *Social network analysis: A brief introduction*. Retrieved from <http://www.orgnet.com/sna.html>.
- Kuhnt, M., & Brust, O. (2014). *Low reciprocity rates in acquaintance networks of young adults – Fact or artifact?* Retrieved from https://tu-dresden.de/die_tu_dresden/fakultaeten/philosophische_fakultaet/is/methoden/pr/arbeit/dateien_kuhnt/reciprocity.
- LaVoice, O. (2016). *Kern County program designed to provide one-on-one mentorship with a nurse for new moms*. Retrieved on March 4, 2016 from <http://www.kerngoldenempire.com/news/kern-county-program-designed-to-provide-one-on-one-mentorship-with-a-nurse-for-new-moms>
- Lee, A. (2013). *Results-based public policy in action*. Washington, DC: Center for the Study of Social Policy.
- Liu, C. (2014). *Senate Bill 1123*. Retrieved from http://www.leginfo.ca.gov/pub/13-14/bill/sen/sb_1101-1150/sb_1123_bill_20140219_introduced.pdf.

- Maslow, A. (1954). *Motivation and personality*. New York, NY: Harper.
- McKinnon, I. (2016). Medical premium system can backfire. *Summerland Review*, 09 March. Copyright (c) 2016 Torstar Syndication Services.
- Medi-Cal Managed Care Division (2013). *Aggregate report for the Medi-Cal Managed Care Program*. Retrieved from http://www.dhcs.ca.gov/dataandstats/reports/Documents/MMCD_Qual_Rpts/HEDIS_Reports/CA2013_HEDIS_Aggregate_Report.pdf.
- National Coalition for the Homeless (2009). *Homeless families with children*. Retrieved from <http://www.nationalhomeless.org/factsheets/families.html>.
- Nichols, S., & Jurvansuu, S. (2008). Partnership in integrated early childhood services: An analysis of policy framings in education and human services. *Contemporary Issues in Early Childhood*, 9, 117-130.
- Nilon, J. (2015). *Welcome*. In Kern County Network for Children (ed.), 2015 report card. Retrieved from http://kern.org/kcnc/wp-content/uploads/sites/43/2015/06/2015ReportCard_interactive.pdf.
- Olsen, L., Rollins, C., & Billhardt, K. (2013). *The intersection of domestic violence and homelessness*. Retrieved from <https://wscadv.org/wp-content/uploads/2015/05/IntersectionPaperDVHF.pdf>.
- Pollet, S. (2011). Economic abuse: The unseen side of domestic violence. *NYSBA Journal*, 83, 40-41.
- Ponzio, C., Palomino, Z., Puccini, R., Strufaldi, M., & Franco, M. (2013). Does low birth weight affect the presence of cardiometabolic risk factors in overweight and obese children? *European Journal of Pediatrics*, 172(12), 1678-1692. (doi: 10.1007/s00431-013-2113-5).
- Project Safety Net of Palo Alto (2011). *Levels of collaboration scale*. Retrieved from http://www.psnpalalto.com/wp/wp-content/uploads/2011/04/PSN_Levels-of-Collaboration-Scale_survey.pdf.
- Proposition 10*. Retrieved from <http://wwwstatic.kern.org/gems/first5kern/ccfcact.pdf>.
- Provan, K., Veazie, M., Staten, L., & Teufel-Shone, N. (2005). The use of network analysis to strengthen community partnerships. *Public Administration Review*, 65, 603-613.
- Ramanadhan, S., Salhi, C., Achille, E., Baril, N., D'Entremont, K., Grullon, M., Judge, C., Oppenheimer, S., Reeves, C., Savage, C., & Viswanath, K. (2012). Addressing cancer disparities via community network mobilization and intersectoral partnerships: A social network analysis. *PLoS ONE*, 7, 1-9.
- Robison-Frankhouser, Z. (2003). *An evaluation of parent education programs: Early brain development information that promotes literacy development in pre-school children*. Long Beach, CA: CSU Long Beach (UMI No. 1419315).
- QRIS National Learning Network (2011). *QRIS resource guide*. Retrieved from <https://qrisnetwork.org/sites/all/files/resources/gscobb/2011-12-15%2006:10/QRISResourceGuide.pdf>.
- Quill, S. (2017). *2016-17 State Annual Report presentation*. Bakersfield, CA: First 5 Kern.
- Samuelson, A. (2010). *Best practices for parent education and support programs: What works*. Retrieved from http://whatworks.uwex.edu/attachment/whatworks_10.pdf.
- Sanders, S., & Sorrells, N. (2016). *Children's health and housing*. Retrieved from <http://www.naceda.org/assets/The-Connections-Between-Childrens-Health-and-Housing.pdf>.

- Schramm, R. (2015). *Nurturing Parenting program for parents and their infants, toddlers, and preschoolers*. Retrieved from <http://www.cebc4cw.org/program/nurturing-parenting-program-for-parents-and-their-infants-toddlers-and-preschoolers/detailed>.
- Schroeder, M., & Stefanich, G. (2001). *Addressing educational, employment, and transportation issues (Chapter 4)*. Retrieved from http://www.uni.edu/stefanic/STIC_Theory-Found.pdf#page=67.
- Schumacher, K. (2016). *Over 1.2 million California children eligible for subsidized child care did not receive services from state programs in 2015*. Retrieved from http://calbudgetcenter.org/wp-content/uploads/Fact-Sheet_Unmet-Need-for-Subsidized-Child-Care_12.15.16.pdf.
- Secretary of State's Office (2016). *Text of proposed laws*. Retrieved from <http://vig.cdn.sos.ca.gov/2016/general/en/pdf/text-proposed-laws.pdf>.
- Shulman, N. (1976). Network analysis: A new addition to an old bag of tricks. *Acta Sociologica*, 19, 307–323.
- Singhal, A., Subbian, K., Srivastava, J., Kolda, T., & Pinar, A. (2013). *Dynamics of trust reciprocation in heterogeneous MMOG networks*. Retrieved from <http://arxiv.org/pdf/1303.6385.pdf>.
- Smith, K., Soman, L., Duenas, J., Carro, N., Burke, N., Robinson, T., & Inkelas, M. (2009). *California's service system for children and youth with special health care needs*. Palo Alto, CA: Lucile Packard Foundation.
- Smith, T., Gorden, B., Colby, S., & Wang, J. (2005). *An examination of the relationship between depth of student learning and National Board certification status*. Boone, NC: Appalachian State University.
- Thibault, M. (2017). *MVCCP presentation to First 5 Kern Commission*. Bakersfield, CA: First 5 Kern.
- Thompson, L., & Uyeda, K. (2004). *Family support: Fostering leadership and partnership to improve access and quality*. Retrieved from <http://www.healthychild.ucla.edu/Publications/Documents/Family%20Support%20Report%20for%20publication.pdf>.
- United Way (2016). *Guiding principles: Mobilizing our community to achieve self-sufficiency*. Retrieved from https://www.uwrochester.org/UWGR/media/Connect/RMAPI_Resource_Team_Report_readersindividlr_6.pdf
- U.S. Department of Health and Human Services. (2014). *The health consequences of smoking: 50 years of progress*. Atlanta, GA: U.S. Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Chronic Disease Prevention and Health Promotion, Office on Smoking and Health.
- Waller, M. (2005). *High cost or high opportunity cost? Transportation and family economic success*. Washington, DC: Brookings Institute.
- Wang, J. (2016). *First 5 Kern Annual Report: Fiscal Year 2014-2015*. Retrieved from <http://files.eric.ed.gov/fulltext/ED564008.pdf>.
- Wang, J., Ortiz, T., Maier, R., & Navarro, D. (2015, April). *A multilevel study of partnership building to support early childhood development across different education contexts*. Paper presented at the 2015 annual meeting of American Educational Research Association, Chicago, IL.
- Wang, J., Ortiz, T., Maier, R., Navarro, D., Wang, S., Wang, L., & Wang, L. (2016). An empirical study of early childhood support through partnership building. *Evaluation and Program Planning*, 59, 74-80.

- Wang, J., Ortiz, T., & Scheiner, H. (2013). *An examination of partnership building in early childhood education*. Paper presented at the 2013 annual meeting of National Association for the Education of Young Children, Washington, DC.
- Wasson, L., & Goon, J. (2013). Nurse-Family Partnership yields Kern benefits. *Kern Business Journal*, 2, 28.
- Wethington, E., & Johnson-Askew, W. (2009). Contributions of the life course perspective to research on food decision making. *Annals of Behavioral Medicine*, 38, S74-80.
- Wilson, S., & Durbin, C. (2013). Mother-child and father-child dyadic interaction: Parental and child bids and responsiveness to each other during early childhood. *Merrill-Palmer Quarterly*, 59, 249–279.
- Wood-Slayton, J. (2017, April). *Making an impact on families and children*. Public presentation at the First 5 Kern Commission meeting, Bakersfield, CA.
- Zhu, Y., Zhang, X., Sun, G., Tang, M., Zhou, T., & Zhang, Z. (2014). *Influence of reciprocal links in social networks*. Retrieved from <http://journals.plos.org/plosone/article/file?id=10.1371/journal.pone.0103007&type=printable>.

Appendix A – Index of Program Acronyms

A

Arvin Family Resource Center (AFRC) – 31, 47, 50, 51, 57, 59, 61, 63, 64, 65, 66, 73, 88, 89, 90, 91, 92, 93, 95, 98, 100, 102, 103, 104, 110

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Appendix B – Technical Advisory Committee served in FY 2016-17

Sam Aunai (Commissioner)

Vice President of Instruction, Porterville College

Tammy Burns

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

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Executive Director, Kern County Network for Children

Michelle Curioso

Director of Nursing and MCAH, Kern County Department of Public Health

Antoinette Reed

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

Sandy Koenig

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

Bill Phelps

Chief of Programs, Clinica Sierra Vista

Rick Robles (Vice Chair and Commissioner)

Superintendent, Lamont School District

Al Sandrini (Chair and Commissioner)

Retired School Administrator

Jennifer Sill, LMFT

Children's System of Care Administrator, Behavioral Health and Recovery Services

Meseret Springer, PHN

Public Health Nurse, Kern County Department of Public Health

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MH Unit Supervisor I, Behavioral Health and Recovery Services

Cindy Wasson

Retired Kern County Director of Nursing

Debbie Wood

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

Jennifer Wood-Slayton

South Valley Neighborhood Partnership Coordinator

Gina Perez

Amulatory Care Service Director, Kaiser Permanente

Isabel Silva

Manager of Health Education and Disease Management, Kern Health Systems

Rebecca Roth

Early Care Educator, Taft College

Karen Davis

Coordinator, Arvin Family Resource Center