FIRST 5 KERN

Annual Report 2022-2023

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Report prepared by:
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Acknowledgments

In Fiscal Year 2022-2023, over $7.7 million of the state tax revenue was invested in Kern County to support 39 programs of early childhood service. This report is required by Proposition 10, the California Children and Families First Act of 1998, to justify Results-Based Accountability of the state funding with evaluation findings.

The data gathering benefited from the collaboration of service providers and parents with guidance and support from the following professionals and organizations:

- Commissioners John Nilon (Chair), Debbie Wood (Vice Chair), Brynn Carrigan (Treasurer), Jennie Sill (Secretary), Lisa Gilbert, Leticia Perez, Lito Morillo, Deborah Murr, Aaron Resendez and Kelly Richers.

- First 5 Kern Commission staff
  Amy Travis, Executive Director
  Patti Taylor, Finance Director
  Theresa Martinez, Evaluation and Program Director
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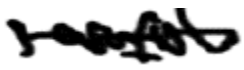
  Ciara Navarrete Reynoso, Development Specialist
  Rebeca Ontiveros, Development Specialist

- The Institutional Review Board, led by Drs. Nate Olsen and Isabel Sumaya of California State University, Bakersfield (CSUB).

- The Technical Advisory Committee (TAC).

TAC Members are recognized in Appendix B. While acknowledging their indispensable contributions, I wrote the report and shall be fully responsible for any inaccuracies in the findings.

Jianjun "JJ" Wang, Ph.D.



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Executive Summary

California voters passed Proposition 10 in 1998 to support the wellbeing and healthy development of children ages 0-5. The money came from a 50-cent-per-pack tax on cigarette products. After the enactment of this legislation, the Kern County Board of Supervisors followed the Health and Safety Code (Sections 130100-130155) to create the *Kern County Children and Families Commission*, also known as *First 5 Kern*, on December 15, 1998 (Ordinance G-6565). In Fiscal Year (FY) 2022-2023, First 5 Kern received $7,730,830 in tobacco tax revenue, less than $8,810,192 last year. To sustain the same level of funding for 39 programs,[1] the commission reduced its reserves to fill the budget gap. In addition, the commission channeled $685,046 from First 5 California to expand local children's access to early learning and care (ELC) services in a project entitled "Improve and Maximize Programs so All Children Thrive" (IMPACT).

New Developments

California voters passed a ballot measure on November 8, 2022, to ban the sale of flavored tobacco products (Wiley, 2022), which caused less tax revenue for early childhood services across the state. Meanwhile, the recent inflation has made 40 percent of Kern County households unable to cover basic living expenses (LaVigne, 2023). Thus, local communities need more resources to support early childhood services.

Due to the decline of Proposition 10 funding and the increase in service demands, First 5 Kern has taken proactive measures on two fronts of the grant administration:

1. Configuration of a new five-year plan to cope with the flavor ban impact

The Finance Director of First 5 Kern examined the trend of revenue reduction and projected a $5,067,288 funding loss in the next five years.[2] Additional scenarios were considered on the potential backfill impact from Proposition 56 to Proposition 10. As a result, the budget allocation was projected in each focus area of the commission's strategic plan for the next funding cycle. Within the current funding cycle, stable support has been maintained to sustain program services according to the five-year strategic plan. Given the substantial decline of Proposition 10 revenue this year, the effort to stabilize program funding exemplifies a *turning-the-curve* process in the Results-Based Accountability (RBA) model (Friedman, 2011).

2. Review of result indicators for enhancing the accountability of program funding

The Technical Advisory Committee (TAC) initiated a momentum of reviewing result indicators (RI) in First 5 Kern's strategic plan this year. TAC members formed subcommittees to examine RI according to their expertise in *Child Health, Family Functioning*, and *Child Development*. The extensive work was commended by a Kern County Grand Jury (2023) and has addressed dual recommendations of the last annual report, i.e., (1) complete the RI target setting for justification of Results-Based Accountability at both program and commission levels and (2) increase the percent of RI coverage by First 5 Kern-funded programs.

[1] https://www.first5kern.org/wp-content/uploads/2022/04/Funded-Programs-Guide-2022-03-01.pdf
[2] https://www.first5kern.org/wp-content/uploads/2023/01/CFC-Agenda-Packet-020123.pdf

In summary, First 5 Kern has taken prudent measures to reduce the impact of fund reduction from Proposition 10. Besides the ongoing trend of smoke cessation, the state ban on commercial flavored tobacco products has made budget planning more critical this year. Meanwhile, TAC leads the RI review to strengthen the program alignment with the commission's strategic plan. The endeavor ensures the much-needed service delivery across a five-year funding cycle. The dual efforts have stabilized the program support for young children in Kern County.

Summary of Evaluation Approaches

Proposition 10 is unique for its requirement of strategic planning to envision the ending outcomes prior to program funding, which is different from traditional approaches to determining the program impact after service delivery (Sutherland, McCroskey, & Halfon, 2001). This report conforms to the commission's strategic plan (First 5 Kern, 2023) and a Statewide Evaluation Framework (First 5 California, 2005) to accumulate evidence on *Child Health, Family Functioning, Child Development,* and *Systems of Care* through result tracking. A five-module structure is adopted to address RBA, [or Outcome-Based Accountability] of the program funding using:

1. Descriptive data to demonstrate the extent of early childhood support across Kern County;
2. Assessment results to track value-added improvements across local service programs under a *pretest* and *posttest* setting;
3. Partnership analyses for evaluating the strength and scope of service integration;
4. Trend comparison to monitor changes in program findings on a time dimension; and
5. Future recommendations to sustain a *Turning the Curve* process for strengthening the funding impact.

Throughout this year, First 5 Kern partnered with local service providers to deliver strategic programs across the county. The Persimmony Data Management System was employed to collect and export assessment data on (1) how much has been done and (2) how well each service provider performed in supporting *Child Health, Family Functioning*, and/or *Child Development*. Furthermore, a *NetDraw* software package has been employed to describe the network of service providers in partnership building. The multilevel approaches are illustrated by evaluation endeavors across four categories:

1. Comparing evaluation results to assess program effectiveness

Multiple sources of information are analyzed from 15 instruments in 12 domains:

- *Ages and Stages Questionnaire-3* (ASQ-3) on child growth across 24 programs;
- *Ages and Stages Questionnaire: Social-Emotional, Version 2* (ASQ:SE-2) for early detection of potential social or emotional problems in eight programs;
- *Adult-Adolescent Parenting Inventory-2.1* (AAPI-2.1) on parenting outcomes from seven programs;
- *Child Assessment-Summer Bridge* (CASB) on preschool learning in six programs;
- *Core Data Elements* (CDE) and *Birth Survey* from 28 programs;
- *Family Stability Rubric* (FSR) from 15 programs;
- *Desired Results Developmental Profile* (DRDP)-Infant/Toddler for infants/toddlers in three programs;

- *DRDP-Fundamental View* for preschoolers in three programs;
- *DRDP-Comprehensive View* for preschoolers in four programs;
- *Parenting Survey* from Nurturing-Parenting workshops across five programs;
- *School Readiness Articulation Survey;* and
- Program-specific surveys, such as
  - *Dyadic Assessment of Naturalistic Caregiver-Child Experiences* (DANCE)
  - *North Carolina Family Assessment Scale for General Services* (NCFAS-G)
  - Buttonwillow's *Raising A Reader Assessment*
  - Family Caregivers Project's (FCP) *Participant Survey*.

2. Articulating success stories to track the service impact between adjacent years

Forty descriptive stories are downloaded from a First 5 Kern website.[3] Plots of (a) top-impact words, (b) keyword dispersions, (c) token-word relations, and (d) word clouds are created to extract the service outcomes from various programs. The results show a consistent emphasis on key stakeholders, such as *children, students, parents,* and *families*, in the impact story generation to reconfirm the intended funding focus of Proposition 10.

3. Reporting data from program networking under a hierarchical 4C model

Partnership data are collected from the Integration Service Questionnaire (ISQ) to assess the scope and strength of network building across 40 service providers, including 39 programs of First 5 Kern and the *IMPACT* project from First 5 California. The network scope is analyzed to examine *direct/indirect support*, *unilateral/reciprocal connection*, and *primary/non-primary collaboration* in both quantitative and qualitative dimensions. In scaling the partnership capacity, a 4C (*Co-Existence, Collaboration, Coordination*, and *Creation*) model is employed to build this investigation in the research literature for sustaining network improvement.

4. Monitoring program investment across focus areas of *Child Health, Family Functioning, Child Development,* and *Systems of Care*

First 5 Kern received state investment to fund programs in 10 service domains.[4] In FY 2022-2023, the program expenditure reached $9,088,265. In Child Health, First 5 Kern invested $669,514 in *Early Intervention*, $284,081 in *General Health Education and Promotion*, $978,325 in *Oral Health Education and Treatment*, and $648,930 in *Prenatal and Early Childhood Home Visiting*. In Family Functioning, the commission spent $2,030,693 on *General Family Support* and $1,014,639 on *Intensive Family Support*. In Child Development, First 5 Kern designated $615,756 to *Quality Early Learning Supports* and $1,241,653 to *Early Learning Programs*. In Systems of Care, $1,185,484 was invested in enhancing *Policy and Public Advocacy*, and $404,064 was devoted to supporting *System Building*.

To facilitate ELC access, the amount of IMPACT project funding increased from $522,713 last year to $685,046 this year. Through the local partnership building, the commission received $261,555 from Kern County Behavioral Health & Recovery Services

[3] https://www.first5kern.org/about-us/success-stories/
[4] The glossary categories of First 5 California are used in First 5 Kern's annual report to the State Commission.

to sustain the Help Me Grow-Kern County program and $16,978 from Kern County Department of Human Services to support an Early Intervention Services project. The external grants include (1) $4,125 from the California Children & Families Foundation to educate families on the benefit of the Earned Income Tax Credit, (2) $5,700 from the Community Action Partnership of Kern for case management training, and (3) $24,040 from Kaiser Permanente to fund community partners in the Resilient Kern-Trauma Informed Care project. The commission also provided $15,126 in direct material support for emergency and disaster relief. Altogether, First 5 Kern invested $1,604,674 in the *Systems of Care* domain.

The program evaluation is extended on the time dimension to "use Outcome-Based Accountability to determine future expenditures" (Proposition 10, p. 4). In comparison, the commission increased its investment in *Child Health* from $2,437,285 last year to $2,580,850 this year. Concurrent increases occurred from $2,991,392 to $3,045,332 in *Family Functioning* and from $1,689,169 to $1,857,409 in *Child Development*. Based on the primary service emphasis, First 5 Kern funded 12 programs in *Child Health*, 17 in *Family Functioning*, and 10 in *Child Development* (see Appendix A).

Primary Aspects of Evaluation Tasks

In FY 2022-2023, First 5 Kern has maintained a vigorous agenda in program administration. The primary aspects of evaluation tasks include:

1. Comparison of target and actual counts across 26 result indicators (RI) in Child Health, 15 in Family Functioning, five in Child Development, and 16 in Systems of Care;
2. Adoption of 16 instruments to assess program effectiveness in 12 domains;
3. Dissemination of the impact stories from all service providers;
4. Review of RI at Technical Advisory Committee (TAC) meetings;
5. Implementation of an Institutional Review Board (IRB) protocol, including site visits, consent form administration, and confidentiality training for 98 program staff;
6. Revision of the consent form in English and Spanish to meet new IRB requirements;
7. Collection of service integration data to assess program networking;
8. Tracking of program investment from leveraged funds and Proposition 10 across focus areas;
9. Articulation of the achieved results with program funding to justify cost-effectiveness;
10. Examination of past recommendations to assess progress last year;
11. Analysis of new findings to support recommendations this year;
12. Preparation of child screening findings for result dissemination;
13. Provision of resource support for Resilient Kern Coalition.

These extensive efforts supported:

1. Documentation of quarterly progress in service deliveries toward the annual target;
2. Aggregation of multiple sources of information for domain-specific result reporting;
3. Illustration of the differences First 5 Kern made in the lives of children and their families;
4. Report of RI examination by TAC subcommittees;

5. Compliance of data handling according to federal, state, and local laws and regulations;
6. Alignment of the consent forms with the IRB template;
7. Summary of social network patterns in service integration;
8. Implementation of contractual agreements for service providers;
9. Justification of Proposition 10 funding with program outcomes;
10. Confirmation of changes according to past recommendations;
11. Explanation of rationale for new recommendations;
12. Report of First 5 Kern research at the annual meeting of the American Educational Research Association;
13. Collection of feedback from the Kern County ACEs Conference on May 17, 2023.

Policy Impact of First 5 Kern Funding

The policy impact has been illustrated on both time and space dimensions. In 2007, a grand jury report indicated that "The first major problem discussed was the report entitled, 'First 5 Kern Annual Report of Findings' (published August 31, 2006). The basis of the findings of the ARC [Applied Research Center] evaluation was questioned."[5] In 2023, a new grand jury testified that "The on-going annual evaluations ensure that current needs of children are being addressed."[6] This contrast shows that First 5 Kern has regained the public trust in its annual evaluation report.

Across the state, the ban on the sale of flavored tobacco products has accelerated the revenue decline from Proposition 10, generating two grand jury reports this year. While the Solano report urged the county commission to "Develop further sources of income, both public and private, to maintain and expand delivery of services,"[7] the Kern report commended First 5 Kern for conducting "research into First 5 Kern's Goals, Objectives, and Result Indicators" (Ibid. 6). The evaluation evidence has resulted in a strong policy recommendation for the Kern County Board of Supervisors to find "other revenues to continue the programs for children 0 to 5 years of age, by January 2, 2024" (Ibid. 6).

In summary, First 5 Kern's program evaluation not only informs its strategic plan on reporting program outcomes and community impact, but also promotes policy discussion on funding sustainability. Transparency of First 5 Kern evaluation is demonstrated by its annual report that has been peer-reviewed by the Education Resources Information Center (ERIC) of the United States Department of Education (Wang, 2023).

Report Structure

In streamlining the result presentation, this report is divided into five chapters. Chapter 1 includes an overview of First 5 Kern's vision, mission, and partnership building at the commission level. Chapter 2 contains service outcomes in *Child Health, Family Functioning*, and *Child Development*. Chapter 3 is devoted to social network analyses across programs to evaluate the effectiveness of partnership building for *Systems of Care*.

[5] https://cdm16255.contentdm.oclc.org/digital/api/collection/p266301coll6/id/362/download
[6] https://www.kerncounty.com/home/showpublisheddocument/10204/638248605467270000re
[7] https://solano.courts.ca.gov/wp-content/uploads/2023/04/Grand-Jury-2023-First-5-Solano-Report.pdf

Chapter 4 focuses on improving common service indicators to describe the *Turning the Curve* effects (see Friedman, 2005) between adjacent years. The report ends with a "Conclusions and Future Directions" chapter to review the past and formulate new recommendations for the following year.

Chapter 1: First 5 Kern Overview

Kern is a dynamic county in California that encapsulates both challenges and promises for raising young children. Located in the southern part of the Central Valley, the county covers an area of approximately 8,163 square miles. The terrain extends from the valley floor to the Coastal Ranges in the west and the Sierra Nevada Range in the east. It also includes parts of the Mojave Desert, Indian Wells Valley, and Antelope Valley. Despite the abundant natural resources, natural drought conditions cause water scarcity, and seasonal employment in agricultural industries typically creates low-wage income for families in rural regions.

In communities where poverty rates are high, children experience malnutrition and rely on processed, unhealthy foods, which become additional health issues like obesity or diabetes at an early age. In areas with intensive oil extraction and air pollution, adverse health effects often disproportionately impact more young children. Because Kern is larger than 95% of the counties in California, strong commission leadership and effective program outreach are essential to help reverse the situation. Sustaining partnership building is also needed for service deliveries to the vast urban, suburban, and rural communities.

Focus Area Designation

Per the stipulation of the Health and Safety Code of California, the state commission reaffirmed that "First 5 county commissions use their funds to support local programs in four result areas:

- Improved Family Functioning
- Improved Child Development
- Improved Child Health
- Improved Systems of Care" (First 5 California, 2022, p. 5)

As First 5 Kern (2023) recapped:

> 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. (p. 3)

Service providers are classified into the first three focus areas according to their primary program functioning (Ibid. 1). The last focus area involves identification and collaboration with local partners that have a shared goal in early childhood support. Table 1 shows the alignment of First 5 Kern focus areas with the state result areas. These result areas are used interchangeably with *focus areas* in the local strategic plan.

In sustaining the systems of care, First 5 Kern's strategic plan is reviewed annually through public hearings for service improvement across its current five-year funding cycle starting in 2020. As a result, Brown Armstrong Accountancy Corporation (2023), the county auditing agency, acknowledged that "The [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. 4).

Table 1: Alignment Between State Result Areas and First 5 Kern Focus Areas

	State Result 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

First 5 California (2019) indicated a vision for *all children to receive the best possible start in life and thrive* in the statewide strategic plan. First 5 Kern (2023) embraced this vision statement and added a key phrase of "supportive, safe, and loving homes and neighborhoods" to emphasize the importance of establishing a nurturing environment in Kern County. As a result, the local commission's vision is stated as:

> 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. (p. 2)

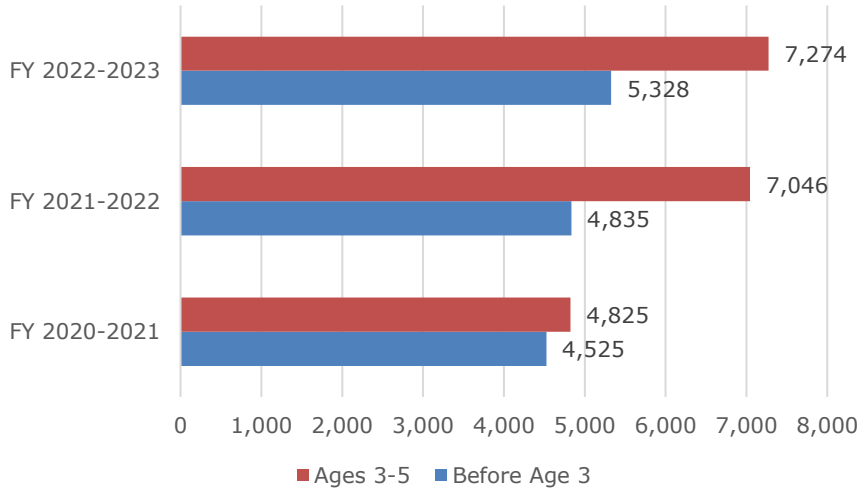
Following Proposition 10, the vision statement is employed as a compass to ensure the identification, implementation, and promotion of best practices for improving child and family wellbeing in Kern County.

Mission Statement

Guided by this vision, First 5 Kern adopts both proven and innovative practices to leverage and maximize local funding for early childhood support. The partnership building has led the commission to endorse 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, 2023, p. 2)

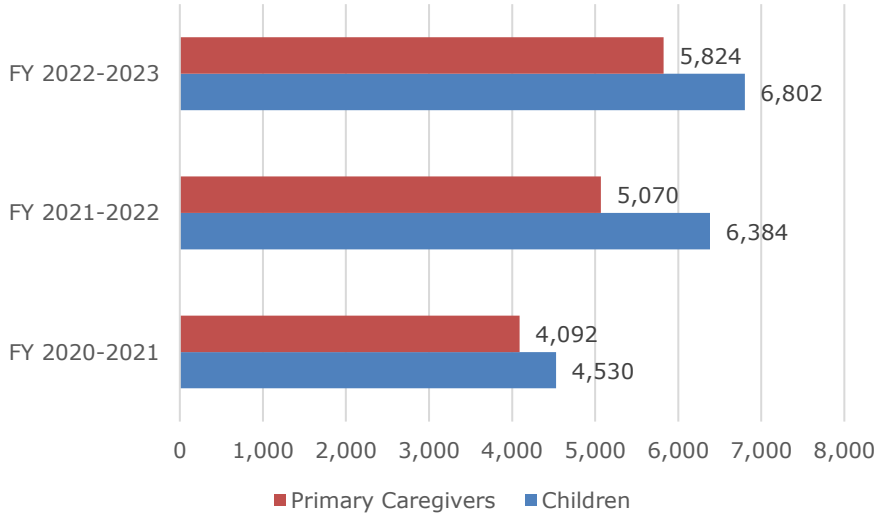
Figure 1: Increase of Service Recipients across Three Years



Result indicators are specified in First 5 Kern's (2023) strategic plan to monitor the mission implementation and ensure the best possible start for all young children. Figure 1 shows an increase in service recipients across the first three years of the current funding cycle. While infants and toddlers are more fragile before age three, preschoolers tend to demand less one-on-one care, which enables pre-kindergarten programs to enroll more children and gain stronger visibility. Hence, the results indicate that First 5 Kern-funded programs serve more children ages 3-5 than infants or toddlers to ensure children enter school ready to learn. In either age group, the trend in Figure 1 confirms an expansion of the service coverage despite the revenue decline from Proposition 10 this year.

The mission also attaches immense importance to articulating different program features for local capacity building. Based on a report of the Hispanic majority from decennial census data, First 5 Kern has expanded service delivery for the Hispanic/Latino population, as illustrated by an increase in children and primary caregivers over the past three years (Figure 2). It is the dual emphases of the mission statement on *care provider support* and *child service needs* that differentiate First 5 Kern from other organizations in early childhood services.

Figure 2: Counts of Hispanic/Latino Children and Primary Caregivers across Three Years



Commission Leadership

According to the California Health and Safety Code (Section 130140), "The county commission shall be appointed by the board of supervisors and shall consist of at least five but not more than nine members." First 5 Kern has nine voting commissioners. One commissioner is a member of the Kern County Board of Supervisors (BOS) with an annual appointment. Five commissioners are appointed by BOS to serve two-year staggered terms. Three members are the Public Health Officer, the Director of the Department of Human Services, and the Director of the Behavioral Health and Recovery Services Department during their official tenure. They are authorized to designate alternate commissioners to participate in any commission meetings during their absence. Altogether, the nine commissioners collectively bring over ten decades of experience in

building and improving *Systems of Care* for young children throughout various communities. Exhibit 1 shows the affiliation of the commission members in FY 2022-2023.

The commission is functioning under a structure of four committees: *Budget and Finance Committee* (BFC), *Executive Committee* (EC), *Personnel Committee* (PC), and *Technical Advisory Committee* (TAC). BFC is led by the Treasurer and three Commissioners to guide the commission and the Executive Director on budgetary and financial planning. EC consists of the Chairperson, the Vice-Chairperson, the Secretary, and the Treasurer to act on any matters about First 5 Kern operations. PC is supervised by the Vice-Chairperson and three Commissioners to attend all personnel settings, including employment, evaluation, compensation, and discipline of commission employees. TAC includes four Commissioners and 14 community representatives to identify and advise on topics relevant or valuable to fulfilling the commission's responsibilities. 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.

Exhibit 1: First 5 Kern Commission Members

Commissioner	Affiliation
John Nilon (Chair)	Retired County Administrative Officer of Kern
Debbie Wood (Vice Chair)	Retired Coordinator of School Health, Bakersfield City School District
Jennie Sill (Secretary)	Children's System of Care Administrator
Brynn Carrigan (Treasurer)	Director, Kern County Department of Public Health Services
Melissa Gilbert	Deputy Superintendent, Instructional Services, Kern County Superintendent of Schools
Lito Morillo	Director of Kern County Human Services
Deborah Murr	Chief Compliance and Fraud Prevention Officer, Kern Family Health Care
Leticia Perez	Fifth District Supervisor, County of Kern
Aaron Resendez	Superintendent of the McFarland Unified School District
Kelly Richers	Superintendent, Wasco Union Elementary School District

Starting on January 1, 2006, any person newly appointed as a Commissioner shall complete a course in ethics training approved by the Fair Political Practices Commission and Attorney General. A repeat of the training is scheduled every two years. Commissioners are required to fill out a government document (i.e., Form 700) to declare no conflict of interest in the funding decisions. In addition, "The commission also performs administrative site visits to monitor contractor compliance with the requirements of their general agreement and to assist in program evaluation, sustainability, and improvement" (Brown Armstrong Accountancy Corporation, 2023, p. 4).

The commission oversees the evaluation of the service providers' programs to meet the goals of its strategic plan. In FY 2022-2023, the commission has achieved program savings on three fronts:

- Contributions to agents were $1,099,604 less than budgeted due to contracts being executed under budget;

- Payroll and employee benefits were under budget by $197,016 and $44,226, respectively, due to staff vacancies and staff reorganization;
- Travel and transportation were under budget by $9,401 due to the increasing use of teleconferencing post-pandemic. (see Brown Armstrong, 2023)

Following an IRB protocol, evaluation site visits are regularly conducted to monitor potential adverse effects of data gathering.

Profile of Young Children in Kern County

Based on Proposition 10, the commission funding depends on the proportion of live births in each county. Hence, the number of children ages 0-5 in each county not only reflects the service demands, but also relates to Proposition 10 investment. To support the commission's strategic planning, the Applied Survey Research (ASR) (2023) created a trend plot on the number of children in Kern County under age six in Figure 3. Using the information from KidsData.org during 2018-2021, ASR shows a decline in the local child population in Figure 3, which seems to contradict an assertion that Kern County has "rising counts of young children" (Manship, Jacobson, & Fuller, 2018, p. 6).

Figure 3: Number of Children in Kern County under Age 6 (2018-2021)

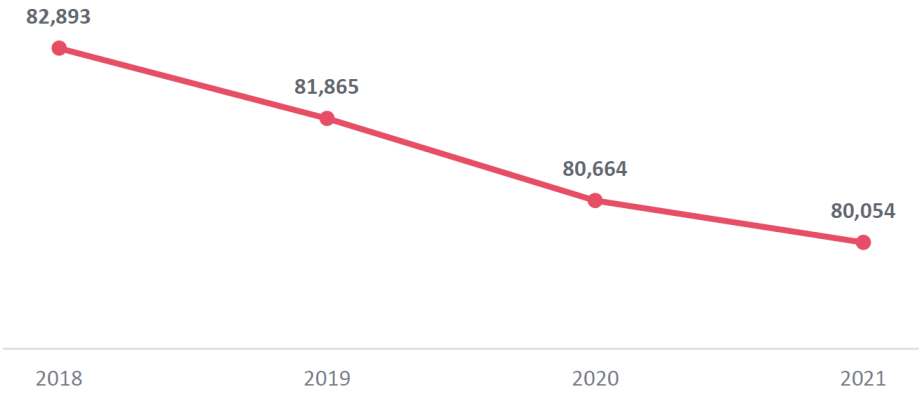
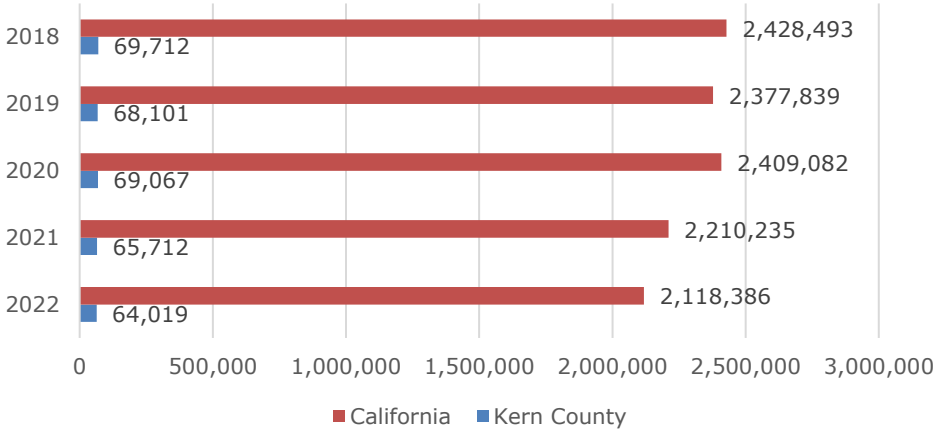


Figure 4: Counts of Children Under Age 5 in Kern County and California

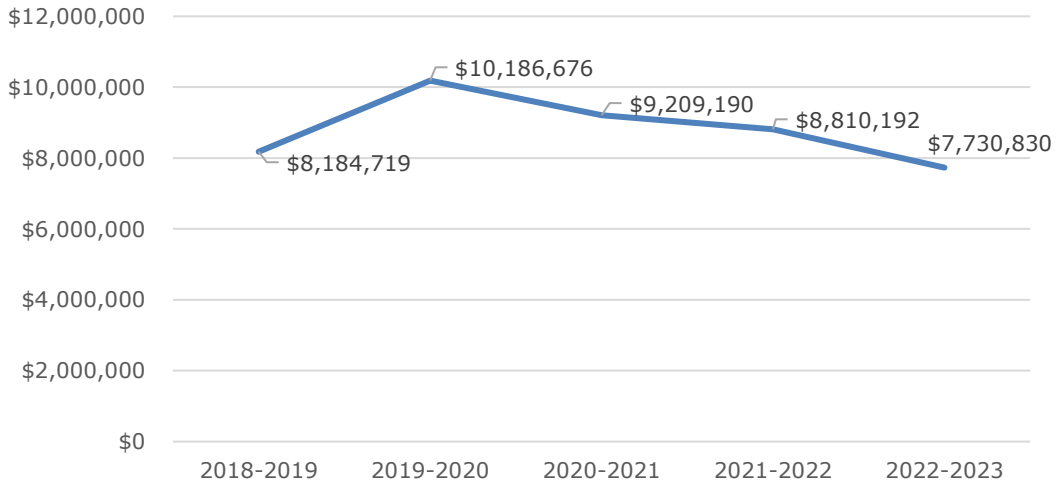


For the result reconfirmation, Figure 4 is constructed from the Census data (Form S0101) to extend the population trend with new information from 2022. As of July 1, 2022, the Census Bureau indicated 916,108 people living in Kern County, and 7.7% of the population were under age 5.[8] In 2021, the population size was 917,673. The population decrease is mirrored by the headcount of the youngest children in Figure 4. Between the adjacent years, the number of children under age 5 decreased from 65,712 in 2021 to 64,019 in 2022.

It should be noted that the local population trend alone cannot completely determine Proposition 10 funding in Kern County. Also indicated in Figure 4 is a much deeper drop in the number of children under age five across the state. The relative difference entails a higher birth rate in Kern County to sustain more First 5 Kern funding from Proposition 10 after 2018. For instance, Figure 5 had a $10,186,676 state investment in FY 2019-2020, and the level of Proposition 10 funding in Kern County remained above the funding amount in FY 2018-2019 during FY 2020-2021 and 2021-2022. The pattern confirmed that the state funding depended on the relative birth rate comparison between Kern and other counties across California.

Nonetheless, the favorable trend was interrupted by the ban on flavored tobacco sales, which might reduce First 5's revenue by 20% by 2024 (Gold, 2023a). In FY 2022-2023, First 5 Kern had a more than 12% funding reduction from the previous year (Figure 5). Regarding the severe impact across the state, Gold (2023a) observed that "Some, such as First 5 Butte County, have already started cutting services" (p. 3), and "Unless new revenue sources are found, some of the smaller First 5 agencies may close up shop" (p. 4).

Figure 5: Trend of Proposition 10 Funding to First 5 Kern



One index that seemed relatively stable across the past five years is the proportion of households speaking Spanish (Census Form S1602) in Kern County. In Figure 6, the rate of Spanish-speaking households stays consistently higher than that of the state, which demands more local attention on English language learners. Although being bilingual is an asset, language misunderstandings can hinder employee performance,

[8] https://www.census.gov/quickfacts/fact/table/kerncountycalifornia/AGE135222

especially in service industries, making it harder for Spanish speakers to access higher-paying jobs (Chiswick & Miller, 2001) or advance their professional careers to a higher level (Portes & Rumbaut, 2006). The barrier in job training may result in lower graduation rates in education (Kena, Musu-Gillette, & Robinson, 2015), causing less income for young parents. Figure 7 shows the low income of the Kern County population 25 years or older in comparison to their counterpart across the state.

Figure 6: Proportion of Households Speaking Spanish in Past Five Years

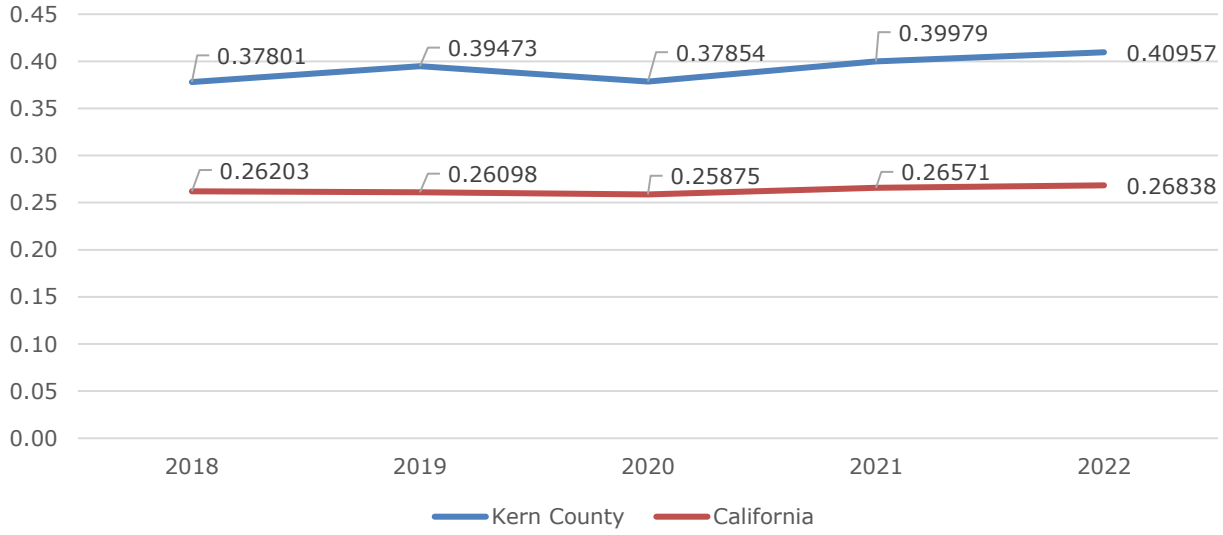
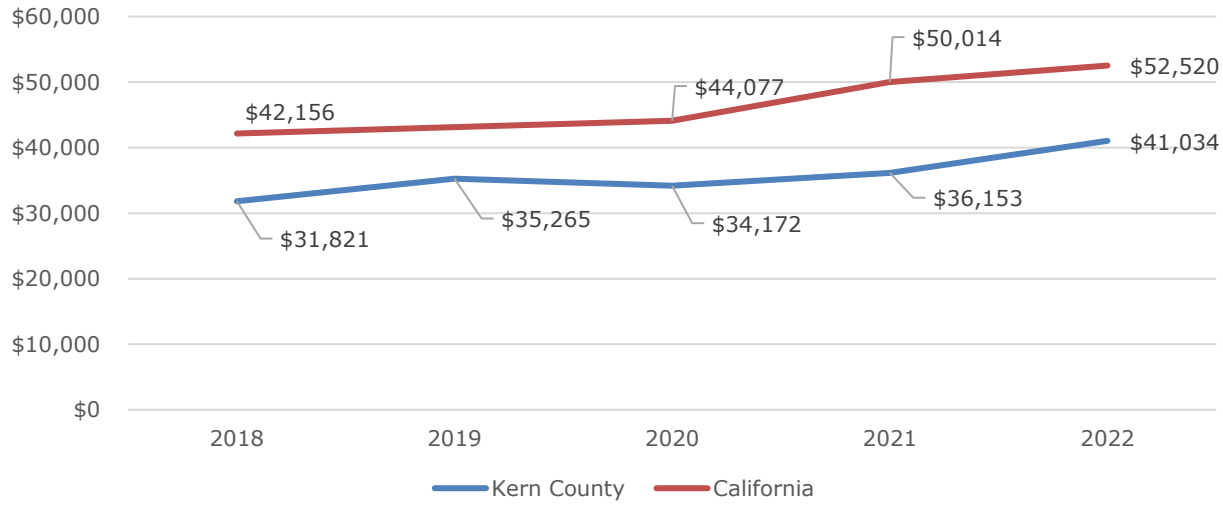


Figure 7: Annual Earning for Population 25 Years and Over*

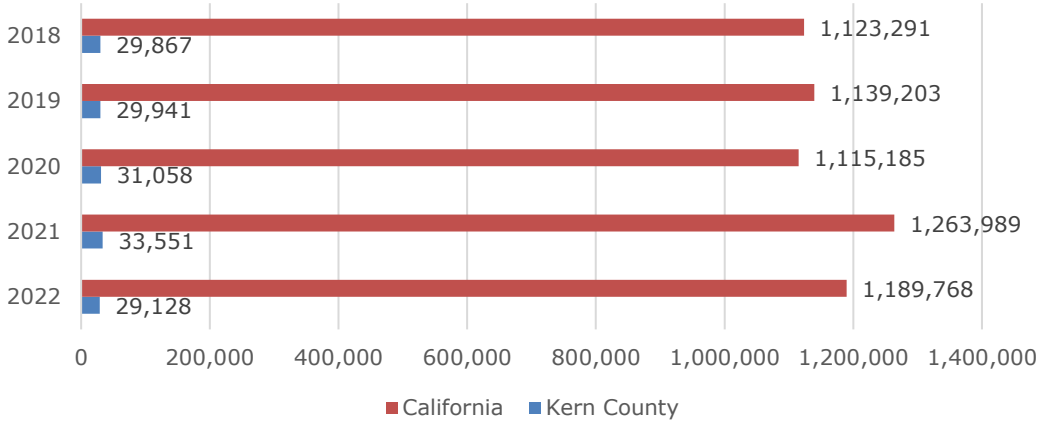


*2019 data for California were unavailable in Census Form S1501.

Even when language was not a job requirement, some employers might be reluctant to hire people with limited English proficiency and perceive them as less capable (Pager & Shepherd, 2008). The restricted social network can lead to fewer job referrals and delimit employment within lower-paying sectors (Granovetter, 1973). The job entry issue corroborates with a relatively consistent count of households with no workers over the past 12 months in Kern County (Figure 8). Meanwhile, the census data indicates more

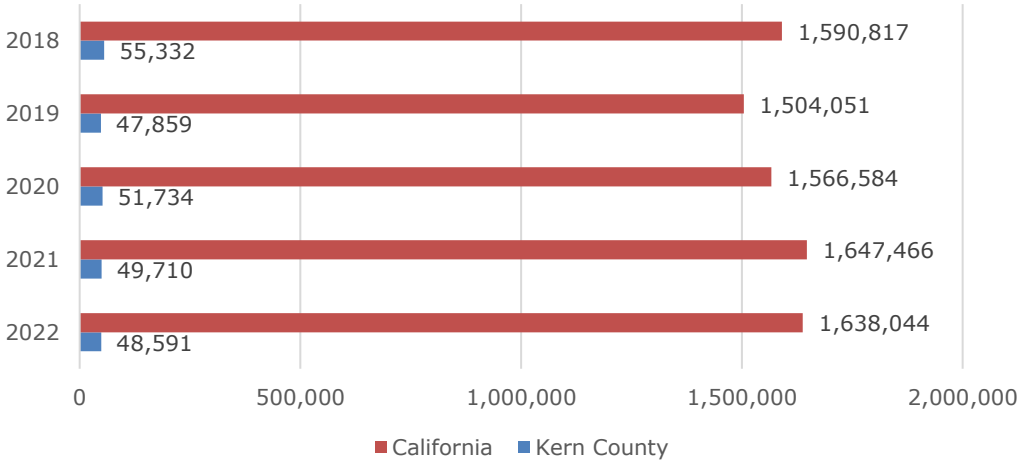
statewide fluctuation during 2020-2022 (Census Form S2201). In controlling the variation, a ratio is computed by dividing the current Kern population size (see Ibid. 8) by the state population size of 39,029,342[9]. When the ratio of .0235 is applied to adjust the 2022 state index of 1,189,768, the average index for the population of Kern County size across California could have been 27,971 (i.e., 1,189,768x0.0235), which is less than the no-worker household count of 29,128 in Figure 8.

Figure 8: Household with no workers over the past 12 months



Due to the lack of employment, many households in Kern County participated in food stamps/supplemental nutrition assistance programs. In Figure 9, the number of households below the poverty level is plotted annually over the past five years to show more statewide fluctuation. Again, when the 2022 state index of 1,638,044 is adjusted by the ratio of .0235 to control the time variation, an average state index for the population of Kern County size could have been 38,494, less than 48,591 households in Figure 9. In combination, Figures 8 and 9 show the connection between employment and poverty, leading to fewer family resources for Kern County's young children.

Figure 9: Household with status below poverty level over the past 12 months



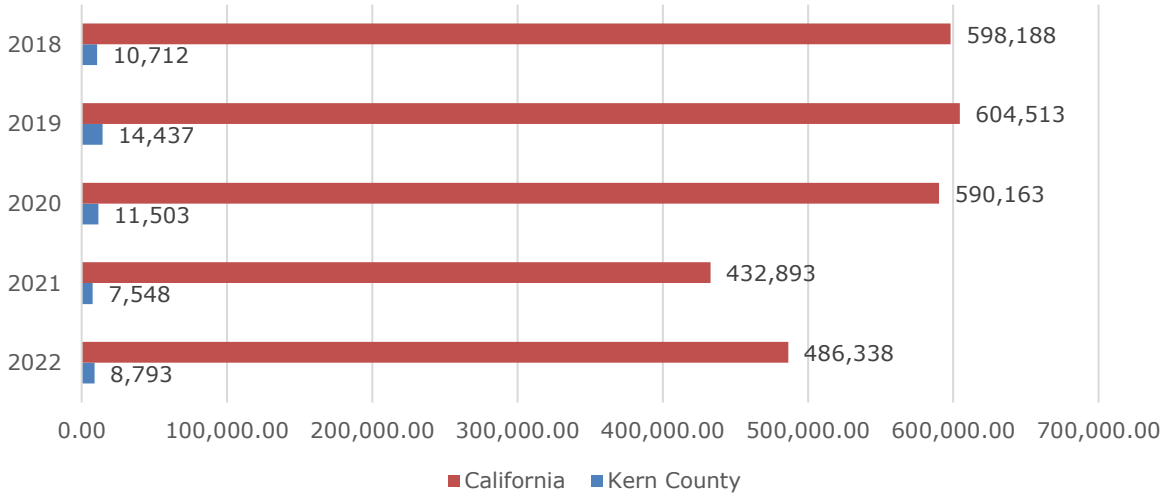
Source: Census Form S2201.

[9] https://www.census.gov/quickfacts/fact/table/california

In areas with higher socioeconomic challenges, children might have limited access to quality early education programs (Sirin, 2005). Figure 10 is designed for a comparison of preschool enrollment numbers between Kern County and California. The index peaked in 2019 before COVID-19 at both county and state levels, but the Kern index dropped to less than 52.3% in 2021 and around 60.9% in 2022. The corresponding ratios across the state were above 71.6% in 2021 and nearly 80.5% in 2022. Hence, the need for enrollment recovery is much stronger in Kern County than in the entire state.

In this context, Proposition 10 funds become crucial in bridging the gap between child needs and available resources. As Constantine and Jonah (2017) recollected, "Poverty disproportionately affects Kern County children with more than a third living below poverty compared to less than a quarter of Californian children" (p. 9). Due to the economic hardship, there is a greater demand for early intervention programs, healthcare services, and parental support that cater to low-income, bilingual families. Based on the review of child characteristics and home backgrounds, First 5 Kern sponsored family-focused, culturally appropriate, and community-based service deliveries to address the local population's needs in *Health and Wellness, Parent Education and Support Services,* and *Early Childcare and Education.* Program information is released to the public (see Ibid. 1) to maintain transparency of the commission funding.

Figure 10: Preschool Enrollment Counts in Kern County and California



Source: Census Form B1401.

Enhancement of Community Support

Based on the child profiling in the last section, Kern County has a considerable portion of its population living below the poverty line. In this intricate fabric of community welfare, children desire nurturing support during ages 0-5 while their parents and caregivers earn money for food, housing, and other essentials (Hamilton, 2023). Regardless of the community location, the needs of children, whether nutritional, educational, or health-related, are substantial in impoverished families. Hence, the demand for supportive programs often outstrips the available funding from Proposition 10. To sustain service delivery, First 5 Kern supported fund leverage at the program level.

Table 2 shows the leveraged fund of $5,835,852 from 29 partners, far above the corresponding annual total of $4,307,421 from 28 sources last year.

The partnership building was envisioned by Proposition 10 to create a consumer-friendly system of services for young children and their families (Bodenhorn & Kelch, 2001). The strategy became a necessity due to the decline in state revenue from tobacco sales. In 1998, about 1.5 billion packs of cigarettes were sold and taxed annually in California. By 2022, sales were down to a level of fewer than 550 million packs (Gold, 2023b). Partnership building was already envisioned by Proposition 10 a quarter of a century ago. It became much more necessary to amend the state fund shortfall and sustain the early childhood services in each county.

Table 2: Sources and Leveraged Funds for Program Support in FY 2022-2023

Source	Leveraged Funds
Borax Visitor Center	$6,000.00
California Department of Public Health	$294,632.00
California Department of Social Services	$86,859.00
California Family Resource Association	$40,598.00
California Office of Emergency Services	$324,491.00
Chevron	$40,000.00
County of Kern	$857,502.00
Desert Lake Community Services District	$840.00
Anonymous or Individual Donation	$24,249.00
Corporate Donation	$4,148.00
Emergency Food and Shelter Program	$14,409.00
Fees/Tuition	$72,128.00
Fundraisers	$31,724.00
Kaiser Permanente	$26,775.00
Kern County Aging & Adult Services	$43,364.00
Kern Family Health Care	$76,800.00
Kern Regional Center	$162,598.00
McKinney Vento	$11,411.00
Medi-Cal	$57,779.00
Medical Administrative Activities	$15,640.00
Network for a Healthy California	$15,899.00
Other Organizations	$1,510,582.00
PG&E CARE Program Stipend	$60.00
State Farm	$500.00
The Wonderful Company	$1,000.00
Title V	$1,104,489.00
Title XIX	$439,262.00
United Way	$570,613.00
Walmart	$1,500.00

In FY 2022-2023, First 5 Kern held six TAC[10] and seven commission meetings[11] to maintain service delivery with less state investment. Meanwhile, innovative approaches have been taken to enhance the commission's visibility on social media and hybrid-virtual platforms. Altogether, First 5 Kern participated in 34 countywide undertakings to enhance community support (Table 3).

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

• Bakersfield College Child Development Advisory Committee
• Bakersfield City School District – School Health Advisory Committee
• Buttonwillow Community Collaborative
• Community Action Partnership of Kern – Health Services Advisory Committee
• County Nutrition Action Plan
• Delano Neighborhood Partnership
• Early Childhood Council of Kern
• East Bakersfield Community Collaborative
• East Kern Collaborative
• Family First Prevention Services Act (FFPSA) Part I Implementation Planning Committee
• Greenfield H.E.L.P.S (Healthy Enriched Lives Produce Success) Collaborative
• Home Visiting and Early Childhood Systems Coordination Meetings
• Indian Wells Valley Collaborative
• Kern Connected Community Network – Community Advisory Group
• Kern County Network for Children – General Collaborative
• Kern County Prevention Council
• Kern Complete Count Committee (Census 2020)
• Kern Pledge – Kinder Readiness Workgroup
• Kern River Valley Collaborative
• Lost Hills Community Collaborative
• McFarland Collaborative
• Medically Vulnerable Care Coordination Committee
• Medically Vulnerable Children Resource Fair Planning Committee
• Mountain Communities Collaborative
• Oildale Community Collaborative
• Resilient Kern Leadership Committee
• Richardson Special Needs Collaborative
• Safe Sleep Coalition of Kern County
• Safely Surrender Baby Coalition
• Shafter Healthy Start Collaborative
• South Valley Neighborhood Partnership Arvin/Lamont/Weedpatch Collaborative
• Southeast Neighborhood Partnership General Collaborative
• West Side "Together We Can" Collaborative
• Wasco Community Collaborative

[10] https://www.first5kern.org/meetings/tech-advisory-meetings/
[11] https://www.first5kern.org/meetings/commission-meetings/

One of the cornerstones of early childhood welfare is access to quality education and developmental programs. The service access depends on program awareness. In First 5 Kern's (2023) strategic plan, an objective is designed to maintain "Community strengthening efforts that support education and community awareness." Table 4 lists 68 outreach services of First 5 Kern at the community, county, and state levels.

Table 4: First 5 Kern's Outreach at the Community, County and State Levels

Event	Initiator	Participant
Community	1. Kern County ACEs Conference 2. First 5 Kern Newsletter 3. First 5 Kern Strategic Plan 4. First 5 Kern Website 5. First 5 Kern Weekly Headlines E-Blast 6. First 5 Kern Social Media content	1. "Baby Shower" events at Oasis Family Resource Center and Bakersfield Pregnancy Center 2. DHS Purple Ribbon Month Outreach 3. North Rotary Club Presentation 4. KidsFest 5. Leadership Bakersfield 2022 & 2023 6. Park Day Celebration (Frazier Park) 7. Ready-Set-Back 2 School event 8. Bakersfield American Indian Health Project Back to School event 9. LB Day of Community Service 10. Open Door Network Spooktacular Halloween Carnival 11. Halloween Trick-Or-Treat at MLK Center 12. Trick or Tweet at the Beale Library 13. Early Childhood Council of Kern Workforce Development Committee 14. Standard Middle School Career Day 15. Vision y Compromiso Open House 16. Dolly Parton Imagination Library partnership planning 17. Read Across America 18. Stay & Play – Beale Library resource event 19. Kern River Valley car seat giveaway event 20. Kern Valley Aquatics Program Summer Kickoff (life vest giveaway) 21. Black Chamber Kids Appreciation Day 22. Riverstone Wellness Center Parent-Child Playgroup events
County	1. Ages and Stages Questionnaire Trainings 2. Black Infant and Maternal Health Initiative 3. Community of Excellence (Tobacco Free Coalition of Kern County) 4. Help Me Grow Kern County Collaborative 5. Nurturing Parenting – Trainings	1. ANEMIA Community Leadership Group 2. California Preterm Birth Initiative 3. Chamber of Commerce Governmental Review Council 4. Family First Prevention Services Act (FFPSA) Part I Implementation Planning Committee 5. Fetal Infant Mortality Review 6. Kern Association for the Education of Young Children 7. Kern Complete Count 2020 Census 8. Kern County Board of Supervisors Meetings 9. Kern County Breastfeeding Coalition

Event	Initiator	Participant
County Cont.	6. SMART Goals Training	10. Kern County Child Death Review Team 11. Kern County Infant & Toddler Seminar 12. Kern County Network for Children Governing Board 13. Kern County Prevention Council 14. Kern Early Stars Consortium 15. Kern Medical Safe Home, Safe Baby 16. Kern Education Pledge Kinder Readiness Work Group 17. MLK Parks Planning Committee 18. Mercy and Memorial Hospitals – Community Benefit Committee 19. Nurse Family Partnership Community Advisory Board 20. Nurse Family Partnership 2022 Graduation 21. Outreach, Enrollment, Retention, Utilization Committee (OERUC) 22. Parks and Recreation City Planning Commission (Representing Ward 1) 23. Safe Sleep Coalition of Kern County 24. Safely Surrendered Baby Coalition 25. Safely Surrendered Baby press event 26. Tobacco Free Coalition of Kern County Steering Committee 27. Black Infant & Maternal Health Initiative Workgroup 28. Kern Connected Community Network
State	1. United Way of California	1. Central Valley Regional Meeting 2. Central Valley Safe Sleep Coalition 3. First 5 Association of California Meetings 4. First 5 Association of California Summit 5. First 5 Association of California Evaluation Workgroup Meetings 6. First 5 Association of California Leadership Program 7. First 5 Association of California Policy Committee 8. First 5 Association Statewide Communications Meetings 9. First 5 California Commission Meetings 10. First 5 IMPACT Hub – Region 5 11. Local meetings with statewide elected representatives 12. Safer California Unintentional Injury Prevention Conference 13. Quality Counts California Consortium 14. Safer California Conference regional planning meeting 15. (National) Help Me Grow National Outreach Coordinator Networking Retreat

Event	Initiator	Participant
		16. California SIDS Advisory Council 17. First 5 Association Regional REDI Convenings 18. First 5 California Stronger Starts press event in Sacramento

Summary of Evaluation Approaches

First 5 Kern partnered with local service providers to sustain program deliveries across the county. Throughout the year, the Persimmony Data Management System was employed to collect and export assessment data on (1) how much has been done and (2) how well each service provider performed in supporting *Child Health, Family Functioning*, and/or *Child Development*. Furthermore, a *NetDraw* software package has been employed to describe the network of service providers in Kern County. The multilevel approaches are illustrated by evaluation activities across four categories:

1. Comparing evaluation results to assess program effectiveness

Multiple sources of information are analyzed from 15 instruments in 12 domains:

- ASQ-3 on child growth across 24 programs;
- ASQ:SE-2 for early detection of potential social or emotional problems in eight programs;
- AAPI-2.1 on parenting outcomes from seven programs;
- CASB on preschool learning in six programs;
- CDE and *Birth Survey* from 28 programs;
- FSR from 15 programs;
- DRDP-Infant/Toddler (IT) for infants/toddlers in three programs;
- DRDP-Fundamental View for preschoolers (PS) in three programs;
- DRDP-Comprehensive View for PS in four programs;
- Parenting Survey from Nurturing-Parenting workshops across five programs;
- School Readiness Articulation Survey; and
- Program-specific surveys, such as
  - Dyadic Assessment of Naturalistic Caregiver-Child Experiences (DANCE)
  - North Carolina Family Assessment Scale for General Services (NCFAS-G)
  - Buttonwillow's Raising A Reader Assessment
  - FCP Participant Survey.

2. Articulating success stories to track the service impact between adjacent years

Forty descriptive stories are downloaded from a First 5 Kern website (Ibid. 3). Plots of (a) top-impact words, (b) keyword dispersions, (c) token-word relations, and (d) word clouds are created to extract the service outcomes from various programs. The results show a consistent emphasis on key stakeholders, such as *children, students, parents,* and *families*, in the impact story generation to reconfirm the intended program focus of Proposition 10.

3. Reporting data from program networking under a hierarchical 4C model

Partnership data are collected from the Integration Service Questionnaire (ISQ) to assess the scope and strength of network building across 40 service providers, including 39 programs of First 5 Kern and the *IMPACT* project from First 5 California. The network scope is analyzed to examine *direct/indirect support*, *unilateral/reciprocal connection*, and *primary/non-primary collaboration* in both quantitative and qualitative dimensions. In scaling the partnership capacity, a 4C (*Co-Existence, Collaboration, Coordination*, and *Creation*) model is employed to ground this investigation in the research literature for ongoing tracking of network improvement.

4. Monitoring program investment across focus areas of *Child Health, Family Functioning, Child Development,* and *Systems of Care*

First 5 Kern received state investment to fund programs in 10 service domains (Ibid. 4). In FY 2022-2023, the program expenditure reached $9,088,265. In Child Health, First 5 Kern invested $669,514 in *Early Intervention*, $284,081 in *General Health Education and Promotion*, $978,325 in *Oral Health Education and Treatment*, and $648,930 in *Prenatal and Early Childhood Home Visiting*. In Family Functioning, the commission spent $2,030,693 on *General Family Support* and $1,014,639 on *Intensive Family Support*. In Child Development, First 5 Kern designated $615,756 to *Quality Early Learning Supports* and $1,241,653 to *Early Learning Programs*. In Systems of Care, $1,185,484 was invested in enhancing *Policy and Public Advocacy*, and $404,064 was devoted to supporting *System Building*.

The commission also provided $15,126 in direct material support for emergency and disaster relief. To facilitate ELC access, the amount of IMPACT project funding increased from $522,713 last year to $685,046 this year. Through the local partnership building, the commission received $261,555 from Kern County Behavioral Health & Recovery Services to sustain the Help Me Grow-Kern County program and $16,978 from Kern County Department of Human Services to support an Early Intervention Services project. The external grants include

1. $4,125 from the California Children & Families Foundation to educate families on the benefit of the Earned Income Tax Credit,
2. $5,700 from the Community Action Partnership of Kern for case management training, and
3. $24,040 from Kaiser Permanente to fund community partners in the Resilient Kern-Trauma Informed Care project.

Altogether, First 5 Kern invested $1,604,674 in the *Systems of Care* domain.

The program evaluation needs to be extended to the time dimension because the commission follows the state statute to "use Outcome-Based Accountability to determine future expenditures" (Proposition 10, p. 4). In comparison, the commission increased its investment in Child Health from $2,437,285 last year to $2,580,850 this year. Concurrent increases occurred from $2,991,392 to $3,045,332 in Family Functioning and from $1,689,169 to $1,857,409 in Child Development. On the basis of the primary service emphasis, First 5 Kern categorized 12 programs in *Child Health*, 17 in *Family Functioning*, and 10 in *Child Development* (see Appendix A).

Primary Aspects of Evaluation Tasks

In FY 2022-2023, First 5 Kern has maintained a vigorous agenda in program administration. Hence, the primary aspects of evaluation tasks include:

1. Comparison of target and actual counts across 26 result indicators (RI) in Child Health, 15 in Family Functioning, five in Child Development, and 16 in Systems of Care;
2. Adoption of 16 instruments to assess program effectiveness in 12 domains;
3. Dissemination of the impact stories from all service providers;
4. Review of RI at Technical Advisory Committee (TAC) meetings;
5. Implementation of an Institutional Review Board (IRB) protocol, including site visits, consent form administration, and confidentiality training for 98 program staff;
6. Revision of the consent form in English and Spanish to meet new IRB requirements;
7. Collection of service integration data to assess program networking;
8. Tracking of program investment from leveraged funds and Proposition 10 across focus areas;
9. Articulation of the achieved results with program funding to justify cost-effectiveness;
10. Examination of past recommendations to assess progress last year;
11. Analysis of new findings to support recommendations this year;
12. Preparation of child screening findings for result dissemination;
13. Provision of resource support for Resilient Kern Coalition.

These extensive efforts supported:

1. Documentation of quarterly progress in service deliveries toward the annual target;
2. Aggregation of multiple sources of information for domain-specific result reporting;
3. Illustration of the differences First 5 Kern made in the lives of children and their families;
4. Report of RI examination by TAC subcommittees;
5. Compliance of data handling according to federal, state, and local laws and regulations;
6. Alignment of the consent forms with the IRB template;
7. Summary of social network patterns in service integration;
8. Implementation of contractual agreements for service providers;
9. Justification of Proposition 10 funding with program outcomes;
10. Confirmation of changes according to past recommendations;
11. Explanation of rationale for new recommendations;
12. Report of First 5 Kern research at the annual meeting of the American Educational Research Association;
13. Collection of feedback from the Kern County ACEs Conference on May 17, 2023.

Description of the Evaluation Framework

The evaluation framework is designed to guide the assessment of program performance according to specific result indicators delineated in the commission's strategic plan. Friedman (2009) noted, "RBA makes a fundamental distinction between Population Accountability and Performance Accountability" (p. 2). Whereas the population

needs are configured through the annual review of the strategic plan in partnership with local service providers, performance accountability depends on systematic data collection across programs (Friedman, 2011). In confirmation of the service delivery, First 5 Kern has contractually required service providers to single out needs statements and measurable objectives in a Scope of Work -Evaluation Plan (SOW-EP) that clarifies resources, data collection tools, result indicators, performance milestones, and program targets.

While addressing the local service needs, the report development follows state guidelines. First 5 California (2010) suggested an evaluation framework to include both needs-based assessment and asset-based assessment. Under the commission leadership, asset-based assessment is conducted quarterly to monitor state investment and service outcomes at the program level. First 5 Kern also gathers information from program reviews and site visits to identify service gaps across different communities. Hence, the evaluation mechanism is fully incorporated in First 5 Kern's daily operation to facilitate the assessment of program performance in *Child Health*, *Family Functioning*, and *Child Development*, as well as sustaining partnership building to improve child wellbeing in Kern County.

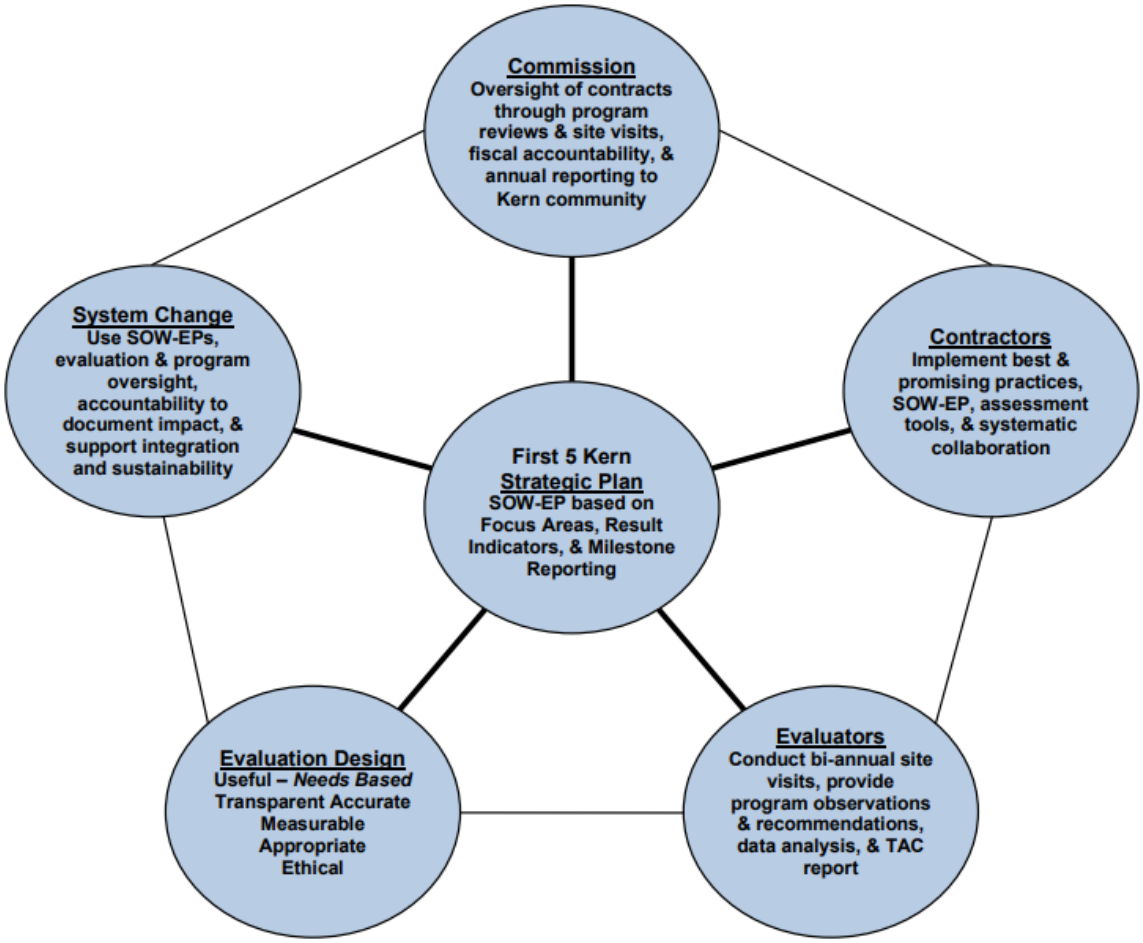
In collaboration with CSUB, an IRB panel reviews the evaluation design and evaluator's responsibilities quarterly to ensure adequate, transparent, and accurate data collection across 39 programs. Meanwhile, the evaluation team attends TAC meetings regularly to support needs-based assessment and provide input for program enhancement. The persistent involvement is designed to meet an expectation of First 5 Kern's (2023) strategic plan for this funding cycle, 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" (p. 8). The entire Evaluation Framework is delineated in Exhibit 2 to address results-based accountability according to the state guidelines (First 5 California, 2010) and the commission's Strategic Plan (First 5 Kern, 2023).

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). In this report, the state statute is fulfilled in five modules: (1) descriptive data from program reviews to demonstrate the evidenced-based support for children ages 0-5 and their families across Kern County, (2) assessment results to track value-added improvements on the effectiveness of funded programs under a pretest and posttest setting, (3) partnership analyses to meet resource demands for service deliveries in hard-to-reach communities, (4) trend comparison to monitor changes of program outcomes between adjacent years, and (5) future recommendations to sustain the "Turning the Curve" process according to the commission strategic plan (First 5 Kern, 2023).

Altogether, this report contains five chapters in compliance with a Statewide Evaluation Framework (First 5 California, 2005) for Proposition 10. Beyond the description of commission functioning 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. While the first three chapters are focused on evaluation findings within FY 2022-2023, key indicators of child wellbeing and family functioning are tracked between adjacent years in Chapter 4 to demonstrate result

improvement. Conclusions in Chapter 5 are grounded on the program impact configuration under the evaluation framework in Exhibit 2.

Exhibit 2: First 5 Kern Evaluation Framework



Chapter 2: Impact of First 5 Kern-funded Programs

In implementing Proposition 10, 80% of the state tax revenue is allocated to the 58 counties according to the live birth rate of each county. The rate configuration is based on the birth mother's county of residence. To guide the statewide result reporting across county commissions, First 5 Association of California identified four modules in its policy agenda[12]: (1) Comprehensive Health and Development, (2) Resilient Families, (3) Quality Early Learning, and (4) Sustainability and Scale (Ibid. 12). Modules 1-3 fit the first three focus areas in Table 1. The fourth focus area, *Integration of Services*, is aligned with the *Sustainability* module to strengthen *Systems of Care*. Regarding the *Scale* part of the fourth module, indicators of child wellbeing and family functioning are tracked between adjacent years to support value-added assessment across programs in Chapter 4.

In the grant administration, each county is expected to decide how the funds will be invested in programs and services for children ages 0-5 and their families. First 5 Kern adopted ten service domains from the state report glossaries (First 5 California, 2023) to lead services in Kern County. Two of the domains, (1) *Policy and Public Advocacy* and (2) *Programs and Systems Improvement Efforts*, belong to the fourth focus area of *Systems of Care*. The remaining eight domains address the direct impact of service outcomes for key stakeholders, including children and caregivers. In addition, First 5 Kern's (2023) mission includes support for service providers in partnership building. Table 5 contains the number of beneficiaries in these report domains.

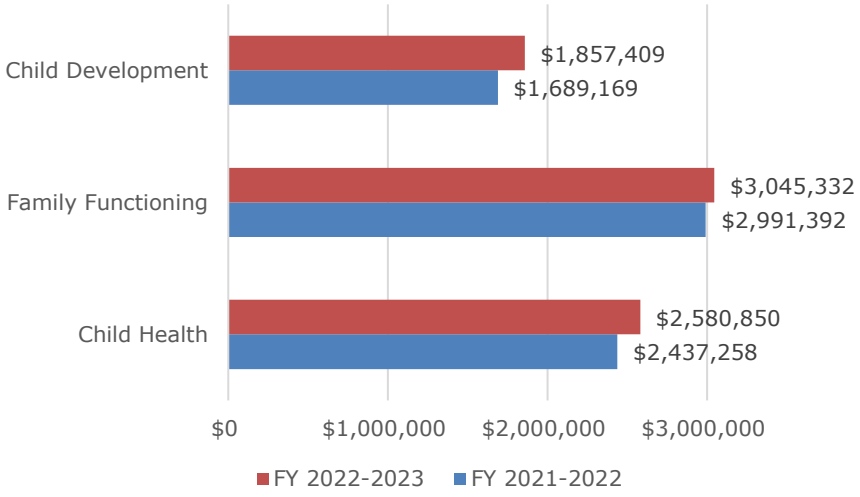
Table 5: Counts of Service Beneficiaries Across Report Domains

Report Domains	Number of Beneficiaries
General Health Education and Promotion	985 children; 165 caregivers
Oral Health Education and Treatment	2,794 children
Perinatal/Early Childhood Home Visiting	118 children; 165 caregivers
Early Intervention	650 children; 241 caregivers
General Family Support	3,489 children; 7,403 caregivers; 84 providers
Intensive Family Support	2,752 children; 2,118 caregivers
Quality Early Learning Support	534 children; 113 providers
Early Learning Program	890 children; 911 caregivers; 29 providers

To ensure the service coverage, First 5 Association of California stressed a "focus on those farthest from opportunity", particularly young children in rural communities (Ibid. 12). Surrounded by mountains on three sides, Kern County has some of the worst air quality in the United States, including the highest density of particulate matter (PM 2.5) that risks preterm birth (Smith, 2021). In coping with these local challenges, as well as the revenue decline from Proposition 10, First 5 Kern has increased its annual program spending in each focus area in Table 1. Figure 11 shows the investment increase between last year and this year. As a result, the caregiver counts increased from 154 to 165 in Perinatal/Early Childhood Home Visiting, 167 to 241 in Early Intervention, and 829 to 911 in Early Learning Support. In addition, more children were served in the report domains of *Oral Health Education/Treatment, Perinatal/Early Childhood Home Visiting, Early Intervention, Intensive Family Support*, and *Early Learning Program* this year than last year (Figure 12).

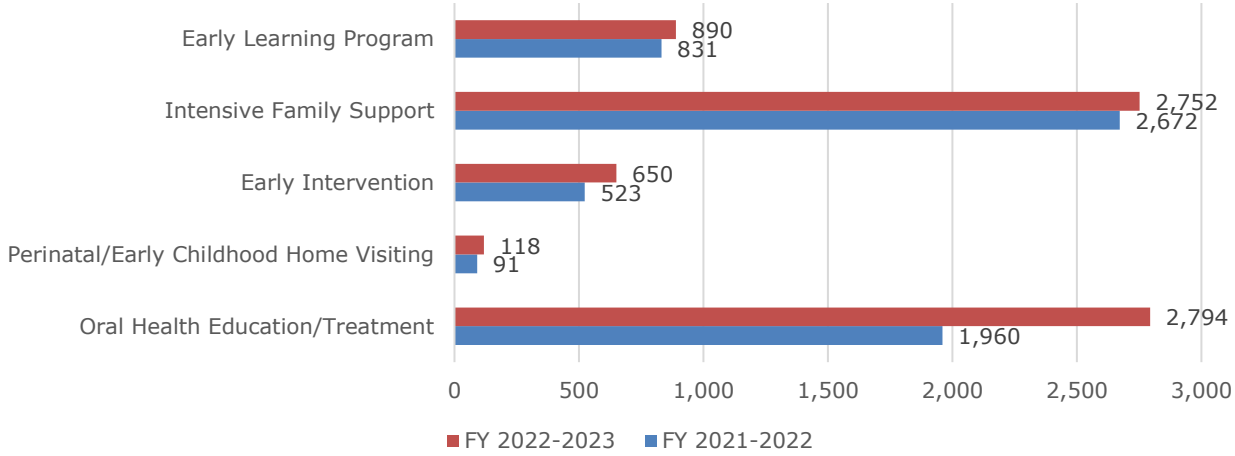
[12] https://www.ccfc.ca.gov/pdf/partners/data_systems/ar/Annual_Report_Guidelines_FY_2022-23.pdf

Figure 11: Increase of Commission Investments Between Adjacent Years



Source: First 5 Kern Annual Reports to the State

Figure 12: Increase of Child Coverage Between Adjacent Years



Source: First 5 Kern Annual Reports to the State

In terms of financial support, the program investment was planned for a five-year funding cycle. Thus, First 5 Kern has to reduce its reserve to amend the state revenue shortfall and address the increasing service demand. As Brown Armstrong Accountancy Corporation (2023) delineated,

> Actual operating revenues were $1,041,980 less than budgeted revenues. This decrease is mostly attributable to the reduction in Proposition 10 funding due to the passage of SB 793, the California flavor ban. Grant awards and other income also decreased due to the completion of the ACEs Aware and Earned Income Tax Credit grants. (p. 5)

In this chapter, the scope of service delivery is tracked at the child and family levels. Through the collaboration of First 5 Kern staff, service providers, and parents or guardians, assessment data are gathered to examine the improvement of program

outcomes under a pretest and posttest setting. The state focus areas (see Table 1) are used interchangeably with First 5 Kern's (2023) focus areas to streamline the result presentation. Program affiliations to a particular focus area are based on the primary service features (Ibid. 1). The leveraged funds reflect the sustainability of program support through partnership building. The aggregation of program-specific findings in this chapter lays a solid foundation toward addressing the fourth focus area, *Systems of Care*, in Chapter 3 on outcomes of service integration.

(I) Program Support in *Child Health*

Kern County's agricultural prominence comes with environmental concerns about air and water quality. The county's occasional bouts with drought, combined with industrial and vehicular emissions, have aggravated these challenges. As Gearhart (2016) noted, "Kern County often ranks as one of the poorest providers of healthcare in the country" (p. 13). For fragile young children, there is an elevated risk for respiratory and other health issues. To offer well-rounded programs in *Health and Wellness*, First 5 Kern strategically funded services in four domains: General Health Education/Promotion, Oral Health Education/Treatment, Perinatal/Early Childhood Home Visiting, and Early Intervention. Unduplicated counts of the service recipients are plotted in Figure 13. In particular, dental caries, commonly known as tooth decay, is one of the most prevalent chronic diseases in children (Castañeda-Sarmiento et al., 2022). Early intervention and regular dental check-ups are crucial to preventing and managing this widespread condition, which explains a higher client count for Oral Health Education/Treatment in Figure 13.

Altogether, First 5 Kern funded 12 programs to support child health and wellness. According to First 5 California (2022), the result area of improved child health includes the identification and elimination of "the risks that threaten children's health and lead to developmental delays and disabilities in young children" (p. 43). In FY 2022-2023, the pace of child development is monitored locally by the free screening services of Help Me Grow (HMG). The remaining 11 programs contributed to the service counts in four report domains of Figure 13. These programs and domains are aligned in Table 6.

Figure 13: Client Counts in Four Domains of *Child Health*

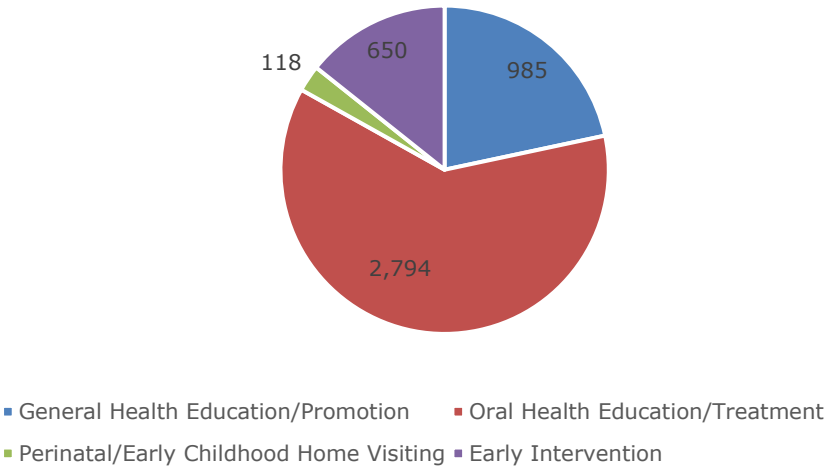


Table 6: Program Affiliation with Report Domains in Child Health

Report Domains	Programs in Child Health
Early Intervention	Infant and Toddler Program
	Medically Vulnerable Care Coordination Project
	Medically Vulnerable Infant Program
	Richardson Special Needs Collaborative
	Special Start for Exceptional Children
General Health Education and Promotion	Children's Mobile Immunization Program
	Kern Valley Aquatics Program
	Make A Splash
Oral Health Education and Treatment	Kern County Children's Dental Health Network
Perinatal and Early Childhood Home Visiting	Black Infant Health Program
	Nurse Family Partnership Program

Capacity of Program Support in *Health and Wellness*

Besides supporting direct services, the state revenue from Proposition 10 is expected to serve as seed money for fund leveraging (Edelhart, 2016). Hence, First 5 Kern encouraged service providers to collaborate with other agencies to expand program support. Eight service providers in *Child Health* have leveraged $3,269,606 from community partners to sustain the capacity building (Table 7), an increase from $2,144,469 last year.

Table 7: Leveraged Funds by Programs in *Child Health*

Program	Sustainability Fund
Black Infant Health Program	$468,011.70
Help Me Grow Kern County	$1,056,004.57
Kern County Children's Dental Health Network	$4,624.60
Kern Valley Aquatics Program	$12,685.19
Make A Splash	$26,775.00
MVCCP	$630,886.72
Medically Vulnerable Infant Program	$124,373.00
Nurse Family Partnership Program	$517,679.00

The program funding is carefully planned to address **six objectives** under a common goal of *Child Health*, i.e., "All children will have an early start toward good health" (First 5 Kern, 2023, p. 6). Table 8 shows the interconnections between state glossary domains and local service objectives. In this section, the RBA requirement is justified by service outcomes of 12 programs with RI alignments to objectives in Table 8. More specifically, health insurance enrollment (**Objective 1**), healthy habit development (**Objective 5**), and safety education for injury prevention (**Objective 6**) are linked to service functioning at both *child* and *family* levels (see RI 1.1.1, 1.1.5, 1.1.6, 1.5.2, 1.6.1-1.6.4 of the strategic plan).[13]

Table 8: Association between State Report Domains and Local Objectives

Objectives of Health and Wellness	Glossary Domain
Children will be enrolled in existing health insurance programs.	[2]
Pregnant women will be linked to early and continuous care.	[4]

[13] https://www.first5kern.org/reporting-the-work/strategic-plan/

Objectives of Health and Wellness	Glossary Domain
Children will be provided health, dental, mental health, develop-mental and vision screenings, and/or preventative services.	[1] [2] [3]
Children with identified special needs will be referred to appropriate services.	[1]
Children will develop early healthy habits through nutrition and/or fitness education.	[2]
Children and their parents/guardians will be provided with safety education and/or injury prevention services.	[2]
Children will be enrolled in existing health insurance programs.	[2]

In Domain [1], early interventions are introduced by MVIP to incorporate case management services for medically vulnerable infants and their families. Richardson Special Needs Collaborative (RSNC) is another program offering case management services, behavioral needs screenings, parent education, and referrals for children ages 0 to 5 and their families. A Family Resource Library is sponsored by RSNC to disseminate information about children with special needs. Special Start for Exceptional Children (SSEC) expands quality early childhood education, parent support, and childcare services during non-traditional hours and for medically fragile infants and toddlers. As Anamariksa Rodriguez (2022), the SSEC Program Supervisor, indicated, "Our youngest children are unable to attend a traditional pre-k or daycare due to the nature of their medical condition" (p. 2). In combination, First 5 Kern has funded a variety of programs across *medical and mental health treatments*, *infant and toddler services*, and *expanded hours of program operation* (Ibid. 1).

In Kern County, "Not only is our population in ill health, but the county does not have the healthcare resources to alleviate these issues" (Gearhart, 2016, p. 13). In meeting the dual challenges, Glossary Domains [1] and [4] are adopted to address special program needs for young children and their families. Attainment of **Objective 3** relies on the delivery of various clinic services. Thus, the corresponding outcomes are represented by the number of children being served (RI 1.3.1, 1.3.2, 1.3.4, 1.3.6, 1.3.7, 1.3.8, 1.3.11), as well as the establishment of the program capacity on service coverage (RI 1.3.10). **Objectives 2** and **4** address support for *mothers in pregnancy* and *children with special needs*. Accordingly, program targets are set on the capacity of prenatal care (RI 1.2.1-1.2.7) and special needs identification (RI 1.4.2).

To sustain *Health Insurance Enrollment* in **Objective 1**, FCP supports 55 providers to attend training or other educational services related to *Health and Wellness* this year (RI 4.1.3), exceeding the annual target count of 50. In Glossary Domain [4], Black Infant Health (BIH), Children's Mobile Immunization Program (CMIP), and NFP offer education on the importance of prenatal care to 198 mothers (RI 1.2.3), surpassing the total target of 154 for these programs.

Although California has a low death rate nationally among pregnant women and new mothers, the baby mortality ratio for Black mothers is six times worse than the rate for white women (Ronayne, 2021). Carrigan (2022) further revealed that

- Kern's percentage of premature Black infants is nearly 1.2 times higher than the state.
- Kern's rate of underweight Black infants is nearly 1.2 times higher than the state.
- Kern's report of Black maternal deaths is 1.5 times higher than the state. (p. 5-7)

To address these issues, BIH offers case management services to 37 children (RI 2.1.7). In addition, fifty-seven women have received prenatal referrals (RI 1.2.2). BIH also provides information on prenatal care to 57 pregnant women and mothers (RI 1.2.3). Sixty families are offered substance abuse education (RI 1.2.5) and tobacco cessation education (RI 1.2.6). BIH and NFP conducted 161 home visits, above the target of 128 homes for RI 1.2.7, as prescribed by **Objective 2**.

Additional services are funded in Domains [2] and [3] to support health education, general treatment, and dental care (see Table 8). For instance, Arvin Family Resource Center and Buttonwillow Community Resource Center extend application assistance to 64 families for healthcare access (RI 1.1.1), above the target count of 12. Medical homes are created by the Medically Vulnerable Care Coordination Program Kern County (MVCCP, formerly named MVCCP-KC), Medically Vulnerable Infant Program (MVIP), and Nurse Family Partnership (NFP) for 555 children, surpassing 105 children in the target (RI 1.1.5).

Moreover, First 5 Association of California urges "an intentional focus on Prenatal-3 during this critical stage of child development".[14] In FY 2022-2023, 101 pregnant women and/or mothers were visited by nurses from NFP to obtain information and education on prenatal and postnatal care (RI 1.2.7), including 93 participants for breastfeeding education (RI 1.2.4) that exceeded the target count of 58. The alignment between RI designation and service description is presented in Table 9.

Table 9: Service Description and RI Designation in *Health and Wellness*

Objective	Service Description	RI Designation
1	Health Insurance Enrollment	Family and Child Coverage
2	Prenatal Services	Support for Mothers during 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

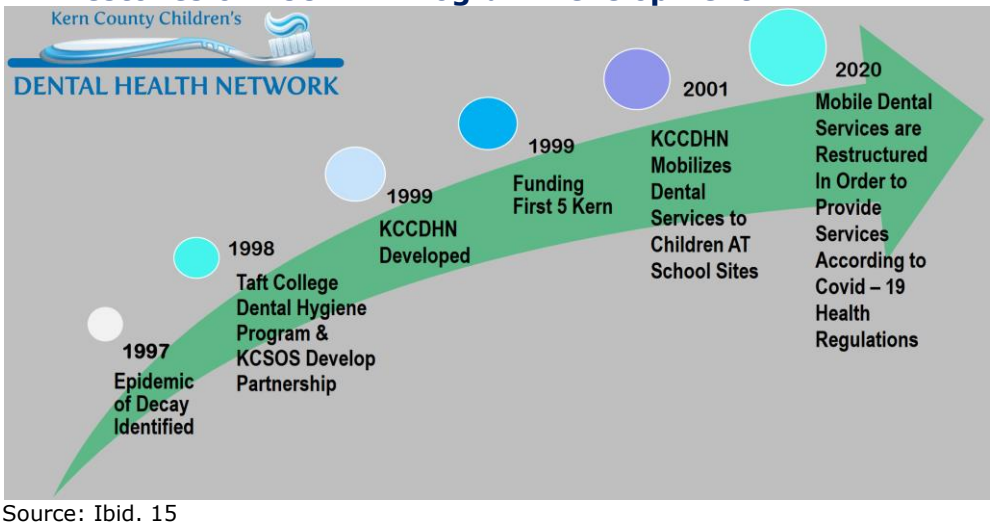
In protecting child wellbeing, First 5 Kern funds CMIP with a mission to safeguard children from preventable diseases.[15] The program has offered immunization services to 606 children ages 0-5 (RI 1.3.11). As the program announced, "If you can't afford your child's vaccinations, let us help. Our mobile unit brings the immunization clinic to you, and, thanks to our partnership with First 5 Kern, there's no charge for children who qualify."[16] In capacity building, CMIP has operated at 115 immunization clinics, larger than 96 in the target (RI 1.3.10). In addition, health screenings (Hemoglobin Tests) are offered to 344 children this year (RI 1.3.2). As part of the impact story, a first-time mom and her one-year-old daughter sought immunization services from CMIP. The mother testified that the mobile clinic was very good, quick, and easy. "Being able to hold my child while she received immunizations was my favorite part." She gave a perfect score for the service (Ibid. 3). The CMIP support is aligned with the program description in Domain [2] of the state report glossary.

Clinic Service is another core component of **Objective 3** in *Child Health*. Dental health often goes overlooked when discussing early childhood health, but it remains a

[14] https://pac.org/job/director-government-affairs-189/
[15] https://www.first5kern.org/wp-content/uploads/2021/07/August-CFC-agenda-packet-080421.pdf
[16] https://www.adventisthealth.org/bakersfield/services/childrens-immunizations/

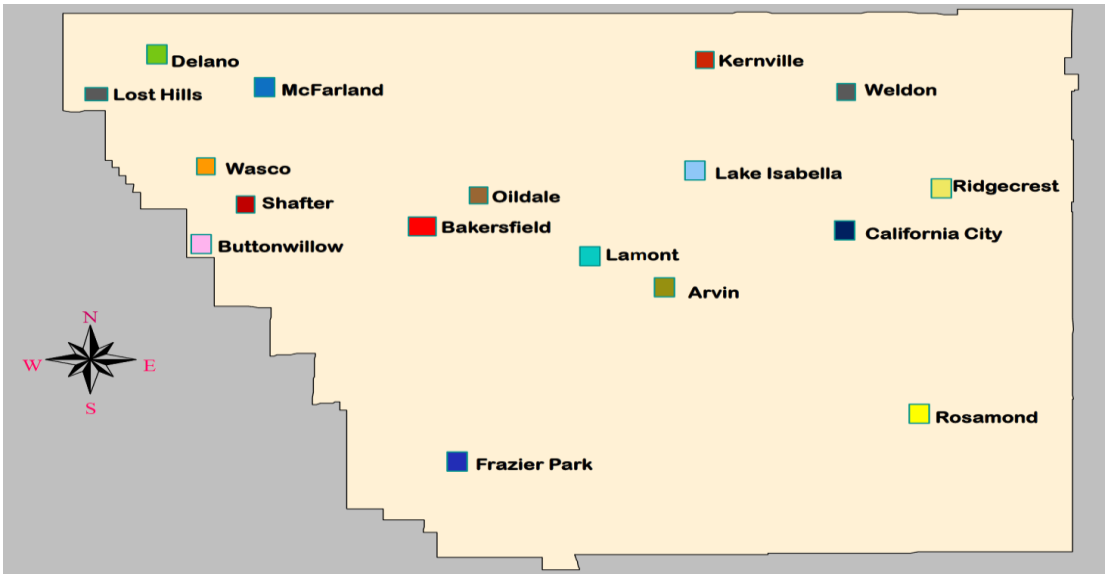
significant concern. Poor oral health in early childhood can lead to pain, infections, and challenges with speech and self-esteem. According to First 5 Association of California (2017), tooth decay ranked among the most common reasons for chronic absenteeism in kindergarten. In regions like Kern County, where access to pediatric dental care is limited, these issues can go unaddressed. To fill the void, First 5 Kern funded Kern County Children's Dental Health Network (KCCDHN), one of the longest service providers in *Child Health*. Milestones of the program development are depicted in Figure 14 since its inception.

Figure 14: Milestones of KCCDHN Program Development



Source: Ibid. 15

Figure 15: Distribution of KCCDHN Service Access across 17 Communities



Source: Ibid. 15

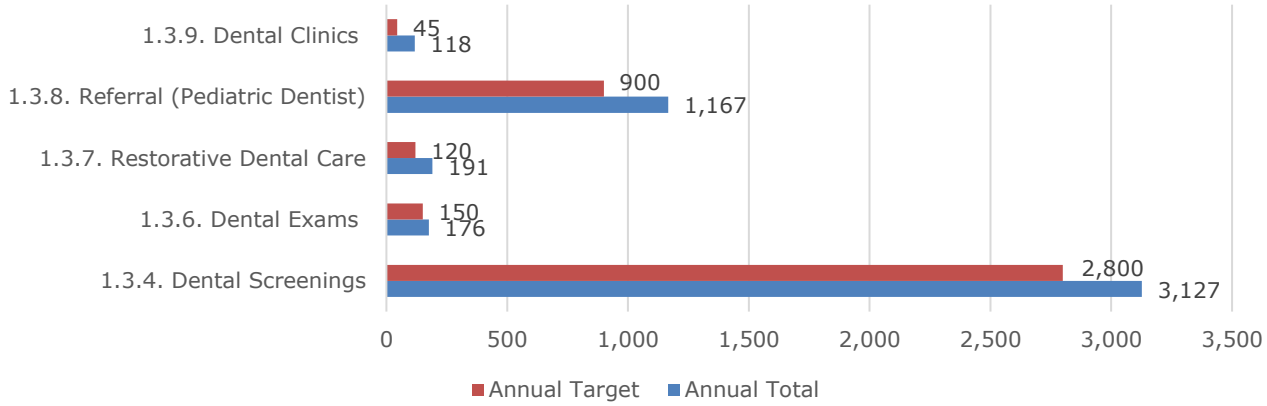
Built on its services for more than two decades, KCCDHN has incorporated Drive-Thru Dental Screenings in four steps:

- Professional teams for dental screenings are stationed in a designated parking lot;
- Up to 3 Families are scheduled every 10 minutes;

- Parents complete consent forms on-site;
- Children receive a dental screening, fluoride varnish application, dental education, and referral for treatment if needed.

During FY 2022-2023, KCCDHN increased the number of clinics to 118 this year (RI 1.3.9), far above its target of 45, to expand dental services in 17 communities (Figure 15). The program also provides dental screening for 3,127 children (RI 1.3.4) and 1,167 appointments for pediatric dentists (RI 1.3.8), leading to the completion of 1,394 restorative dental services for 191 children (RI 1.3.7). The service counts are above the annual targets for these indicators (Figure 16).

Figure 16: Dental Service Counts above Result Indicator Targets



The service count increase is illustrated in Figure 16 across the *dental clinics*, *dental screening, restorative dental care, dental exams,* and *dentist referral* categories. As a regular practice, a six-month reminder has been sent to families to continue the services after dental home establishment, and the number of dental home offerings has increased to 588 on RI 1.1.6. KCCDHN offered 176 dental exams, larger than its target of 150 (RI 1.3.6). In FY 2022-2023, a total of 184 preventative treatments were handled by pediatric dentists, and 6,040 preventative treatments were completed by KCCDHN staff. In supporting school readiness, KCCDHN made an extra effort to avoid interruption of dental services for some kindergarteners who had been in the program since age 5. In FY 2022-2023, the largest spending occurred with five-year-old children (Figure 17). Compared to last year, the investment amount nearly doubled for that group. The program offered case-management services for 320 children, above the target count of 200 (RI 2.1.7).

According to the Mayo Clinic, "Oral health is whole-person health, and untreated dental disease has been linked to stroke, heart disease and diabetes in adulthood."[17] Due to the long-term impact, every child should have an oral health exam by age one or when the first tooth emerges. Within this funding cycle, a consistent increase occurred in the cases of dental screening and fluoride varnish application (Figure 18).

[17] https://www.gmtoday.com/health/mayo-clinic-q-and-a-keeping-childrens-teeth-healthy/article_11f5ba10-1b2d-11ee-9ccb-ef5d50ff4654.html

Figure 17: Fund Allocation for Oral Health Case Management

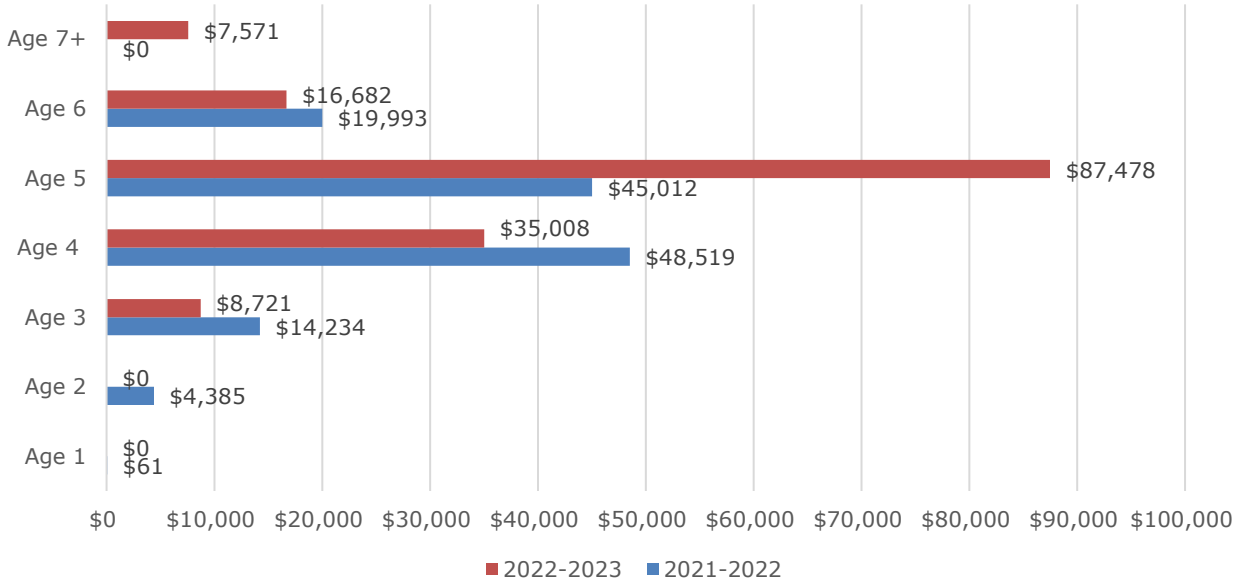
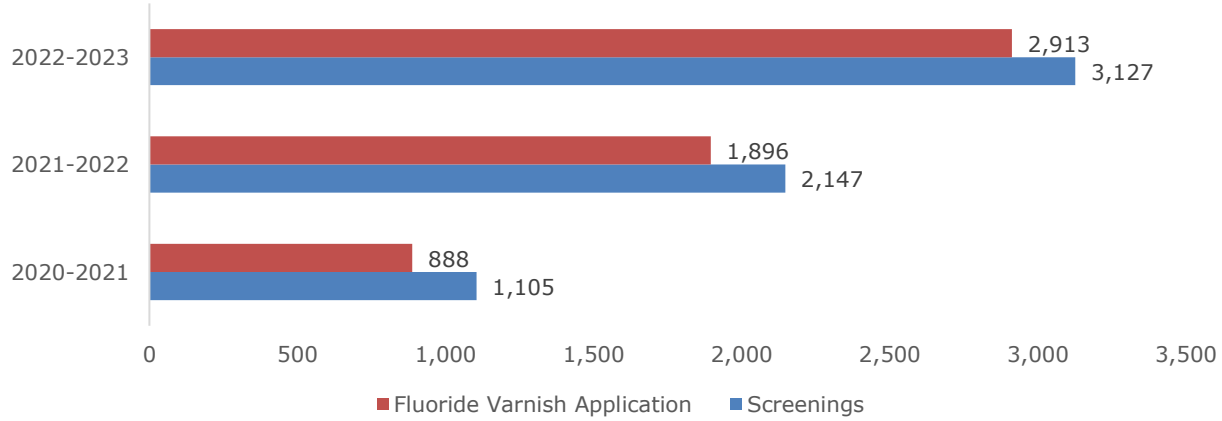


Figure 18: Trend of Dental Screening and Fluoride Varnish Application



These services have generated positive outcomes in Domain [3] to sustain oral health treatments with well-rounded team support for problem-solving. This year, a child received a dental screening/fluoride varnish application and was identified with visual caries. When a dental office contacted the mom to verify an appointment, it became clear that the parent was deaf. With the coordination of KCCDHN, extra effort was made to arrange an interpreter and ensure accurate communication for a child of a refugee family at a dental appointment (Ibid. 3). As Children Now (2018) noted, "Care coordination is especially critical for children with special health care needs" (p. 35).

Guided by **Objective 4**, MVCCP oversees case referrals across a network of hospitals and other partner agencies. HMG also referred 62 children in the Health and Wellness domain (RI 2.4.4). In program collaboration, HMG supported 11 providers in education events (RI 4.4.1) and 51 providers (RI 4.5.4) in four collaborative meetings (RI 4.5.3). Social service referrals are provided by 2-1-1 Kern County (2-1-1) to 1,423

families, including 691 families for developmental screening, on RI 2.4.1. Impact stories indicated that information and referral (I&R) specialists at 2-1-1 not only offered answers to resource questions for local families, but also paid special attention to the needs of young children.

For instance, a recent caller contacted 2-1-1 in need of information for resource items for a large household. While the caller answered a few demographic questions with the I&R Specialist, the mom shared she had a child under five years old. The parent was offered a developmental screening as an additional resource option through Help Me Grow Kern County and completed a developmental screening over the phone. A Help Me Grow Development Specialist was able to walk the parent through the process of completing both Ages and Stages Questionnaires, and the parent shared concerns about her son's behavior. The Developmental Specialist was able to address the parent's concerns, and a referral was sent to Kern Behavioral Health and Recovery Services. The mom will be contacted to schedule an appointment for an assessment. Mom was thankful for the opportunity to complete both Help Me Grow screenings and receive the resources her family needed. (Ibid. 3).

Altogether, MVCCP and MVIP have assisted 476 children with special needs in service access (RI 1.4.2), far above the MVIP target count of 55. Besides the completion of developmental screening for 274 children by the IMPACT project of the state commission, Blanton Child Development Center (BCDC), Health Literacy Program (HLP), and HMG have screened 446 children for potential developmental delay (RI 1.3.1), surpassing their target of 365. The service expansion is important because "Accessible, quality health care and seamless care coordination are critical to achieving positive health outcomes for children and to promoting efficient care through prevention, early detection and disease management" (Children Now, 2018, p. 35).

For over five years, First 5 county commissions have been the largest funders of home visiting programs across California (First 5 Association of California, 2017). In addition, the effectiveness of NFP has been demonstrated through randomized trials across the nation (Heckman, 2014), and BIH is another program that has a proven record of success in reducing the mortality of African-American infants across 13 counties in California (Parma, 2022). The *group-based education in BIH* and *home-based consultation in NFP* have jointly contributed to enhancing *Perinatal and Early Childhood Home Visiting* indicators in Domain [4] of the state report glossary. Early intervention is cost-beneficial because "The highest rate of return in early childhood development comes from investing as early as possible" (Heckman, 2012, ¶. 2). Therefore, an 18-month Kern County home visiting project includes BIH, NFP, Family Resource Centers, and other community partners to collect data and host collaborative learning sessions on program models for the service populations in local communities.[18]

The broad impact has been illustrated by a BIH story on offering one-on-one case management to extend support in both material and spiritual dimensions. For example, a recent participant was encouraged by her Family Health Advocate to set goals. When the Advocate stopped by to deliver some diapers, the client announced that she took her advice to apply for County jobs on the Kern County Job's website and had acquired a job

[18] First 5 Kern's annual report to the State Commission.

with the Kern County Housing Authority. She felt more confident and self-empowered with the BIH program support (Ibid. 3).

Court Appointed Special Advocates (CASA), also known as the Infant and Toddler Program (ITP), is designed to enhance the health and safety of infants and toddlers under a circumstance of abuse and/or neglect. Besides weekly visits of CASA volunteers to children in foster care, the program offers resource packets to guide client access to health and education services. This program partners with HMG to support service provider training in child developmental screening. Meanwhile, HLP continues its nutrition and fitness education services to address **Objective 5** of Child Health.

Safety Education in **Objective 6** is addressed by KVAP and MAS. In Kern County, an essential 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 training on different devices in two locations, the remotely located Weldon and densely-populated Bakersfield. In FY 2022-2023, outcomes in Domain [2] are reflected by swim lesson completion for 306 children in KVAP and MAS (RI 1.6.2). Meanwhile, 28 parents or guardians participated in KVAP swim lessons, above its target of 25 (RI 1.6.3). Training for First Aid/Cardiopulmonary Resuscitation is offered by FCP, KVAP, and MAS to 144 parents/guardians, surpassing the target count of 115 (RI 1.6.4). KVAP also offers water safety education for 129 children, exceeding its target of 80 (RI 1.6.1).

In summary, young children are vulnerable and "the most likely to experience severe injury or death" (Kern County Network for Children, 2017, p. 10). Parent education on hazard prevention, such as water safety, is critical for maintaining the health and wellness of infants, toddlers, and preschoolers. In traditionally underserved communities with special needs, oral, medical, and mental health services are provided by BIH, CMIP, KCCDHN, MVIP, NFP, RSNC, and SSEC. MVCCP is designed to further address the *Systems of Care*. In FY 2022-2023, the entangled issues of health insurance, medication, and medical equipment resulted in a child's visit to an emergency room. Due to the program assistance, the child did not need any more acute care services. The mother stated: "I was getting the run-around and wouldn't have been able to figure this out without you [the nurse]" (Ibid. 3). Guided by First 5 Kern's (2023) strategic plan, a dozen programs collectively addressed six objectives of *Health and Wellness*:

(1) Children were enrolled in existing health insurance programs with support of AFRC and BCRC;
(2) Prenatal support was provided by BIH and NFP programs;
(3) Medical, dental, and behavioral health services were delivered by CMIP, KCCDHN, and RSNC;
(4) Special-needs services were supported by MVCCP, MVIP, RSNC, and SSEC;
(5) Early screening of developmental delay was conducted by CASA, HMG, MVCCP, and MVIP;
(6) Injury prevention and water safety were addressed by KVAP and MAS.

Primary features of program support are categorized into four domains to differentiate the *health education*, *home visiting*, *oral health*, and *early intervention* services for children ages 0-5 (Table 10).

Table 10: Program Features in *Health and Wellness*

Domain	Program*	Primary Services	Age
Early Intervention	HMG	Developmental Screening	0-5
	MVIP	Targeted Intensive Intervention	0-2
	SSEC	Targeted Intensive Intervention	0-2
	RSNC	Targeted Intensive Intervention	3-5
General Health Education and Promotion	CASA	Developmental Screening on Potential Delay	0-5
	CMIP	Mobile Program for Immunizations	0-5
	KVAP	Safety Education in Weldon	0-5
	MAS	Safety Education in Bakersfield	0-5
	MVCCP	Quality Health Systems Improvement	0-5
Oral Health	KCCDHN	Mobile Program for Oral Healthcare	0-5
Prenatal/Infant Home Visiting	BIH	Maternal/Child Healthcare	0-2
	NFP	Maternal/Child Healthcare	0-2

*Program full names are listed in Appendix A.

In comparison to last year, service deliveries have increased in Child Health across 17 result indicators (Table 11).

Table 11: Increases of the Service Count in Child Health Between Adjacent Years

Result Indicator	FY 2021-2022	FY 2022-2023
1.1.5. Medical Home	373	555
1.1.6. Dental Home	442	588
1.2.2. Referral (Prenatal Care)	46	57
1.2.4. Breastfeeding Education	70	93
1.2.5. Substance Abuse Education	58	60
1.2.6. Tobacco Cessation Education	58	60
1.2.7. Home Visits (Prenatal/Postnatal)	155	161
1.3.1. Developmental Screenings	699	720
1.3.4. Dental Screenings	2,147	3,127
1.3.7. Restorative Dental Care	99	191
1.3.8. Referral (Pediatric Dentist)	893	1167
1.3.9. Dental Clinics	94	118
1.4.1. Developmental Screenings (Identified Special Needs)	0	8
1.4.2. Special Needs Services	351	476
1.5.2. Nutrition/Fitness Education (Parents/Guardians)	107	119
1.6.1. Water Safety Education	106	129
1.6.4. CPR Education	87	144

Improvement of Program Outcomes across Service Providers

The *Child Health* domain covers preventive and restorative care (Belsey, 2009). Both demand data tracking to assess the effectiveness of program support in child developmental screening, parent education, behavioral health intervention, and infant service coordination. In this section, assessment outcomes are gathered to evaluate the improvement of service benefits for local children ages 0-5 and their families.

1. Support of Healthy Child Development

In FY 2022-2023, indicators of early childhood development are collected from ASQ-3 screening in CASA, HMG, MVIP, and NFP programs. Table 12 contains the percent of children with performance levels above the age-specific ASQ-3 thresholds in *Communication* (COM)*, Gross Motor* (GM)*, Fine Motor* (FM)*, Personal-Social* (PerS), and *Problem-Solving* (ProS) domains. In comparison, a relatively consistent finding has been obtained in ProS to show 81% or more children performing above the threshold across the four programs. The program-specific findings are discussed below.

Table 12: Percent of Children with Performance Level above ASQ-3 Threshold

Program*	N	COM	GM	FM	PerS	ProS
CASA	22	63.6	54.5	68.2	77.3	81.8
HMG	440	86.6	86.1	76.8	89.8	93.4
MVIP	11	81.8	45.5	72.7	63.6	81.8
NFP	27	88.9	77.8	96.3	92.6	96.3

*Program full names are listed in Appendix A.

In CASA, the ASQ-3 screening indicates no developmental delays among 54% or more children. Because of its support for children in an abused and/or neglected environment, the CASA sample is relatively small (i.e., N<30). Because of its service domain within children who had exposure to adverse experiences, the percentage in COM is lower than in other programs, given the adverse circumstances.

In contrast, HMG collected much larger data to detect developmental delays in the general population. In a real story about its impactful service, a parent heard about HMG via television and called 211 for assistance. She was transferred to a Development Specialist to complete a screening for her child. The ASQ:SE-2 and ASQ-3 screening results indicated developmental delays in multiple domains. Timely appointments were scheduled for this child at Kern Regional Center for further assessment (Ibid. 3). In alignment with this kind of diligent effort, the HMG result in Table 12 shows 76% or more children performing above the threshold across five ASQ-3 domains.

Historically, MVIP was redesigned from a project, the *High-Risk Infant Program*, to promote family-centered, community-based, and coordinated care for children with special healthcare needs. In June 2000, Clinica Sierra Vista received a Title V grant to sponsor nurse visits and case management services for over 2,000 infants in Kern County. The program focused on (1) reducing hospitalizations and emergency room 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) guiding families to address infant's special needs; (7) reducing child mortality in high-risk population; and (8) preventing early abuse consequences. With First 5 Kern funding, eleven medically vulnerable infants received ASQ-3 screening in MVIP this year. It has been shown in Table 12 that the health constraint did not hinder the development of communication and problem-solving skills – more than 81% of the children performed above the COM and ProS thresholds.

In improving pregnancy outcome and infant development, intensive case management services are arranged by NFP 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. Public health nurses are sent to conduct home visits with low-income, first-time mothers at the *prenatal* and *infant care* stage for two and a half years. Topics of parent education include newborn care, parenting preparation, baby-friendly environment setting, referral assistance, and healthy pregnancy. The program also offers communications in both English and Spanish to ensure effective parental engagement. By design, the service outreach covers communities of Bakersfield, Lamont, Ridgecrest, Rosamond, Shafter, and Wasco. The positive impact of NFP is demonstrated by the highest percentage of children passing the COM, FM, PerS, and ProS thresholds of ASQ-3 screening in Table 12.

Table 13: ASQ-3 Results from CASA, HMG, MVIP, and NFP

Program	Domain	df	t	p	Effect Size
CASA	COM	21	2.04	0.0539	0.89
	GM	21	5.23	<.0001	2.28
	FM	21	3.63	0.0016	1.58
	PerS	21	5.04	<.0001	2.20
	ProS	21	2.02	0.0567	0.88
HMG	COM	439	22.97	<.0001	2.19
	GM	439	38.40	<.0001	3.67
	FM	439	29.53	<.0001	2.82
	PerS	439	29.62	<.0001	2.83
	ProS	439	31.82	<.0001	3.04
MVIP	COM	10	3.22	0.0092	2.04
	GM	10	1.14	0.2820	0.72
	FM	10	1.24	0.2441	0.78
	PerS	10	2.00	0.0735	1.26
	ProS	10	1.87	0.0911	1.18
NFP	COM	26	8.54	<.0001	3.35
	GM	26	7.96	<.0001	3.12
	FM	26	9.93	<.0001	3.89
	PerS	26	8.81	<.0001	3.46
	ProS	26	10.37	<.0001	4.07

Due to the program differences, the results of data analysis seem to be impacted by the sample size. For programs with a sample larger than 30 (i.e., HMG and NFP), child performance is significantly above the ASQ-3 thresholds at α=.0001. For CASA and MVIP with smaller samples, not all the child development indicators are significant at α=.05 (Table 13). In avoiding potential statistical artifacts, effect sizes are computed to reflect the practical program impact that is less sensitive to the sample size variation. Except for two ASQ-3 domains in the MVIP results, most effect sizes in Table 13 are above 0.80, suggesting strong practical influences of First 5 Kern-funded programs in child growth.

2. Improvement of Parent Health Literacy

First 5 Kern funded HLP to offer health literacy education for 63 parents (RI 2.3.2), above its target of 60. "Given that children learn their habits from the adults in their life, it is important for adults to both create an environment conducive to healthy living and lead by example" (Constantine & Jonah, 2017, p. 27). This year, HLP reported the positive

impact of its family engagement workshops on both children and parents. At a school garden, children and parents watered plants, picked weeds, and washed fresh vegetables. Many parents commented on how they didn't think they could garden because they needed a large outdoor space. The facilitator explained all the different ways to grow a garden, indoors and outdoors, and plant in buckets, cups, pots, etc. As a result, many parents developed plans on how they could make a salsa garden or vegetable garden. Each parent was given a cucumber plant at the workshop, and one reported back that she was able to transplant it in her backyard, and it was growing (Ibid. 3).

In improving parents' understanding of child wellbeing, the program offering has kept families engaged in improving child health and wellness. Based on the Scope of Work and Evaluation Plan, HLP and FCP offered nutrition and fitness education to 119 parents or guardians this year, larger than their target count of 90. The service on enhancing health literacy has addressed RI 1.5.2 of First 5 Kern's (2023) strategic plan, i.e., "Number of parents/guardians who received nutrition and/or fitness education" (p. 5).

3. Support of Healthy Parent-Infant Interaction

Parent-infant interaction is important in developing an infant's central nervous system (Barlow et al., 2007). NFP adopts the Dyadic Assessment of Naturalistic Caregiver-Child Experiences (DANCE) to monitor the effectiveness of parent-infant interaction. The data were collected in June 2023 from three eligible participants: Two infants in the ninth month and the other in the 16th month. In comparison, the DANCE data contained 22 cases last year. Apparently, changes in the program supervision and data entry staff occurred this year, which might have contributed to the small sample size. The golden standards of the DANCE *Sensitivity and Responsivity* scale[19] are listed in Table 14 to evaluate the effect of parent-infant interaction.

Table 14: DANCE Results on the Sensitivity and Responsivity Scale

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

The results show that caregivers surpass the golden standards in *Visual Engagement* and *Responsiveness*. In the *Positioning, Pacing, Negative Touch, and Non-Intrusiveness* domains, the outcomes meet the corresponding golden standards. According to the scale design, *Visual Engagement* addresses the caregiver's visual attention toward the child or a shared focus of interest. *Responsiveness* displays the caregiver's supportive reactions to the child's state, affect, and communication. *Positioning* gauges the caregiver's proper location to read the child's communications. *Pacing* indicates the tempo of caregiver-child interactions that is complementary to the child's behavior, activity level, and needs. *Negative Touch* assesses if the caregiver's

[19] https://docplayer.net/118332851-Dyadic-assessment-of-naturalistic-caregiver-child-experiences-dance.html

touch of the child is rough. *Non-Intrusiveness* represents no intrusion of caregivers in the child's activity, as well as emotional or physical space. These indicators are important because "Development and learning are dynamic processes that reflect the complex interplay between a child's biological characteristics and the environment" (National Association for the Education of Young Children [NAEYC], 2020, p. 8).

On the DANCE scale of *Emotional Quality and Behavioral Regulation*, results in Table 15 show caregiver performance above the golden standard of *Verbal Connectedness*. In *Caregiver's Affect Complements Child's Affect*, improvement is needed to reach the golden standard that ensures 100% of the caregiver's affect, facilitating the maintenance of the child's positive to neutral affective state, and as needed, a return to the child's positive to neutral affective state. Likewise, the program needs to strengthen the indicator of *Expressed Positive Affect* that reflects low to high-intensity pleasure in the observable display (facial expression, verbal tone, body language, and gestures). In *Verbal Quality*, the DANCE result meets the golden standards of 100% to confirm kind, respectful, and cheerful communication from caregiver to child.

Table 15: DANCE Results on Emotional Quality and Behavioral Regulation

Scale of Emotional Quality and Behavioral Regulation	NFP Result	Golden Standard
1. Expressed Positive Affect	96.7%	100%
2. Caregiver's Affect Complements Child's Affect	88.3%	100%
3. Verbal Quality	100%	100%
4. Verbal Connectedness	93.3%	75%

In summary, findings in Tables 13 and 14 are approaching, meeting, or above the golden standards of the DANCE measurement.[20] The variation might reflect the small sample that was atypical for NFP. In FY 2022-2023, NFP engaged in the delivery of other services and surpassed its target counts in all the result indicators. More importantly, the counts in Table 16 are much larger than three. Comparable expectations were made in FY 2021-2022, and the DANCE data contained more cases. To support a valid report of the DANCE findings, First 5 Kern is urged to communicate with NFP on the potential issue of DANCE information gathering.

Table 16: NFP's Outcome on Other Result Indicators Besides DANCE Assessment

RI Label	2.2.3	2.1.7	1.2.7	1.2.4	1.2.3	1.1.5
Service count	93	81	101	93	97	79
Target	58	50	58	58	58	59

4. Coordination of Infant Medical Services

Prior to the commission support, few organizations offered similar programs like MVCCP for infants in Kern County with serious health conditions. It was reported that MVCCP "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). The need has been

[20] http://www.cittdesign.com/dance/sites/default/files/Practice5_19M_1_0.pdf

persistent when Medi-Cal and Healthy Families have restrictions on assisting undocumented families.

To strengthen the support for network building, MVCCP is designed to bridge gaps and leverage resources to improve the service system to benefit parents, providers, and other partners of healthcare. The partnership also includes collaboration with the Maternal, Child, and Adolescent Health (MCAH) program of the Kern Department of Public Health. 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."[21] The care coordination reflects the Proposition 10 spirit of filling a void in the existing system.

On May 17, 2023, First 5 Kern organized the second annual *ACEs Conference: Building Community Resilience* at the Bakersfield Marriott to support the Resilient Kern Coalition.[22] Among 132 respondents who attended the conference, 98.5% believed that the conference has met or exceeded their expectations. One hundred and twenty-six respondents reported that the speakers were "very engaging" or "extremely engaging", and 109 indicated their interest in participating in the First 5 Kern Trauma Informed Care training.

In summary, information in this section focuses on service outcomes of First 5 Kern-funded programs in *Health and Wellness*. Program features are 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, and preschoolers). In justifying the Results-Based Accountability on these dimensions, evaluation findings are derived from various sources of data (e.g., ASQ-3, DANCE) and service providers (KCCDHN). As First 5 Kern (2023) 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. 2).

The service tracking and value-added assessment in this section consistently indicated First 5 Kern's positive impact on *Health and Wellness* across Kern County.

(II) Service Enhancement in *Family Functioning*

For children ages 0-5, parenting is crucial in shaping their cognitive, emotional, and physical development. In general, "Parents tend to need child care earlier in their career when lower salaries match their limited experience. ... They spend an average of 14% of their household income on child care, twice the share the federal government recommends" (Hamilton, 2023, p. 7). By empowering parents with the knowledge and skills they need, First 5 Kern will lay bright prospects for the youngest Kern residents.

[21] https://first5.calaverasgov.us/First-5-Calaveras/Prop-10-Information
[22] https://www.resilientkern.org/aces-aware/aces-conference-2023/

While in the prosperous state of California, Kern County has a lower average family income in comparison to the rest of the state. One of the primary factors is its heavy reliance on agriculture, a sector of employment that often offers lower wages than other industries. The employment is also seasonal, making it difficult for families to secure a steady source of income year-round. To cope with the stress, *Parent Education and Support Services* have been identified as a focus area in First 5 Kern's (2023) strategic plan. Table 17 shows the program affiliation in the report domains of general family support (GFS) and intensive family support (IFS) for the commission report to the state.

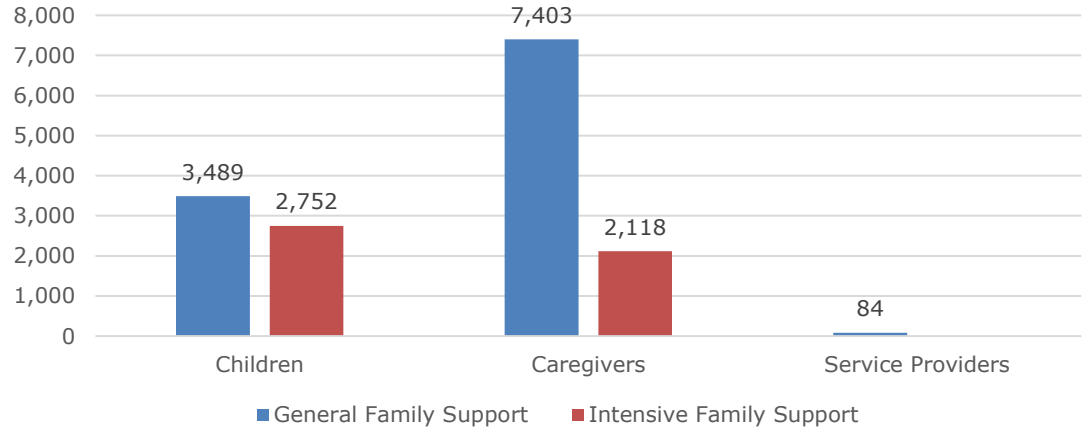
Table 17: Program Affiliation with Report Domains in Family Functioning

Report Domains	Programs in Family Functioning
General Family Support	2-1-1 Kern County
	Arvin Family Resource Center
	Buttonwillow Community Resource Center
	East Kern Family Resource Center
	Family Caregivers Project
	Greenfield School Readiness Program
	Kern River Valley Family Resource Center
	Lamont/Vineland School Readiness Program
	McFarland Family Resource Center
	Mountain Communities Family Resource Center
	Oasis Family Resource Center
	Shafter Healthy Start
	Southeast Neighborhood Partnership Family Resource Center
	Women's Shelter Network
Intensive Family Support	Differential Response Services
	Domestic Violence Reduction Project
	Guardianship Caregiver Project

In FY 2022-2023, the commission funded 17 programs for improving family functioning and child wellbeing. As the pandemic impact dwindles down, caregivers are no longer operating in lockdown mode. Center-based services can accommodate more clients than home-based programs. Thus, the caregiver count was reduced from 7,523 last year (Wang, 2023) to 7,403 this year. Meanwhile, the caregiver count increased in IFS from 1,956 to 2,118 to strengthen family function in child protection. The number of children receiving IFS also increased from 2,234 to 2,752. The beneficiary counts in Figure 19 show the capacity of First 5 Kern support for local children, caregivers, and service providers in these domains.

In the IFS programs for child protection, First 5 Kern funded Differential Response Services (DR), the Domestic Violence Reduction Project (DVRP), and the Guardianship Caregiver Project (GCP) to provide safety nets for young children in local communities. "The need for family- and community-centered care is particularly critical in pregnancy and the first five years of life, when the architecture of the brain is established, and neural connections grow at the fastest rate in a person's lifetime" (Briscoe, 2019, p. 1). To support child growth, FCP trained parents and caregivers on nutrition education, parenting skills, and healthy development of children ages 0-5. The program also distributed a toolkit to introduce culturally and linguistically specific tools, activities, and materials for service outreach and network building.

Figure 19: Capacity of General Family Support and Intensive Family Support



It should be noted that this fiscal year is financially difficult for service providers because of the highest inflation surge in forty years (Winters, 2022). First 5 Kern invested $2,039,693 in GFS, which is larger than $1,998,334 last year. Likewise, program expenditure in IFS has increased from $993,058 to $1,014,639 between adjacent years. The total funding reached $3,045,332 in *Family Functioning*, above $2,773,954 last year. Fourteen service providers also leveraged $2,273,531 from partners to sustain the capacity building (Table 18), which is larger than $1,871,289 last year.

Table 18: Leveraged Funds by Programs in *Family Functioning*

Program	Sustainability Funds
2-1-1 Kern County	$383,621.98
Differential Response Services	$504,000.00
East Kern Family Resource Center	$313,500.00
Family Caregiver Project	$275,000.00
Greenfield School Readiness	$10,520.00
Guardianship Caregiver Project	$43,364.00
Kern River Valley FRC/Great Beginnings Program	$135,853.88
Lamont Vineland School Readiness Program	$9,788.52
McFarland Family Resource Center	$115,944.50
Mountain Communities Family Resource Center	$44,239.56
Oasis Family Resource Center	$62,060.00
Shafter Healthy Start	$4,700.00
Southeast Neighborhood Partnership Family Resource Center	$4,135.00
Women's Shelter Network	$359,803.45

As a result, the service count increased in 10 result indicator categories this year (Table 19)

Table 19: Increases of Service Count across Ten Indicators in *Family Functioning*

Result Indicator	FY 2021-2022	FY 2022-2023
2.1.1. Group-Therapy	45	66
2.1.4. General Case Management (Parents/Guardians)	543	548
2.1.6. Preventative Services (Parents/Guardians)	363	1,116
2.1.7. General Case Management (Children)	1,013	1,060
2.1.9. Preventative Services (Children)	468	1,421

Result Indicator	FY 2021-2022	FY 2022-2023
2.2.1. Parent Education (Court-Mandated)	146	170
2.2.2. Parent Education (Group-Based)	129	146
2.2.3. Parent Education (Workshops)	805	894
2.3.2. Literacy Workshops	57	63
2.4.1. Referrals (including developmental screening to HMG)	1,696	2,114

Capacity of Program Support to Strengthen Family Functioning

Services in *Family Functioning* are strategically designed to ensure that "All parents/guardians and caregivers will be knowledgeable about [1] early childhood development, [2] effective parenting and [3] community services" (First 5 Kern, 2023, p. 5). The three-fold considerations are aligned with two domains, GFS and IFS, of the statewide report glossary (see First 5 California, 2023). Table 20 matches these service domains and the four objectives of *Parent Education and Support Services* in First 5 Kern's (2023) strategic plan to articulate different service configurations.

Table 20: 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.	[1]
3. Parents/guardians will be provided with educational services to increase family reading and/or literacy.	[1]
4. Parents/guardians and children will be provided social services.	[1]

General services in Domain [1] are sustained through parent education and social support. In Domain [2], First 5 Kern funded special services to restore and/or improve home environments. A service network has been established through program referrals (e.g., 2-1-1) and collaborations (e.g., Women's Shelter Network with DR, DVRP, and GCP). Across the state, 2-1-1 connects over 1.4 million people to a service network.[23] The local 2-1-1 program provides information about community services 24 hours a day, seven days a week. In FY 2022-2023, 2-1-1 responded to a total of 1,255 unduplicated callers with children ages 0-5. The referrals served 2,043 young children and 174 callers with a pregnant woman in the household. Without the referral support, families could have been misguided, and service delays might have occurred for young children with special needs for program access.

First 5 California (2015b) highlighted the need to "Support sustainability of Family Resource Centers and other community hubs for integrated services for children and families" (p. 1). Due to the importance of improving parenting skills, First 5 Kern (2023) strategically funded programs to enrich caregiver knowledge about early childhood development, childrearing strategies, and community support. These efforts are aligned with the State Commission's attempt to "strengthen families' resilience, expand support

[23] https://www.unitedwaysca.org/our-work/2-1-1-resources

systems, and reduce child abuse and neglect" (First 5 Association of California, 2017, p. 7). 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)

Based on First 5 Kern's (2023) strategic plan, *Targeted and/or clinical supports* in **Objective 1** are linked to service deliveries at both child (RI 2.1.1, 2.1.7-2.1.9, Ibid. 13) and group (RI 2.1.4-2.1.6, Ibid. 13) levels. For instance, Small Steps Child Development Center and Women's Shelter Network offered group therapy for 42 children (RI 2.1.1). In addition, multiple result indicators have been 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. 13) are assessed to reflect family support in **Objective 2**;
2. Reading strategy development and literacy workshops (RI 2.3.1, 2.3.2, Ibid. 13) are evaluated to address parent/guardian education in **Objective 3**;
3. Program referrals and transportation services (RI 2.4.1, Ibid. 13) are adopted to support program outreach in **Objective 4**.

Table 21 shows the alignment between RI designation and service capacity.

Table 21: Service Capacity and RI Designation

Objective	Service Capacity	RI Designation
[1]	Targeted/Clinical Family Support	Parent and Child Participation
[2]	Parent Education Offerings	Parent Learning Outcome
[3]	Reading Literacy Services	Parent Training Outcome
[4]	Referral/Transportation Support	Family Service Access

In the multiple service deliveries, Community Action Partnership of Kern (CAPK) sponsored 2-1-1 for program referral, HMG for developmental screening, as well as two family resource centers, East Kern Family Resource Center (EKFRC) and Oasis Family Resource Center (OFRC), for case management and parent education through *home-based services* and *kindergarten transition* programs. In partnership with HMG, the 2-1-1 program connects families to medical facilities, family resource centers, legal assistance programs, and other community support systems. Both EKFRC and OFRC are centrally located to expand service access in hard-to-reach communities. As a result, CAPK was recognized as the non-profit of the year for the Beautiful Bakersfield award from the Greater Bakersfield Chamber of Commerce in 2022 (Wang, 2023).

In summary, First 5 Kern fills program gaps by connecting *what is needed* with *what is available* in *Parent Education and Support Services*. In parent support, First 5 Kern funded 15 service providers for general case management (RI 2.1.4), one for intensive case management (RI 2.1.5), four for preventive services (RI 2.1.6), seven for court-mandated parent education (RI 2.2.1), five for group-based parent education (RI

2.2.2), and 13 for parent education workshops (RI 2.2.3). In addition to the direct program support, *referral services* are offered to strengthen partner collaboration. The dual emphases are 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). It is the program support and partnership collaboration that sustain service deliveries for children ages 0-5 and their families across Kern County.

Overview of Program Alignment with the Strategic Plan

While children are born equal, their growth environment may vary. "Research shows the brain develops best in safe settings that are without intense stress" (Hamilton, 2023, p. 3). To extend a protection network for all children, DR examines reports of child abuse and neglect based on information from Child Protective Services (CPS). DR case managers discuss family assessments, care plans, and service delivery strategies, as well as positive and negative implications to child development at weekly meetings with service supervisors. Case closures are dependent on the mitigation of risk factors with confirmation from DR supervisors. Intensive home visitations are conducted to reduce the recurrence rate.

For instance, a case manager of DR worked on a general neglect case in which a mother and a toddler lived with maternal grandparents. Allegations have been brought to the attention of law enforcement regarding the kid walking alone in the middle of the street. With DR's support, the mother was able to send the child to a preschool. After-school care has been arranged for the next school year when the child becomes a full-time kindergartener. The case was closed successfully, and the mother was very thankful for DR services. (Ibid. 3). This example illustrated the scope of service far beyond child protection.

As the DR provider, "Kern County Network for Children [KCNC] serves many functions benefiting children and families in Kern County."[24] Through community networking, DR identifies cases and offers strength-based, family-centered support, such as counseling, parent education, job training, food, utility, housing assistance, and transportation. The leadership is illustrated by six projects (Table 22). DR's intensive case management led to home visits to 849 families (RI 2.1.5) that impacted 1,354 children ages 0-5 (RI 2.1.8), surpassing the corresponding targets of 715 and 1,000. The partnership capacity is built on the support of nine county agencies, 15 community-based organizations, 19 family resource centers, and five funders of local child services.[25]

Intense case management services are also provided by CASA for 49 children (RI 2.1.8). Each case demands tremendous attention. For example, A four-year-old boy was in foster care when his mother overdosed on pain medication. After approximately three months of parenting classes, substance abuse counseling, and random drug tests, the mother regained his custody with an arrangement of gaining CASA support three to four times a month. His CASA completed an ASQ assessment with him and identified concerns in areas of communication, problem-solving, and fine motor skills. The family was provided school supplies to assist the boy in strengthening his skills in fine motor, language, and comprehension. The CASA reassessed the boy after six months, and the

[24] http://kern.org/kcnc/about/
[25] http://kern.org/kcnc/links/

scores were greatly improved in all areas. If it weren't for the CASA advocating for his academics, he might not have thrived so quickly (Ibid. 3).

Table 22: 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

As a DR partner, DVRP provides legal assistance and representation for victims of domestic violence. Students who experienced domestic violence as infants tend to have worse academic outcomes in school due to neurodevelopmental lags and a higher risk of health issues, including gastrointestinal distress, trouble eating and sleeping, as well as stress and illness (Bullock et al., 2021). Furthermore, children ages 0 to 3 are too fragile to recover from severe abuse or neglect (KCNC, 2017). DVRP takes specific steps to address the need for early protection, including court document preparation, legal consulting, safety planning, victim representation, and resource referral in communities of Bakersfield, Delano, Frazier Park, Mojave, and Shafter.

Child protection further depends on an understanding of the legal system. In an impact story of DVRP, a victim of domestic violence seeks restraining and custody orders. As a drug user, the abuser physically harmed the client and one of their children. He was eventually arrested and served a one-week-long protective order. The order was violated, and the program staff prepared the client's paperwork. A judge heard the case and granted the client a permanent restraining order and permanent custody orders (Ibid. 3).

To gain assistance from extended families, GCP receives First 5 Kern funding to help grandparents and non-parent caregivers in obtaining guardianship for children, and thus, re-establishing stable and loving homes. The new settlement is critical to the discontinuation of physical, mental, and emotional harm to child victims. It is also much needed during the pandemic when the virus claims the lives of primary caregivers, and thus, grandparents are expected to step in for childcare (Dube & Magalhaes, 2021). To reduce issues of attachment, mental anxiety, and psychological depression among young children, the program supports guardianship transitions under critical circumstances, including parent incarceration or unemployment, substance or child abuse, child neglect or abandonment, physical or mental illness, parent divorce, and teen pregnancy.

In FY 2022-2023, GCP reported a story in which a boy had a number of serious disabilities and was in need of many services. As a "putative" parent, a woman sought guardianship to take care of the boy, but his parents were either unavailable or unwilling to grant permission. The GCP staff worked through court proceedings for about a year and a half to get the issue of service resolved. The client obtained guardianship to help the boy proceed with several treatments (Ibid. 3).

Domestic support may involve child protection in a homeless shelter setting. WSN offers family counseling, group therapy, parent education, case management, and medical or legal support. Altogether, GCP, DR, DVRP, and Women's Shelter Network (WSN) served 1,421 children (RI 2.1.9) and 1,116 parents or guardians (RI 2.1.6), surpassing the corresponding targets of 1,107 and 851 this year. These services contribute to the prevention of domestic violence and alleviation of substantiated child abuse/neglect, which, in turn, reduces the burden of foster care facilities.

Across California, "Half of kids in foster care have endured four or more adverse childhood experiences" (Children Now, 2018, p. 49). Within the local community, Corson (2017) estimated, "On average, 50 children per day are referred to CPS for abuse or neglect with an average of 10 substantiated referrals per day" (p. 2). First 5 Kern funded the following FRCs to strengthen family stability:

1. Arvin Family Resource Center (AFRC)
2. Buttonwillow Community Resource Center (BCRC)
3. East Kern Family Resource Center (EKFRC)
4. Greenfield School Readiness (GSR)
5. Kern River Valley Family Resource Center-Great Beginnings Program (KRVFRC)
6. Lamont Vineland School Readiness Program (LVSRP)
7. McFarland Family Resource Center (MFRC)
8. Mountain Communities Family Resource Center (MCFRC)
9. Oasis Family Resource Center (OFRC)
10. Shafter Healthy Start (SHS)
11. Southeast Neighborhood Partnership Family Resource Center (SENP)

Four additional programs received funding in *Focus Area III: Early Childcare and Education* with a scope of work in *Parent Education and Support Services*:

1. Delano School Readiness (DSR)
2. Lost Hills Family Resource Center (LHFRC)
3. Neighborhood Place Community Learning Center (NPCLC)
4. West Side Outreach and Learning Center (WSOLC)

To increase accessibility, all these FRCs are set at central community locations. Resources from the National Association for the Education of Young Children (NAEYC) are employed to enrich culturally relevant parent education and support services. Table 23 shows a support services coverage of 5,393 parents/guardians in 14 programs (RI 2.4.3).

Despite the service overlaps across focus areas, over 90% of the recipients in Table 23 are supported by programs in *Family Functioning*. In comparison, most programs in *Focus Area I: Child Health* provide countywide services. The majority of service providers in *Focus Areas II* and *III* are FRCs and community-based agencies. Due to the emphasis on program support, parent education outcomes in *Focus Area II* are presented below. The last part of this chapter addresses results in *Focus Area III, Early Childcare and Education.*

Table 23: Number of Parents Receiving Support from 14 Programs

Focus Area	Program	2022-2023 Count
Child Health	RSNC	140
Family Functioning	AFRC	330
	BCRC	142
	EKFRC	144
	GSR	633
	KRVFRC	78
	LVSRP	515
	MCFRC	140
	MFRC	1,273
	OFRC	185
	SENP	630
	SHS	319
Child Development	DSR	822
	WSOLC	42

Depending on program capacities, FRC services include court-mandated parent education, nutrition instruction, financial training, school readiness preparation, nurse consultation, transportation support, and legal assistance. The well-rounded support is demonstrated by a list of nearly two dozen partners in FRC brochures for program referrals pertaining to (1) medical, dental, and mental health treatment, (2) child developmental screening, (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.

Guided by its strategic plan, First 5 Kern funded court-mandated parent education in seven center-based settings: (1) East Kern Family Resource Center (EKFRC), (2) Kern River Valley Family Resource Center (KRVFRC), (3) Lamont Vineland School Readiness Program (LVSRP), (4) Neighborhood Place Community Learning Center (NPCLC), (5) Oasis Family Resource Center (OFRC), (6) Shafter Healthy Start (SHS), and (7) Southeast Neighborhood Partnership Family Resource Center (SENP). Altogether, these programs are classified into two focus areas to offer the much-needed service for 170 parents (Table 24), which is larger than 146 parents last year. The number also exceeds the annual target of 110 parents (RI 2.2.1).

Table 24: Participant Count in Court-Mandated Parent Education

Focus Area	Program	Parent
Family Functioning	EKFRC	10
	KRVFRC	21
	LVSRP	19
	OFRC	25
	SHS	26
	SENP	39
Child Development	NPCLC	30

Establishment of Parenting Beliefs against Child Maltreatment

Improvement of parental belief is supported by court-mandated parent education according to positive norms of nurturing parenting. To evaluate the outcome, researchers

identified a norm-referenced Adult-Adolescent Parenting Inventory-2 (AAPI-2.1) for measuring attitudes and beliefs about parenting and assessing parental knowledge of child development (Berg, 2011; Moore & Clement, 1998). Constructs of the AAPI-2.1 assessment reflect five parent beliefs on 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

Table 25: Improvement of Parental Beliefs in Seven Programs

Program	Construct	Df	t	p	Effect Size
EKFRC	A	5	1.12	0.3144	1.00
	B	5	3.30	0.0214	2.95
	C	5	4.07	0.0096	3.64
	D	5	0.22	0.8316	0.20
	E	5	1.22	0.2752	1.09
KRVFRC	A	21	0.25	0.8080	0.11
	B	21	4.70	0.0001	2.05
	C	21	1.91	0.0692	0.83
	D	21	1.96	0.0639	0.86
	E	21	1.53	0.1418	0.67
LVSRP	A	10	0.00	1.0000	0
	B	10	3.54	0.0054	2.24
	C	10	4.36	0.0014	2.76
	D	10	0.39	0.7046	0.25
	E	10	2.57	0.0280	1.63
NPCLC	A	18	9.04	<.0001	4.26
	B	18	10.91	<.0001	5.14
	C	18	5.41	<.0001	2.55
	D	18	6.00	<.0001	2.83
	E	18	4.92	0.0001	2.32
OFRC	A	25	3.55	0.0016	1.42
	B	25	7.51	<.0001	3.00
	C	25	5.45	<.0001	2.18
	D	25	0.55	0.5899	0.22
	E	25	2.45	0.0216	0.98
SENP	A	25	3.35	0.0026	1.34
	B	25	7.97	<.0001	3.19
	C	25	5.24	<.0001	2.10
	D	25	6.73	<.0001	2.69
	E	25	1.86	0.0747	0.74
SHS	A	11	1.10	0.2933	0.66
	B	11	4.47	0.0009	2.70
	C	11	4.26	0.0013	2.57
	D	11	1.91	0.0821	1.15
	E	11	0.64	0.5364	0.39

Besides First 5 Kern, at least nine other First 5 county commissions employed AAPI-2.1 to evaluate the effectiveness of parent education.[26] The instrument was recommended by California Evidence-Based Clearinghouse for Child Welfare (2014). "Responses to the inventory provide an index of risk of behaviors known to be attributable to child abuse and neglect" (First 5 California, 2021, p. 37). In FY 2022-2023, AAPI-2.1 results are gathered from pretest and posttest sessions to track 122 data records from seven programs. The result consistency is indicated by Cronbach's alpha, which has reached an acceptable level of 0.70.

The data size ranges from six to 26 across seven programs. Due to inadequate data collection (i.e., N<30), effect sizes are computed to assess the practical significance even though the results are not statistically significant. Among the 12 records of AAPI-2.1 in EKFRC, only six parents had their responses tracked between the pretest and posttest. The achieved sample size is too small for a statistical analysis. Meanwhile, a significant impact has been demonstrated in all AAPI-2.1 constructs by NPCLC at α=.0001. All effect sizes in Table 25 are larger than 0.80, suggesting strong practical impacts of these programs.

In addition, KRVFRC, LVSRP, NPCLC, and OFRC illustrate significant improvement of Construct B on parental empathy toward children's needs. Table 26 also shows a significant enhancement of Construct C on parental belief in using physical punishment at KRVFRC. NPCLC exhibits a significant improvement of Constructs D and E on *parent-child family roles* and *children's power or independence* (Table 26). Effect sizes are larger than 0.80 to suggest a practical impact of the program support.

Table 26: Aspects of Significant Impact from KRVFRC, LVSRP, NPCLC and OFRC

Construct	Program*	Result
B	KRVFRC	t(16)=3.43, p=.0034; Effect Size=1.88
	LVSRP	t(8) = 2.47, p=.0390; Effect Size=2.74
	NPCLC	t(11)=4.54, p=.0008; Effect Size=2.01
	OFRC	t(6) = 5.92, p=.0010; Effect Size=2.66
C	KRVFRC	t(16)=2.65, p=.0176; Effect Size=2.46
D	NPCLC	t(11)=3.19, p=.0086; Effect Size=2.01
E	NPCLC	t(11)=4.57, p=.0008; Effect Size=2.01

*Program full names are listed in Appendix A.

Restoration of Family Functioning for Child Protection

Besides the importance of parent education, external intervention is sometimes needed to improve family functioning for child protection. For instance, Children Now (2018) pointed out,

> Children need access to quality, affordable mental health care and supports that monitor and treat mental illness, help kids build positive relationships, assist kids who have experienced trauma, and give kids the ability to face typical stressors with resilience. (p. 37)

First 5 Kern funded four programs to improve family functioning in early childhood

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

protection. The result tracking is reported in this section to gauge program effectiveness.

1. DR Service to Strengthen Child Protection

In FY 2022-2023, DR uses the North Carolina Family Assessment Scale for General Services (NCFAS-G) to monitor the improvement of family functioning on eight dimensions, *Environment, Parental Capabilities, Family Interactions, Family Safety, Child Wellbeing, Social/Community Life, Self-Sufficiency*, and *Family Health*. The assessment is conducted across 111 families from urban, suburban, and rural communities to track changes. The reliability index, as represented by Cronbach's alpha, has reached 0.92 to confirm the consistency of the gain score measures.

Table 27 shows effect sizes between 0.38 and 0.87 for a medium to strong program impact. The largest effect size of 0.87 is found on the *environment safety* indicator, suggesting a strong practical impact of DR on child protection. Statistical testing also indicates a highly significant difference from DR support at α=.05 on all NCFAS-G scales, except for the one on *Social/Community Life*.

Table 27: Impact of DR Services on the NCFAS-G Scales

Scale	Df	t	P	Effect Size
Environment	110	4.55	<.0001	0.87
Parental Capabilities	110	3.48	.0007	0.66
Family Interactions	110	2.30	.0233	0.44
Family Safety	110	2.45	.0160	0.47
Child Wellbeing	110	2.64	.0094	0.50
Social/Community Life	110	1.97	.0516	0.38
Self-Sufficiency	110	3.28	.0014	0.63
Family Health	110	2.53	.0127	0.48

2. DVRP Support to Reduce Domestic Violence

DVRP provides a full range of legal assistance for child protection. Upon case identification, DVRP assigns a supervising attorney and a paralegal to examine the issue of a child's exposure to domestic violence. Feasible plans are implemented to protect children and other victims with *substantiated abuse* experiences. The service also includes interpretation support for clients in 21 languages.[27] In FY 2022-2023, DVRP supported 158 parents or guardians (RI 2.1.6) and 229 children (RI 2.1.9), larger than the corresponding target counts of 136 and 172, to prevent domestic violence, child abuse and/or neglect.

At the end of DVRP services, 53 victims of domestic violence responded to a program survey. All of them "agreed" or "strongly agreed" 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;

[27] http://gbla.org/about-gbla/history/

- The child(ren) are no longer exposed to domestic violence;
- I know my rights and protections as a victim of domestic violence; and
- The child(ren) in the household are not subjected to abuse and/or neglect.

The strong consistency of the responses is reconfirmed by a perfect Cronbach's alpha index of 1. Since "Child abuse and neglect present serious threats to children's well-being" (Children Now, 2018, p. 45), the results suggest a key role of DVRP in reducing child victimization and repairing family functioning as prescribed by RI 2.1.6 and 2.1.9 of First Kern's (2023) strategic plan.

3. GCP Services for Child Protection

In Kern County, 66.1% of grandparents speak a language other than English, and only 23.7% speak English very well (Census Form S1002).

In the United States, around 2% of children are raised by grandparents (Bera, 2020). The situation is often related to a home setting with drug abuse, parent divorce/decease, domestic violence, or psychiatric illness. While legal procedures are established to serve adult victims of domestic violence, "increasing attention is now focused on the children who witness domestic violence" (Bragg, 2003, p. 5). GCP assists caregivers in preventing abuse or neglect of children ages 0-5 through the establishment of guardianship protection. The services include (1) representation of prospective caregivers in preparing guardianship petitions, (2) responding to objections, (3) planning for mediations and guardianship hearings, and (4) completion of post-hearing letters and orders.

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%.[28] To close the gap, GCP offered services to 158 guardians and 219 children to prevent domestic violence, child abuse and/or neglect (RI 2.1.6, 2.1.9), surpassing the corresponding targets of 136 and 200, respectively.

For GCP program evaluation, exit survey data were gathered from 51 clients this year. All respondents "strongly agreed" to the following statements:

- The child(ren) live in a safe environment;
- The child(ren) live in a stable environment;
- I am able to access medical services for the child(ren) in the household
- I am more knowledgeable about the duties, rights, and responsibilities of legal guardianship; and
- The child(ren) in the household are not subjected to abuse and/or neglect.

Due to the lack of variation in the GCP survey responses, the Cronbach alpha index cannot be computed across the five items. The remaining item, "I am able to access mental health treatment for the child(ren)", received 50 "strongly agreed" responses and one "agreed" response. In summary, all responses "agreed" or "strongly agreed" to these GCP survey statements.

[28] www.Kidsdata.org

The case management has achieved its intended goal of establishing a stable environment for grandchildren and supporting family access to medical homes, health or mental health services, and preschool education. The settlement is important because "A child that has a stable placement or finds a permanent home, through reunification with parents, guardianship or adoption, is more likely to receive the services and supports they need to heal and thrive" (Children Now, 2018, p. 47).

4. Collaborative Interventions on Family Support

Mental health support requires collaborative efforts in social-emotional screening and service referrals. As an outcome measure, Ages and Stages Questionnaires®: Social-Emotional, second edition (ASQ:SE-2) is employed to help professionals of home visiting, early intervention, and child welfare screen and assess infants and young children in the area of social-emotional development.

Children's social and emotional wellbeing is deeply influenced by their immediate environment. When family functioning is an issue, young children could be exposed to chronic stress, domestic violence, or substance abuse. Such environments can hamper their emotional development and lead to long-term mental health challenges. First 5 Kern-funded programs addressed this critical problem by strengthening family functioning with the following program features:

- CASA assisted infants and toddlers to overcome the impact of child abuse and/or neglect;
- DDCCC offered early childcare and education to children ages 0 to 5 from homeless families;
- EKFRC, MCFRC, and OFRC extended direct family services through case management, parenting classes, referrals, and expanded parents' knowledge of child development milestones;
- HLP provided monthly interactive parent/child workshops and take-home health kits to promote parent/child interactive activities;
- HMG conducted developmental screenings and connected families to local resources for further assessments;
- NFP delivered home visiting services to support low-income, first-time mothers at *prenatal* and *infant care* stages;
- SSCDC assisted families of domestic violence with integrated services such as court visits, parent education, counseling, housing, and job placement;
- WSN established shelter accommodations for mothers and children who experienced domestic violence.

The ASQ:SE-2 data contains 523 cases from eight programs. A lower assessment score on the scale corresponds to a better mental health condition. In comparison, HMG offered mental health screening to the general public without specific interventions. Thus, it has the largest data (N=250), and 76% of the children scored below the ASQ:SE-2 thresholds. For other programs, the percentage of children below the threshold was above 82%, which confirmed the effectiveness of First 5 Kern-funded service interventions in improving the mental health conditions of local children. In EKFRC, MCFRC, NFP, and SSCDC, the results reached 100%, and no children were diagnosed from the ASQ:SE-2 screening to have social-emotional issues for mental health referral. Although EKFRC, NFP, and SSCDC had a total of 21 children born prematurely, the adverse situation did not block these programs from achieving the perfect result.

Despite the sample size variation from 7 to 250, statistical testing reveals that all the intervention effects are significant at α=.01 (Table 28). In addition, the effect sizes are larger than 0.80 to suggest a strong practical impact of the program support on the screening results.

Table 28: Percent of Children with Screening Results below Referral Thresholds

Program	Descriptive Statistics		Statistical Testing			
	N	Percent	Df	t	P	Effect Size
CASA	17	82.4	16	6.19	<.0001	3.10
DDCCC	42	88.1	41	5.78	<.0001	1.81
EKFRC	7	100	6	5.42	.0016	4.43
HLP	41	95.1	40	15.28	<.0001	4.83
HMG	250	76.0	249	6.52	<.0001	0.83
MCFRC	24	100	23	15.77	<.0001	6.58
NFP	55	100	54	40.81	<.0001	11.11
OFRC	40	82.5	39	2.96	.0052	0.95
SSCDC	38	100	37	23.63	<.0001	7.77
WSN	9	88.9	8	3.36	.0099	2.38

5. Case Management Services for General Family Support

General case management is supported by 18 programs to extend services to children of the general population in Table 29, except for MVIP, which is exclusively focused on medically vulnerable children. While the infant support in BIH and NFP, as well as dental services in KCCDHN, demand individualized attention, all other programs offer family-based support to reflect the emphasis on result reporting in *Parent Education and Support Services*. Altogether, 548 families (RI 2.1.4) and 1,060 children (RI 2.1.7) received general case management support in FY 2022-2023, surpassing the corresponding target count of 463 families and 700 children.

Table 29: General Case Management Support across Eighteen Programs

Focus Area	Program	Family Count	Child Count
Child Health	BIH	--	37
	KCCDHN	--	320
	MVIP	51	--
	NFP	--	81
	RSNC	28	28
Family Functioning	AFRC	27	35
	BCRC	15	19
	EKFRC	31	38
	GSR	36	39
	KRVFRC	86	104
	LVSRP	29	39
	MCFRC	30	32
	MFRC	35	47
	OFRC	33	40
	SENP	64	86
	SHS	23	33

Focus Area	Program	Family Count	Child Count
Child Development	DSR	21	31
	LHFRC	16	15
	WSOLC	23	36

Implementation of Nurturing Parenting Curriculum in Parent Education

According to Stephen Bavolek (2000), the Nurturing Parenting (NP) curriculum developer, parenting patterns are learned in childhood and replicated later in life when children become parents. Thus, negative experiences may engulf children in parenting models of abuse, neglect, exploitation, and victimization. The NP curriculum is considered a high-quality program and has been employed in both court-mandated and non-court-mandated parent education settings. Due to its impact on improving parenting skills, the departments of the Army and Navy utilize the NP program to enhance parenting skills for first-time parents in military bases 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).

NP workshops were offered to remediate 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 2022-2023, 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.

Table 30: 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
4	Help parents recognize and communicate their feelings and their child's feelings
5	Improve parent's and children's self-worth and self-concept
6	Help parents recognize and understand their feelings and their child's 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

Across Kern County, AFRC, BCRC, DSR, GSR, and MFRC used NP in non-court-mandated parent education. A three-day training was sponsored by First 5 Kern to introduce NP concepts and procedures to the FRC staff. Each workshop lasted 120

minutes. The workshops presented various topics to improve positive lifestyles, design appropriate expectations, strengthen mutual understandings, develop self-concepts, establish family values, and handle discipline issues. An unduplicated count of 146 parents participated in the workshops (RI 2.2.2), above the target of 120 parents across five program sites (AFRC, BCRC, DSR, GSR, MFRC). Specific goals have been set for these workshops noted in Table 30.

Participants were asked to rate the usefulness of the workshops on a five-point scale, with 5 representing the most positive result. Table 31 shows the range of average ratings between 4.07 and 4.78. The result reconfirmed the usefulness of the workshop contents.

Table 31: Mean Ratings on the Usefulness of NP Workshops

Workshop	N	Mean
1	126	4.53
2	83	4.48
3	80	4.46
4	81	4.47
5	84	4.58
6	79	4.65
7	68	4.41
8	62	4.76
9	70	4.07
10	59	4.78

In comparison, the total number of NP workshop participants increased from 671 last year to 792 this year, i.e., these workshops expanded their impact to 18% more participants this year. Figure 20 shows the increase across all workshops except for workshop 2. Workshop 2 was intended to increase parent's awareness of appropriate expectations of children. The appropriateness could be child-specific, and was difficult to expect at a group level. Thus, no significant difference was observed in the pre/post surveys of workshop outcome [$t(82)=1.58$, $p=.1178$]. The effect size, as represented by Cohen's (1988) d, was .35, suggesting a weak practical impact.

In addition, Workshops 1 and 10 served as the introduction and conclusion sessions. For the remaining workshops 3-9, Table 32 showed highly significant improvement (i.e., $\alpha=.0001$) in parental learning outcomes between pretest and posttest surveys. Effect sizes were computed to assess the practical impact of workshop training beyond statistical testing. All effect sizes were larger than 0.80, suggesting a strong impact of these workshops on participants' NP skill development this year.

The 10 workshops were also offered in sequence. First, a feedback survey for Workshop 1 included two questions on practicing the concept of nurturing parenting:

- Before this workshop, how much did you practice the concepts of nurturing parenting?
- How likely are you to practice the concepts you learned today?

At the concluding section of parental training, two additional questions were employed in Workshop 10 to assess the learning outcomes:

- As a result of today's workshop, how do you feel about your ability to handle your own stress in positive ways?
- As a result of today's workshop, how do you feel about your ability to help your child or children handle their stress in positive ways?

Figure 20: Participant Counts of NP Workshops Between Adjacent Years

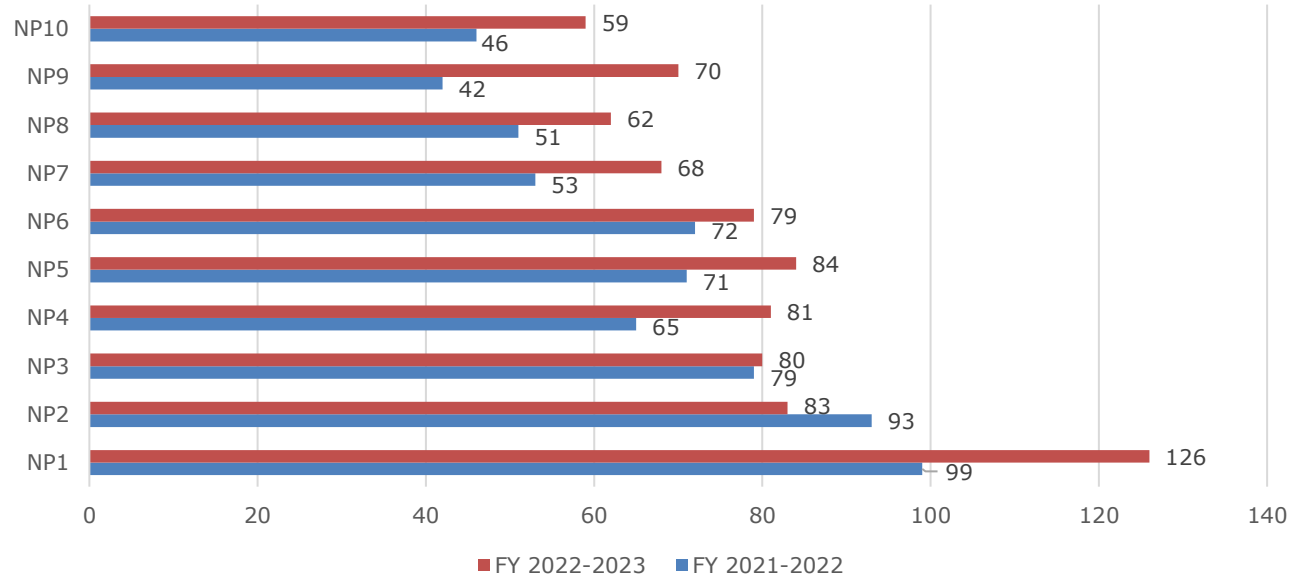


Table 32: Increase of Participant Knowledge on the Content of Workshops 3-9

Workshop	Pretest	Posttest	df	t*	Effect Size
3	3.19	3.91	79	4.37	0.98
4	2.91	3.91	80	6.00	1.34
5	3.56	4.55	83	7.32	1.60
6	3.68	4.42	78	5.19	1.18
7	3.72	4.29	67	5.06	1.24
8	4.02	4.66	61	4.13	1.06
9	2.93	3.51	69	4.13	0.99

*Based on df and t values, all p values are no larger than .0001.

On average, Table 33 showed that participants initially practiced nurturing parenting concepts at 3.56, below a scale value of four on a five-point scale. After the first workshop, the value increased to 4.30, approaching the "often/always" category at the highest level. At the conclusion of the 10th workshop, parents reported that they gained "some" or "a lot of" ability to handle their own stress in positive ways. More importantly, participants seemed to have more confidence in helping children handle stress.

Table 33: Mean Ratings on Special Survey Items for Workshops 1 and 10

Item	*N*	Mean
Practice nurturing parenting before Workshop 1	126	3.56
Practice nurturing parenting after Workshop 1	126	4.30
Ability to handle own stress after Workshop 10	59	4.39
Ability to help child handle stress after Workshop 10	59	4.56

The value of NP workshops reconfirms an assertion of Bowman, Pratt, Rennekamp, and Sektnan (2010), i.e., "investments in high-quality parenting education will be among the best investments any community can make" (p. 8). Through the NP workshop offerings, positive impacts occurred in parent education to support child development. Thus, First 5 Kern funding has reached its original goal 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).

Strengthening Commitment to Caregiver Training

FCP offers family support training to friends, caregivers, and parents. Fifty-nine participants responded to a survey, and all strongly agreed with the statement, "In general, the facilitator was able to explain the topics and concepts clearly." Also, all respondents *agreed* or *strongly agreed* that "The training topics were presented interactively allowing the participation of the participants". Another statement, "Overall, the location and schedule were adequate for the training", was *agreed* or *strongly agreed* by 91.5% of the respondents. In the end, 94.9% of respondents *agreed* or *strongly agreed* that "I feel better prepared to support my child's healthy development".

In addition, FCP incorporated audiovisual learning aids to develop TALK (i.e., Tell, Ask, Listen, and KeepSafe) steps for the caregiver's first-hand skill development.[29] In an impact story, a father reported, "To have the opportunity in this class [offered by FCP] is priceless. I usually don't do any craft art with my kids. I would start to make at least 30 min per week," he expained. "It feels good to act like a child again. I had fun." (Ibid. 4).

Adoption of *Raising a Reader* Curriculum for Caregiver Engagement

Although it is generally agreed that reading is essential for cognitive development, good reading instruction is rarely available to disadvantaged Latino students (Jacobson, 2021). As an innovative approach, a *Raising a Reader* (RAR) curriculum is adopted by BCRC to engage caregivers in a routine of book sharing with their children. Survey data are gathered from 15 RAR participants. More than half of the families (53.3%) speak Spanish at home. An overwhelming majority (or 93.3%) of families earn an annual income under $50,000, and only 26.6% of the adults received education beyond high school. The number of times for looking at books with children ranged from one to six last week, with an average of 3.27 times per week. Each time, the average reading period lasted 22.67 minutes.

RAR has an instructional strategy to foster healthy brain development, healthy relationships, a love of reading, and literacy skills critical for school success. As an

[29] https://visionycompromiso.org/what-we-do/training/

evidence-based, scalable, and affordable program, it is also backed by 39 independent evaluation projects to document the learning impact over time and across diverse settings.[30] Through the program intervention, all respondents have established a routine for looking at books with children. All respondents attended the education workshop to learn about sharing books with their children.

The program demonstrated features of:

- letting children choose what to read by 93.3% of the parents;
- talking about new words and what they meant by 46.7% of the parents;
- using different voices for different characters in the story by 80% of the readers.

In reaction, children engaged attentively in the RAR activities. In particular, child reactions include:

- Paying much attention to the story, per observation of all survey respondents;
- Turning pages of the book, according to 86.7% of the respondents;
- Asking questions about the book, as recalled by 46.7% of the respondents;
- Wanting to reread the book after 46.7% of the respondents ended the reading; and
- Reading the book or telling a story about the pictures to 53.3% of the respondents.

In summary, among 17 programs in *Family Functioning*, First 5 Kern sponsored court-mandated and non-court-mandated parent education at 12 FRCs across Kern County. A total of 894 parents participated in educational workshops from 14 programs across three focus areas (RI 2.2.3), exceeding the total target of 634 parents. AAPI-2.1, RAR, FCP, and NP workshop data were analyzed to show the effectiveness of program training services in early childhood support. In delivering the service on child protection, parent/guardian reports were employed to indicate program outcomes after the DR, DVRP, and GCP interventions. The positive impact of DR was illustrated by the NCFAS-G results. Meanwhile, ASQ:SE-2 data were analyzed from CASA, HLP, HMG, MCFRC, NFP, and WSN to determine the need for mental health referrals. Based on these findings, children are not only well-protected in their living environment, but also fully supported for reading literacy and social-emotional development.

(III) Funding Impact in *Child Development*

To expand early learning opportunities, First 5 Kern channeled $685,046 of IMPACT (Improve and Maximize Programs so All Children Thrive) grant, more than $522,713 last year, from the state commission to strengthen high-quality early learning initiatives, including engaging families in the early learning process. First 5 Kern was among the "deeply involved" county commissions to promote IMPACT in early education (Melnick, Meloy, Gardner, Wechsler, & Maier, 2018). In the focus area of *Early Childcare and Education*, two general domains of the state report glossaries have been addressed: [1] Quality Early Learning Supports (QELS) and [2] Early Learning Programs (ELP).

As Miller (2023) maintained, "Access to Pre-K without quality is not real access" (p. 2). In FY 2022-2023, the commission designated $615,756 to QELS and $1,242,635 to ELP. Including the investment from IMPACT, the total program spending in FY 2022-2023

[30] https://www.raisingareader.org/

adds to $2,542,455, larger than $2,211,882 last year. Meanwhile, seven service providers in *Child Development* leveraged $292,715 to sustain the capacity building (Table 34).

Table 34: Leveraged Funds by Programs in *Child Development*

Program	Sustainability Funds
Blanton Child Development Center	$92,632.53
Delano School Readiness	$56,254.18
Health Literacy Program	$32,399.00
Neighborhood Place Community Learning Center	$46,904.42
South Fork Preschool and Daycare Center	$9,870.59
West Side Outreach and Learning Center	$17,420.00
Wind in the Willow Preschool	$37,234.11

Following its strategic plan, First 5 Kern funds HLP to offer monthly parent and child workshops to promote interactive learning and reading strategies. Parents are given take-home health kits to expand their knowledge of early developmental milestones and child behavioral norms. BCDC, DDCCC, and SSCDC support early childcare for families with special needs. In particular, BCDC works with parenting teens, SSCDC serves children with exposure to domestic violence, and DDCCC supports homeless families. DDCCC and SSCDC offered developmental screenings for eight children who have been identified with special needs (RI 1.4.1).

For instance, DDCCC served a mother who fled from an abusive relationship with four children. Among them, one had special needs, and another was medically fragile. Due to all the problems she has endured, she was moved to the emergency shelter to afford more space to care for her medically ill child. She is currently looking for permanent housing and will be enrolling in a substance abuse training program to help others. (Ibid. 3)

Table 35: Increases of Service Count across Four Indicators in *Child Development*

Result Indicator	FY 2021-2022	FY 2022-2023
3.1.1. Center-Based Activities	557	601
3.1.2. Home-Based Activities	114	118
3.2.1. Center-Based Activities (Special Needs)	39	47
3.2.3. Center-Based Activities (Non-Traditional Hours)	27	32

In service outreach, First 5 Kern funds South Fork Preschool (SFP) and Wind in the Willows Preschool (WWP) to sponsor school readiness and developmentally appropriate activities in rural communities of Boron, Kern River Valley, Lake Isabella, and Mojave Desert. These programs extend quality daycare and early education to traditionally underserved children ages 3 to 5. In comparison to last year, the service count increased in four result indicator categories this year (Table 35). Table 36 shows the program affiliations to the state annual report domains in Child Development.

In supporting the law of compulsory education, First 5 Kern sponsors 11 programs for preschool preparation that ensure the best possible start in life and thriving for all children at the point of kindergarten entry. Four of the programs are affiliated with Focus Area III: *Early Childcare and Education*:

1. Delano School Readiness (DSR)
2. Lost Hills Family Resource Center (LHFRC)
3. Neighborhood Place Community Learning Center (NPCLC)
4. West Side Outreach and Learning Center (WSOLC)

Table 36: Program Affiliation with Report Domains in Child Development

Report Domains	Programs in Child Development
Early Learning Programs	Blanton Child Development Center Delano School Readiness Discovery Depot Child Care Health Literacy Program Lost Hills Family Resource Center Neighborhood Place Community Learning Center Small Steps Child Development Center South Fork Preschool West Side Outreach and Learning Center Wind in the Willows Preschool
Quality Early Learning Supports	Improve and Maximize Programs so All Children Thrive

DSR and LHFRC originated from a First 5 California School Readiness Initiative (SRI). In addition, First 5 Kern supported the development of Summer-Bridge classes across eight programs in Focus Area II: *Parent Education and Support Services*:

1. Arvin Family Resource Center (AFRC)
2. Buttonwillow Community Resource Center (BCRC)
3. East Kern Family Resource Center (EKFRC)
4. Greenfield School Readiness (GSR)
5. Lamont Vineland School Readiness Program (LVSRP)
6. McFarland Family Resource Center (MFRC)
7. (SSEC
8. Shafter Healthy Start (SHS)

The partnership building has merged services across focus areas. Similar to the eight programs that extend the SRI services with a primary focus on parent education, the four programs in *Child Development* also provide direct family support services through case management, referral support, and parent education on developmental milestones and norms. The alignment between RI designation and service description is summarized in Table 37. Service outcomes are examined in the following sections to assess the effectiveness of these center-based, home-based, and Summer-Bridge programs, as well as individualized support services for children with special needs.

Table 37: 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

In summary, First 5 Kern's support for *Child Development* has addressed two objectives: (1) Children will enter school prepared as a result of their participation in early

childhood education and childcare services, and (2) Children under special circumstances (e.g., non-traditional hours and/or children with special needs) are given access to early childhood education and childcare services (First 5 Kern, 2023). In the current strategic plan, multiple Result Indicators (RI) have been specified to link **Objective 1** to service outcomes of home-based, center-based, and Summer-Bridge programs (RI 3.1.1-3.1.3, Ibid. 13). **Objective 2** aims at the service access by children with special needs (RI 3.2.1, Ibid. 13) and/or during non-traditional hours (RI 3.2.3, Ibid. 13).

Capacity of Program Support in Child Development

Because program capacities are interconnected, First 5 Kern-funded programs may incorporate multiple services across focus areas, which fit the original purpose of making FRCs function as a one-stop hub in local communities (Thompson & Uyeda, 2004). In Table 38, center-based service counts are listed for 14 programs across two focus areas. They have collectively provided education services for 601 children, more than 539 children in the target (RI 3.1.1).

Table 38: Delivery of Early Education Services on Center-Based Platforms

Focus Area	Program*	Count
Family Functioning	EKFRC	26
	GSR	54
	MFRC	35
	SHS	50
Child Development	BCDC	28
	DDCCC	39
	DSR	31
	HLP	81
	LHFRC	25
	NPCLC	116
	SFP	30
	SSCDC	33
	WSOLC	22
	WWP	31

*Program full names are listed in Appendix A.

First 5 Kern also funds home-based education services. These programs are located in different communities (Table 39). In FY 2022-2023, BCRC, EKFRC, DSR, LHFRC, and OFRC delivered home-based education for 118 children, above the target of 63 children (RI 3.1.2). In the community served by DSR, some families opt for in-person, center-based services. Therefore, the participant count is nine for home-based services, below the annual target for DSR. Nonetheless, the number has substantially increased from five last year.

Besides broad support across *Child Health, Family Functioning*, and *Child Development*, program offerings are not limited to part-day or part-year care. In

particular, SSEC served 32 children in center-based education activities during non-traditional hours (RI 3.2.3), exceeding the target of 20 children. SFP combined with SSEC to serve 47 children with special needs in educational center-based activities (RI 3.2.1), above the service count of 39 children last year.

Table 39: Delivery of Early Education Services on Home-Based Platforms

Focus Area	Program Program*	Child Count Participant	Child Count Target
Family Functioning	BCRC	12	8
	EKFRC	39	15
	OFRC	40	15
Child Development	DSR	15	15
	LHFRC	12	10

*Program full names can be found in Appendix A with the acronyms.

Similar flexibilities have a broad impact on improving the state economy that shows a low share of female workers under a hefty burden of child care (Miller, 2019). In recent years, families on average spend more on childcare than on housing, healthcare, food, and college (Bonello, 2019). Without First 5 Kern support during non-traditional hours, local families have to use private service providers. Consequently, "Those needing care beyond that time must pay the high price for full care in private centers. This creates inequality in expendable income in families with children and puts a heavier burden on women who work" (Drake, 2008, p. 4). Hence, early childhood support from First 5 Kern has removed a long-lasting barrier for local families.

In summary, the research literature suggested that "access to early childhood education — preschool for 3- and 4-year-olds — is invaluable in preparing young learners for elementary school" (Hamilton, 2023, p. 3). In FY 2022-2023, the commission led countywide efforts to champion wide-ranging support for early childhood education across valley, mountain, and desert communities. "Children who attend preschool are not only more prepared for kindergarten but some also say children are better set up for the rest of their lives" (Mauskopf, 2019, p. 2). In strengthening school readiness for children from different family backgrounds, result indicators have been monitored on the quality of home-based, center-based, and Summer-Bridge programs. By design, these services have addressed persistent issues of program access by children *with special needs* and/or *in remote locations*.

Assessment of Program Outcomes in Early Childhood Education

In FY 2022-2023, assessment data have been gathered from pretest and posttest settings to track program improvement. Instruments employed in this section include ASQ-3, CASB, Desired Results Developmental Profile (2015) (DRDP) - Infant/Toddler (IT) View, DRDP-PS/Fundamental View, and DRDP-PS/Comprehensive View. Features of the data collection are listed in Table 40 to support result tracking in early childhood development.

Table 40: Instruments for Data Collections in Focus Areas II & III

Instrument	Feature	Population
ASQ-3	Age-appropriate measures to assess child development in *Communication, Gross Motor, Fine Motor, Personal-Social*, and *Problem-Solving* domains.	Ages 0-5
CASB	Value-added assessment in child *Communication, Cognitive, Self-Help, Scientific Inquiry, Social Emotional* and *Motor* skills.	Ages 4-5
DRDP-IT View	Indicators of *Approaches to Learning – Self-Regulation, Cognition, Language and Literacy Development, Physical Development-Health, and Social and Emotional Development*.	Infant or Toddler
DRDP-PS Fundamental/ Comprehensive Views	Indicators of *Approaches to Learning – Self-regulation, Cognition, History-Social Science, Language and Literacy Development, Physical Development-Health, Social and Emotional Development,* and *Visual and Performing Arts*.	Preschooler

1. ASQ-3 Findings

Among programs funded by First 5 Kern, 24 service providers track developmental status against age-specific thresholds for 1,651 children during Months 2-60. In Section (I) of this chapter, ASQ-3 findings were statistically reported for 500 children from CASA, HMG, MVIP, and NFP programs to examine developmental delays in *Health and Wellness*. This section is devoted to the presentation of ASQ-3 findings from 1,151 children, 841 from 12 programs in *Focus Areas II: Parent Education and Support Services,* and 310 children from seven programs in *Focus Areas III: Early Childcare and Education* (Table 41).

Table 41: Scope of ASQ-3 Data Collection in Focus Areas II & III

Focus Area	Program	Months	Sample Size
II	AFRC	2-60	51
	BCRC	2-60	40
	EKFRC	2-60	46
	GSR	33-60	63
	KRVFRC	2-60	155
	LVSRP	2-60	69
	MCFRC	2-60	51
	MFRC	8-60	78
	OFRC	2-60	73
	SENP	2-60	157
	SHS	2-60	47
	WSN	6-60	11
III	BCDC	4-33	31
	DDCCC	12-60	48
	DSR	2-60	35
	LHFRC	18-60	45
	NPCLC	2-60	81
	SSCDC	6-60	37
	WSOLC	42-60	33

The ASQ-3 measures comprise child growth indicators in *Communication* (COM), *General Motor* (GM), *Fine Motor* (FM), *Personal-Social* (PerS), and *Problem-Solving* (ProS) domains. Table 42 shows that a couple of results have reached a 100% passing rate in COM, PerS, and ProS. These domains also include relatively low rates below 80%. In contrast, the ranges of passing rate are 18.2 in ProS and 39.6 in GM, indicating a large difference in the variability of ASQ-3 outcome measure distributions. The results indicate that young children develop these skills at different paces. Hence, it is important to design programs that are age-appropriate and indicator-specific to close learning gaps at the early stage.

Table 42: Percent of Children with Performance Level above ASQ-3 Threshold

Focus Area	Program	COM	GM	FM	PerS	ProS
II	AFRC	90.2	80.4	90.2	94.1	96.1
	BCRC	97.5	90.0	90.0	90.0	95.0
	EKFRC	93.5	95.7	87.0	93.5	97.8
	GSR	96.8	87.3	70.0	87.3	90.5
	KRVFRC	91.0	88.4	82.6	91.6	91.0
	LVSRP	92.8	82.6	84.1	91.3	92.8
	MCFRC	92.2	90.2	92.2	96.1	100
	MFRC	93.6	83.3	80.8	88.5	89.7
	OFRC	82.2	80.8	78.1	76.7	93.2
	SENP	98.1	94.3	100	100	100
	SHS	89.4	80.9	61.7	83.0	87.2
	WSN	90.9	72.7	72.7	72.7	81.8
III	BCDC	87.1	83.9	90.3	93.5	96.8
	DDCCC	75.0	83.3	60.4	77.1	83.3
	DSR	88.6	82.9	65.7	85.7	85.7
	LHFRC	95.6	80.0	71.1	93.3	95.6
	NPCLC	82.7	86.4	77.8	87.7	96.3
	SSCDC	97.3	83.8	91.9	94.6	97.3
	WSOLC	100	93.9	78.8	100	100

Statistical testing has been conducted to examine whether the level of child development is significantly above the corresponding ASQ-3 threshold. The test statistic from single sample t tests is listed in Table 43. Except for MVIP and WSN, which have small samples, all t values are significant at α=.0005. Effect sizes (EZ) are larger than 0.80, indicating a strong program impact on all five ASQ-3 outcome measures across 19 programs.

In summary, child development in the *Communication, Gross Motor, Fine Motor, Personal-Social*, and *Problem-Solving* categories is an important outcome of ASQ-3 assessments. In *Focus Areas II* and *III*, data sizes vary from 11 in WSN to 157 in SENP (see Table 41), which may have impacted the result of statistical significance. 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). Hence, effect sizes are reported in Table 43 to confirm the strong practical program impact.

Table 43: Test Statistic (t) for Significant Results in 17 Programs

Focus Area	Program	df	COM	GM	FM	PerS	ProS	EZ
II	AFRC	50	9.55	10.36	11.00	12.55	12.16	>2.70
	BCRC	39	9.43	13.79	12.27	13.65	9.04	>2.90
	EKFRC	45	12.42	22.85	12.55	11.93	16.32	>3.56
	GSR	62	13.12	13.96	8.53	10.92	8.91	>2.17
	KRVFRC	154	16.22	20.27	17.47	18.96	15.50	>2.50
	LVSRP	68	13.49	13.20	14.55	14.55	13.05	>3.17
	MCFRC	50	12.38	18.30	17.37	17.76	19.07	>3.50
	MFRC	77	15.69	14.07	12.03	15.10	10.62	>2.42
	OFRC	72	7.48	11.55	9.57	7.27	8.49	>1.71
	SENP	156	35.18	43.33	46.16	41.04	60.02	>5.63
	SHS	46	7.22	10.64	7.64	8.49	6.95	>2.05
	WSN	10	4.15	4.51	2.29	3.01	1.92	>1.21
III	BCDC	30	7.76	11.26	11.13	8.70	9.36	>2.83
	DDCCC	47	5.75	7.11	5.99	4.54	5.07	>1.32
	DSR	34	6.54	6.51	4.10	5.74	4.32	>1.41
	LHFRC	44	11.08	13.98	9.23	15.60	9.10	>2.74
	NPCLC	80	10.12	12.86	10.78	12.63	12.44	>2.26
	SSCDC	36	12.58	9.39	10.77	10.35	11.54	>3.13
	WSOLC	32	12.09	20.07	12.77	16.00	16.17	>4.27

2. Desired Results Developmental Profile (DRDP) Indicators

Children transition through various developmental stages, each with its unique needs and challenges. Integrated services, as advocated by Proposition 10, ensure smooth transitions between these phases, offering continuity of care and consistent developmental support (Ramey & Ramey, 2004). DRDP includes different forms to assess child development at infant/toddler and preschool stages. In the assessment for preschoolers, the instrument has comprehensive and fundamental views of child development in specific programs. In general, the *Comprehensive View* focuses on the full range of learning and development (see Table 44) that most early childhood curricula cover. The *Fundamental View* addresses the five domains of school readiness.

As shown in Table 44, the domains for preschool children contain multiple measures of *Approaches to Learning–Self-Regulation* (ALT-REG), *Cognition* (COG), *History-Social Science* (HSS), *Language and Literacy Development* (LLD), *Physical Development–Health* (PD-HLTH), *Social and Emotional Development* (SED), and *Visual and Performing Arts* (VPA). The ratings are scaled sequentially according to developmental levels.[31]

In addition, DRDP includes four measures 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 are scaled on six points: (1) Discovering Language, (2) Discovering English, (3) Exploring

[31] https://www.desiredresults.us/sites/default/files/docs/forms/DRDP2015-IT-Comprehensive-View-20200124_ADA.pdf

English, (4) Developing English, (5) Building English, and (6) Integrating English.[32]

Table 44: Domain Coverage of DRDP-PS Comprehensive Assessment

Domain	Knowledge and Skill Measures
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.
HSS	(1) Sense of Time, (2) Sense of Place, (3) Ecology, (4) Conflict Negotiation, (5) Responsible Conduct as a Group Member.
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.
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.
VPA	(1) Visual Art, (2) Music, (3) Drama, (4) Dance.

In the collected data, however, Table 45 shows less domain coverage in the tracked data from the Comprehensive View due to missing values. The number of tracked cases also varies across the assessment domains of the DRDP-PS instruments. More importantly, the requirement of data tracking seemed to have been ignored by SFP and SSEC, and no children had both pre- and follow-up assessments.

- **Indicators of DRDP-IT View**

As shown in Table 45, the DRDP-IT instrument is employed by three programs to collect child development data in pre- and follow-up assessments. The intention is to track changes at the individual level. Due to issues in the case tracking, most observations between pre- and follow-up assessments are unrelated, leaving a total of seven tracked cases across three programs.

Besides the sample size examination in the subject dimension, DRDP-IT variables are adjusted to fit the level of child maturity. Thus, the following measures are excluded from the instrument: ALT-REG 6, ALT-REG 7, LLD 6 – LLD 10, COG 4 – COG 7, COG 10, PDHLTH 9, and PDHLTH 10.

[32] https://www.desiredresults.us/sites/default/files/docs/forms/DRDP2015_PSC_Combined-20200123RatingRecorg.pdf

Table 45: DRDP Data Size Summary

Instrument	Program	Pre-Assessment	Follow-up Assessment	Tracked Cases
DRDP-IT	BCDC	16	15	4
	HLP	11	3	1
	SSCDC	6	13	2
DRDP-PS Fundamental View	HLP	28	27	1, 23ˆ
	SFP	20	1	0
	WWP	21	32	14
DRDP-PS Comprehensive View	DDCCC	18	10	1, 3ˇ
	DSR	27	29	24-26¨
	SSCDC	7	8	0, 2˜
	SSEC	3	5	0

ˆ N=23 for scales ALT-REG, COG, LLD, and SED; N=1 for the PDHLTH scale.
ˇ N=1 for scales COG and LLD; N=3 for ALT-REG and SED.
¨ N=24 for LLD; N=25 for SED; N=26 for scales ALT-REG and COG.
˜ N=0 for LLD; N=2 for scales ALT-REG, COG, and SED.

In addition, domains HSS and VPA are not addressed by the DRDP-IT instrument. Based on the available data, items for the DRDP-IT scale composition are listed in Table 46 after deleting missing data and unrated observations.

Table 46: Scale Structure of the DRDP-IT Outcomes

Scale	Label	DRDP-IT Items
ALT-REG	Approaches to Learning–Self-Regulation	ALTREG1, 2, 4, 5
COG	Cognition	COG1, 2, 3
LLD	Language and Literacy Development	LLD1, 2, 3, 4, 5
PD-HLTH	Physical Development–Health	PDHLTH1, 2, 3, 4
SED	Social and Emotional Development	SED1, 2, 3, 4

In Table 47, the follow-up assessment shows better results on the DRDP-IT outcomes than the pre-assessment. Because most data were not tracked on the same children, independent sample t tests have been employed to avoid information loss. The statistical analyses reveal no significant difference. The corresponding effect sizes do not indicate strong practical impacts across the DRDP-IT scales.

Table 47: Testing of the DRDP-IT Outcomes Between Pre- and Follow-up Groups

Scale	df	t	p	Effect Size
ALT-REG	60	1.61	0.1128	0.42
COG	58	0.32	0.7473	0.08
LLD	59	1.51	0.1367	0.39
PDHLTH	59	0.68	0.5012	0.18
SED	60	1.36	0.1804	0.35

Alternatively, an attempt can be made to delimit the evaluation within the tracked samples across three programs. Although the total number of cases becomes seven (see Table 45), related sample t tests show significant child development at α=.05 on the ALT-REG, LLD, and SED scales (Table 48). All effect sizes are above 0.80, suggesting strong practical benefits in child development on these DRDP-IT indicators.

Table 48: Testing of the Improvement of DRDP-IT Outcomes from Tracked Cases

Scale	df	t	p	Effect Size
ALT-REG	6	3.20	0.02	2.63
COG	5	2.08	0.09	1.86
LLD	5	3.30	0.02	2.95
PDHLTH	5	2.41	0.06	2.16
SED	6	3.14	0.02	2.56

In contrast, data quality is far more important than the data quantity. Without the data tracking, the independent sample t test cannot detect significant differences in Table 47 despite the retention of most data in the analysis. When the data are tracked, strong practical impacts are found from a small sample (Table 48). Therefore, a recommendation was made last year urging First 5 Kern to "adopt feasible measures of quality control on DRDP data collection to evaluate the effectiveness of eight programs in *Child Development*" (Wang, 2023, p. 113). That recommendation continues to have support from the DRDP-IT data this year.

- **Indicators of DRDP-PS Fundamental View**

HLP, SFP, and WWP employed *DRDP-PS Fundamental View* to track the development levels of preschool children under a pretest and posttest setting. SFP had 20 observations from the pretest assessment, but the posttest sample size was one. More importantly, no tracking mechanism existed to ensure the assessment of the same group of children (see Table 45). HLP only tracked one child on the PDHLTH scale despite its initial sample of 14 in the pretest. WWP reported no change on the ELD scale.

Table 49: Data Tracking across the Measures of DRDP PS Fundamental View

Measure	Program	$N_{Pretest}$	$N_{Posttest}$	$N_{tracking}$
ALT-REG, COG, LLD, SED	HLP	28	27	23
	SFP	20	1	0
	WWP	21	32	14
PDHLTH	HLP	14	3	1
	SFP	20	1	0
	WWP	21	32	14

Table 50: Results of Data Analysis from the DRDP PS Fundamental View

Program	Measure	df	t	p	Effect Size
HLP	ALT-REG	22	2.07	0.0502	0.88
	COG	22	1.25	0.2232	0.53
	ELD	22	2.23	0.0362	0.95
	LLD	22	6.21	<.0001	2.65
	SED	22	4.38	0.0002	1.87
WWP	ALT-REG	13	4.82	0.0003	2.67
	COG	13	2.54	0.0248	1.41
	LLD	13	2.38	0.0332	1.32
	SED	13	2.45	0.0293	1.36
	PDHLTH	13	3.23	0.0066	1.79

After cleaning the data from *DRDP-PS Fundamental View*, the HLP and WWP results are presented in Table 50. The effect sizes are larger than 0.80 for strong practical impacts, except for the COG finding in HLP. HLP shows a moderate impact with an effect size of 0.53 on COG. In addition, HLP shows significant differences between pretest and posttest on the ELD, LLD, and SED scales at α=.05. The WWP results have reached the significance level in the ALT-REG, COG, LLD, SED, and PDHLTH domains. SFP results are missing because of its zero data tracking.

- **Indicators of DRDP-PS Comprehensive View**

DRDP-PS Comprehensive View has been adopted to collect 107 assessment data from four programs (DDCCC, DSR, SSCDC, SSEC). While the instrument contains 69 outcome measures (ALTREG1-ALTREG7, SED1-SED5, PDHLTH1-PDHLTH10, LLD1-LLD10, HSS1-HSS5, COG1-COG11, ELD1-ELD4, VPA1-VPA4, COG1-COG11), some variables, such as COG10, have all observations missing or unrated. According to the statistical standards from the National Center for Education Statistics, the DRDP data analysis is delimited to the variables with at least an 85% response rate (Standard 4-1-5)[33]. The data cleaning retains ALTREG4-ALTREG6, COG2, COG3, LLD1, PDHLTH1-PDHLTH4, and SED1-SED4 as the indicators to evaluate program effectiveness.

It has been shown in Table 45 that the number of tracked cases from DDCCC, SSCDC, and SSEC ranged between zero and three between the pre- and post-assessments. Thus, the overall DRDP-PS findings primarily reflected the impact of DSR that tracked 24-26 cases, depending on the domain choice. The combined data show significant program effects at α=.05 on the DRDP indicators of *Approaches to Learning–Self-Regulation*, *Cognition*, *Language and Literacy Development*, *Physical Development–Health*, and *Social and Emotional Development* (Table 51). All the effect sizes are larger than 0.80, indicating strong program impacts on these DRDP outcomes.

Table 51: Results of Data Analysis from the DRDP PS Comprehensive View

Measure	df	t	p	Effect Size
ALT-REG	30	4.26	0.0002	1.55
COG	28	3.19	0.0035	1.21
LLD	24	2.78	0.0104	1.13
PDHLTH	28	4.27	0.0002	1.61
SED	29	3.60	0.0012	1.34

In summary, the DRDP results across three instruments hinge on data collection. Table 45 shows no rigorous tracking in ten DRDP data sets. An attempt has been made in the data analyses to include all available data from the pretest and posttest groups. The results revealed significant impacts of First 5 Kern-funded programs on at least one measure of each DRDP View. The findings are confirmed by the values of effect size that are less sensitive to the sample size variation.

3. Child Assessment-Summer Bridge Results

A statewide need has been identified to fund "Programs of all types (e.g., classes, home visits, summer bridge programs) that are designed to support the kindergarten

[33] https://nces.ed.gov/statprog/2002/std4_1.asp

transition for children and families" (First 5 California, 2015b, p. 58). In the effort to support school readiness, First 5 Kern funded Summer-Bridge programs to improve Motor Skills (MS), Social Emotional Skills (SES), Communication Skills (ComS), Self-Help Skills (SS), Scientific Inquiry (SI), and Cognitive Skills (CS). Sample sizes are listed for Child Assessment-Summer Bridge (CASB) data from five programs in Table 52.

Table 52: CASB Data Sizes from Five Programs

Source	DSR	EKFRC	GSR	OFRC	SHS
Pretest	25	5	30	30	15
Posttest	23	6	30	25	12
Matched Pair	24	5	30	23	10

Except for EKFRC, which tracked a small number of students (N=5), all other programs show significant improvement in CS outcomes at α=.05 (Table 53). All effect sizes are larger than 0.80 to suggest strong practical impacts on the CS outcomes of the Summer Bridge programs.

Table 53: Statistical Testing on CS Outcomes Between Pretest and Posttest

Program	df	t	p	Effect Size
DSR	23	2.13	0.0437	0.88
GSR	29	4.54	<.0001	1.69
OFRC	22	4.39	0.0002	1.87
SHS	9	2.43	0.0377	1.62

GSR, OFRC, and SHS also demonstrated significant improvement in other CASB outcomes (Table 54). The effect sizes are near or larger than 0.80 for strong program impacts. Hence, the benefits of the Summer Bridge programs are not confined to the improvement of cognitive skills. However, the impact is not as consistent as the ones in Table 53 across programs.

Table 54: Improvement of Other CASB Outcomes Between Pretest and Posttest

Program	CASB Outcome	Df	t	p	Effect Size
GSR	Social Emotion	29	4.09	0.0003	1.52
	Self-Help	29	2.34	0.0264	0.87
	Inquiry	29	2.10	0.0443	0.78
OFRC	Motor	22	3.10	0.0052	1.32
SHS	Motor	9	2.45	0.0368	1.63

In retrospect, First 5 Kern (2023) has strategically filled the void with a clear goal in the focus area of *Child Development*, i.e., "Early childcare and education services will be accessible" (p. 6). Prior to the passage of Proposition 10, few private foundations reached the valley, mountain, and desert communities to sponsor programs that were strategically designed for the comprehensive improvement of child health, early learning, and family support. No strategic plan was developed in Kern County for early childhood services, nor did the service integration become a focus area to enhance the sustainability of local programs for children ages 0-5 and their families. "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" (First 5 Association of California, 2009, p. 7).

More importantly, the service delivery was completed cost-effectively, and all programs operated within their budgets. In particular, seven programs in this focus area saved $68,908 from the original annual budget (Figure 21).

Figure 21: Program Budget Savings in *Early Childcare and Education*

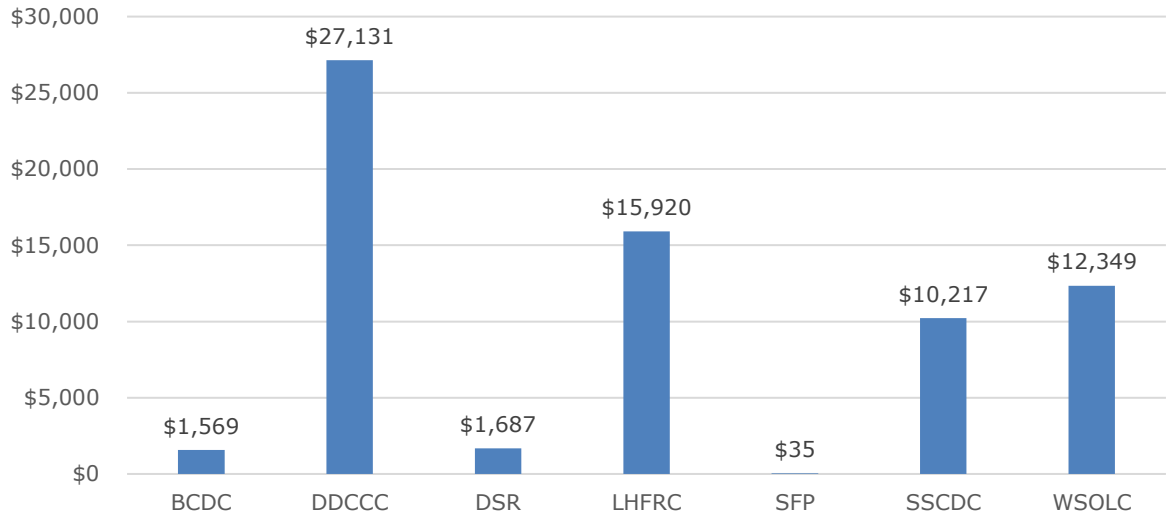
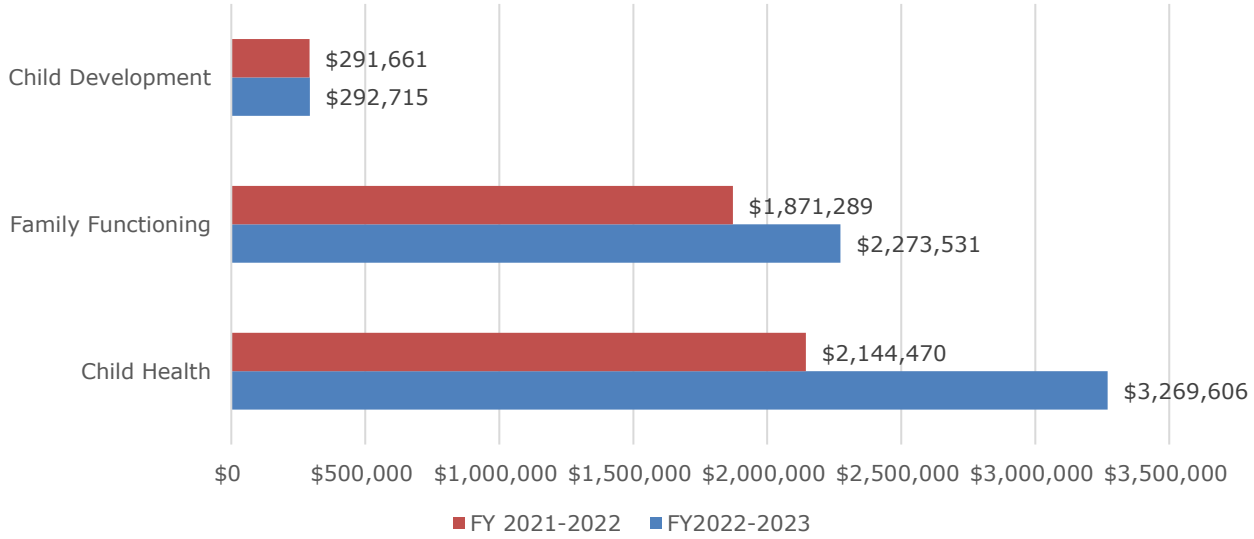


Figure 22: Sustainability Funds Leveraged in Program-Affiliated Focus Areas



In conclusion, the systematic data tracking in this chapter conforms to the Statewide Evaluation Framework (First 5 California, 2005). More specifically, descriptive data are summarized to indicate the extent of early childhood service delivery in each focus area. Value-added assessments are conducted to monitor the improvement of program outcomes under a pretest and posttest setting. Altogether, this chapter not only

elaborates on the scope of services in each focus area, but also incorporates extensive analyses of positive changes resulting from First 5 Kern-funded programs using AAPI-2.1, RAR, ASQ-3, ASQ:SE-2, BCBH, CASB, DANCE, DRDP, FCP, and NCFAS-G instruments.

To channel more Proposition 10 funding into direct services, First 5 Kern maintained a frugal budget in the office operation. As Brown Armstrong Accountancy Corporation (2023) reported, "Payroll and employee benefits were under budget by $197,016 and $44,226 respectively, due to staff vacancies and staff reorganization" (p. 5). In pursuing improvement of program effectiveness, most service providers used Proposition 10 investment as the seed money to strengthen program sustainability through external partnership building. In FY 2022-2023, service providers leveraged external funds totaling $5,835,852, larger than $4,307,421 last year (see Figure 22). More results are presented in Chapter 3 to report the outcomes of service integration at the commission level.

Chapter 3: Effectiveness of Service Integration

Proposition 10 was designed to promote, support, and improve the early development of children from prenatal to five years of age. Besides *Child Health, Family Functioning*, and *Child Development*, its emphasis on the *Systems of Care* underscores the recognition that multiple factors influence child wellbeing and that a siloed approach to service delivery can be less effective than a holistic one. According to NAEYC (2020), effective integration of early childhood services should include "everything discernible about the social and cultural contexts for each child, each educator, and the program as a whole" (p. 7). First 5 Kern employed an Integration Service Questionnaire (ISQ) to assess systemic program connections. The ISQ data are analyzed in this chapter, along with an application of computer software, *NetDraw*, to examine the network composition within and between focus areas, as well as configure the strength of the partnership links.

Partnership building directly impacts the commission's strategic planning. It was stipulated by Proposition 10 that "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). Because county commissions oversee and direct the funds generated by the tobacco tax, integrating services across local programs is particularly important for First 5 Kern to reduce service duplications and ensure efficient resource allocations.

In the state report glossary, two result domains, *Policy and Public Advocacy* (PPA) and *Programs and Systems Improvement Efforts* (PSIE), are designated to document county commission efforts in system building (First 5 Association of California, 2013). While PPA depends on coordinated endeavors across the state, PSIE hinges on the coherent development of partnerships among service providers. In addressing PSIE under the commission control, network analyses are conducted to assess partnership capacity among the First 5 Kern-funded programs. In addition, the IMPACT (Improve and Maximize Programs so All Children Thrive) project of the state commission has been incorporated as a partner to support service integration. Articulation of the internal and external network connections fits a long-standing policy agenda of 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

The quality of early childhood support depends on the professional training of service providers. In FY 2022-2023, FCP and MVIP fulfilled RI 4.1.3 in Child Health by training 55 parents, which is larger than the target of 54 parents. FCP also held four workshops to disseminate information about its health and wellness services to parents/guardians (RI 4.1.2). Two programs (CASA and SSEC) in *Child Health* and six programs (BCDC, DDCCC, HLP, SSCDC, SFP, and WWP) in *Family Functioning* offered training for 66 service providers to improve early childcare and education in Child Development (RI 4.3.1), exceeding the target of 65. Altogether, four service providers attended CMIP and HMG collaborative meetings (RI 4.2.2), doubling the original target of two.

"In the childcare industry, there are two main populations involved — the children and the providers" (Morgan, 2019, p. 1). First 5 Kern has funded seven programs to

support both stakeholders by guiding the organization of 26 articulation meetings (RI 4.3.3) with 66 participants (RI 4.3.2) to develop transition plans for incoming kindergartners in eight programs. These counts were above the corresponding targets of 17 and 45. In addition, three commission-led training workshops were conducted by OFRC (RI 4.4.3). The staff of 14 programs attended 112 collaborative meetings (RI 4.2.1), more than 106 meetings in the annual target. Eleven service providers participated in HMG-led educational events on early childhood topics (RI 4.4.1).

In addition, School Readiness Articulation Survey (SRAS) data were gathered from 13 teachers, school administrators, and community members this year to assess the impact of local services on child development. The percent of *agree* or *strongly agree* responses to SRAS questions are listed in Table 55.

Table 55: Percent of *Agree* or *Strongly Agree* Responses to SRAS Items

SRAS Items	Percent
Children in the community have an early start toward good health	92.3
Parents of children in the community know about early childhood learning	76.9
Parents in the community know about good parenting	46.2
Parents in the community know about community resources	46.2
Early education programs in the community provide quality education	92.3
Early education programs in the community provide quality childcare	76.9
Community programs integrate services for children and families	92.3
Overall, children in the community are well prepared for kindergarten	76.9

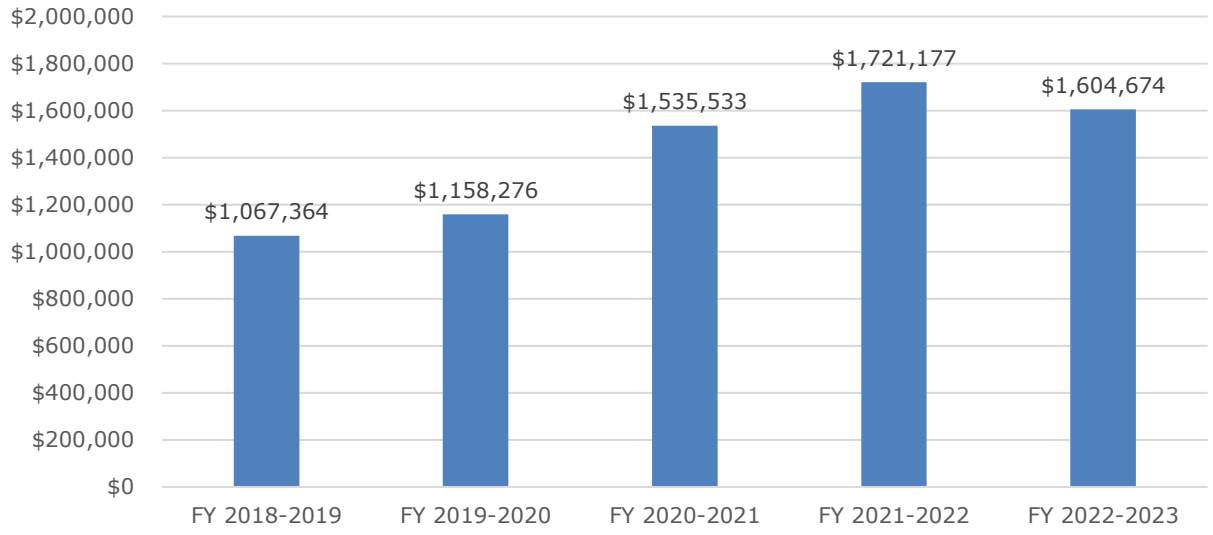
The results show that 46.2% of the respondents *agreed* or *strongly agreed* that parents know about good parenting and community resources, confirming the need for educating the majority of parents with First 5 Kern-funded services. Meanwhile, 92.3% of the respondents *agreed* or *strongly agreed* with the statements that early education programs provided quality education and integrated services for children and families. The same proportion of respondents believed that children in the community had an early start toward good health. Above three-quarters of respondents supported three assertions: (1) parents knew about early childhood learning, (2) early education programs provided quality childcare, and (3) children were well prepared for kindergarten. These findings not only identified the room for improvement, but also established a new baseline to monitor the service indicator improvement next year.

Under First 5 Kern's leadership, 21 service providers share the responsibility of child or infant services, 26 programs collaborate on parental supports, 20 programs feature services of case management, nine programs cover early learning, and three programs carry pivotal functions in service referral system (Ibid. 1). The program funding across multiple aspects reflects an overall goal of service integration to establish a "well-integrated system of services for children and families" (First 5 Kern, 2023, p. 6), which met the expectation for county commissions to "facilitate the creation and implementation of an integrated, comprehensive, and collaborative system of information and services to enhance optimal early childhood development" [Proposition 10, Section 5(a)].

The demand on service integration has been advocated by the state and local commissions for nearly 25 years. Like *Child Health, Family Functioning*, and *Child Development*, a template of the *annual report to the state* has designated a budget domain for the *Systems of Care*. In retrospect, Figure 23 shows First 5 Kern funding in service

integration over the past five years. In comparison to last year, the commission saved $16,200 this year from the *Emergency and Disaster Relief* category. The spending on *Policy and Public Advocacy* was also reduced from $1,330,160 to $1,160,484. Meanwhile, the investment in *System Building* increased from $350,317 to $404,064.

Figure 23: First 5 Kern Funding in Service Integration



The funding increase echoed the need for service integration from the current research literature, i.e., "families generally report higher satisfaction with services given comprehensive Systems of Care" (Doll et al., 2000, p.4), including articulation of direct treatments with referral service networks. As a result, the service count increased in seven result indicator categories this year (Table 56).

Table 56: Service Count across Seven Indicators in Systems of Care

Result Indicator	FY 2021-2022	FY 2022-2023
4.1.2 Workshops (Health and Wellness)	4	8
4.3.2 Articulation Meetings (Providers)	64	66
4.3.3 Articulation Meetings	24	26
4.4.1 Education Events (Providers)	10	11
4.4.3 Commission-Led Training/Workshop	16	697
4.6.1 Early Learning Sites (IMPACT)	77	121
4.6.3 Workshops (Early Childcare and Education)	30	113

In summary, First 5 California (2015a) confirmed, "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). In the local capacity building, First 5 Kern funded service provider training to sustain a learning community with collaborative responsibilities in early childhood service, parental support, case management, school readiness preparation, and program referral support (Ibid. 1).

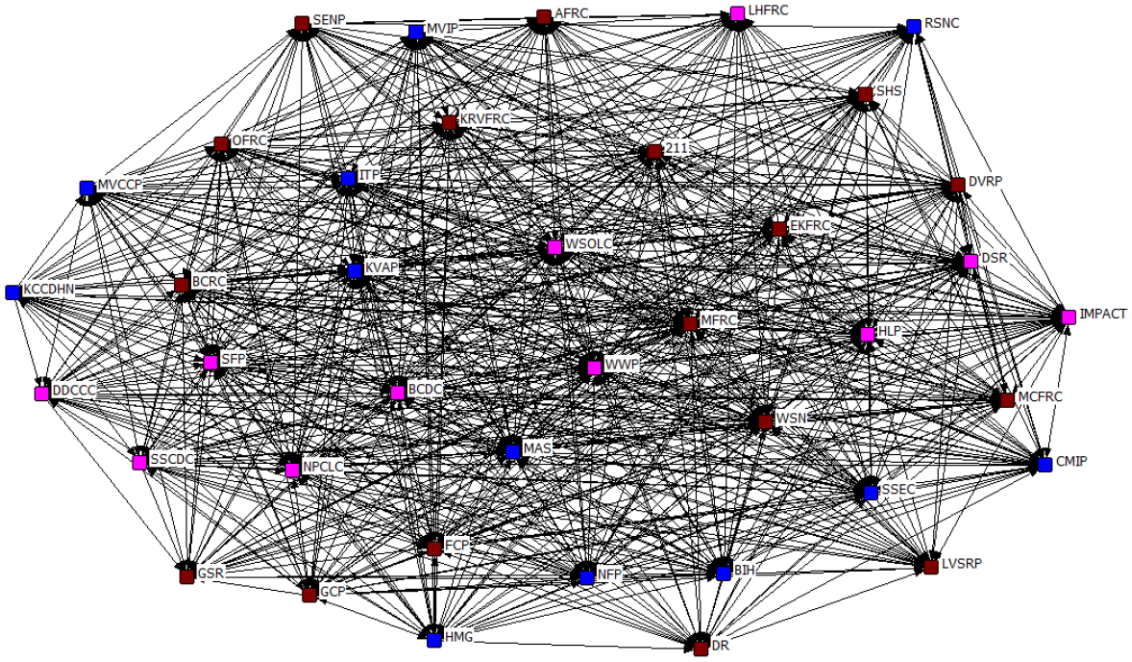
Strengthening of Partnership Network among Service Providers

Partnership network offers a coordinated approach to improving services in *Child Health, Family Functioning*, and *Child Development*. Not only does it ensure better

benefits for children and families, but it also promises efficient and judicious use of Proposition 10 resources. Hence, the expectation of service integration has been communicated with each service provider. In the network configuration, service providers identified partners from a list of the First 5 Kern-funded programs during the ISQ data collection. The inclusive coverage of all programs is effective in gaining a more complete picture of the network structure than other approaches (Wasserman & Faust, 1994). The process of collecting whole-network data is stipulated by a *saturation sampling technique* in the research literature (see Carolan, 2014).

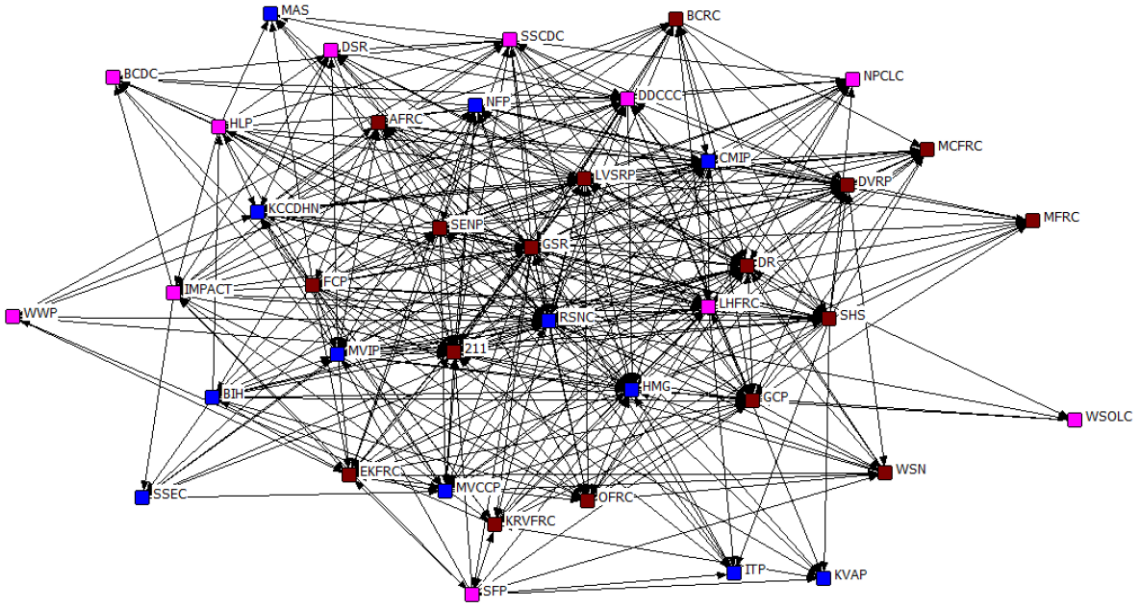
With 40 service providers, including IMPACT, receiving Proposition 10 funding, each program could have 39 potential partners, composing 1,560 network links (i.e., 40X39). At the baseline level, program connections can be characterized as *Co-Existence* without outreach effort. The partnership analysis indicates 1,093 links at the *Co-Existing* level, accounting for 70.06% (i.e., 1,093/1,560) of all possible links in the ISQ database. In Figure 24, blue, brown, and pink colors are used to differentiate program nodes in *Child Health, Family Functioning*, and *Child Development*, with IMPACT denoted in pink to support the QRIS system in early childhood education. The overall pattern across all 40 service providers shows an approximately even spread of the network connections with an overall density of 0.67. The network findings obtained from PROC NETWORK in Statistical Analysis System (SAS) also suggest approximately 26.66 links per program, comparable to 26.15 last year.

Figure 24: Density of Program Networking at the *Co-Existing* Level



Beyond the *Co-Existing* level, more active links are plotted in Figure 25 for 467 connections involving program outreach. Due to the demand for additional efforts in program outreach, the links in Figure 25 are sparser than the network of program *co-existence* in Figure 24. The density of the active network is 0.28, with an average of 11.39 links per node, which is comparable to 11.13 links per node last year. Hence, First 5 Kern-funded programs have stabilized their outreach efforts in partnership building, as reflected by the network density between adjacent years.

Figure 25: Density of Active Program Links above the *Co-Existing* Level



Among the active links in Figure 25, 2-1-1 referral partnerships are solicited by 30 programs. Dental health support from KCCDHN is included in a service network with 19 programs. Programs with no ethnic or geographic delimitation, such as CMIP, HMG, MVIP, and NFP, demonstrate more connections than programs for relatively small populations (e.g., BIH, SFP). Countywide programs like DR have more links than local service providers in remote communities (e.g., WSOLC and WWP). Due to its specialty in supporting early education, IMPACT actively connects to (1) two programs in *Child Health* (HMG and SSEC), (2) three programs in *Family Functioning* (EKFRC, KRVFRC, and OFRC), and (3) five programs in *Child Development* (BCDC, DDCCC, DSR, SFP, and SSCDC). IMPACT is also reciprocally identified as a partner of 12 First 5 Kern-funded programs in *Child Health* (RSNC), *Family Functioning* (AFRC, BCRC, FCP, GSR, KRVFRC, LVSRP, SHS), and *Child Development* (DDCCC, DSR, HLP, SFP). Hence, First 5 Kern's focus area of service integration is supported by an extensive network for active partnership building. Because program links above the *Co-Existing* level often involve initiators, mutual partnership connections need to be further examined on the program roles in the next section.

Reciprocal Partnership Connection Beyond Co-Existence

Partnership building can be unilateral or reciprocal. Reciprocal links occur when a network connection is concurrently confirmed by both parties. In general, the "reciprocation rate is inversely related to the barrier level in these networks" (Singhal et al., 2013, p. 1). Hence, the improvement of service integration is accompanied by the elimination of partnership barriers and the expansion of reciprocal connections (Borgatti, Everett, & Johnson, 2018). At the baseline level, 173 pairs of reciprocal links are identified from 1,093 program connections at the *Co-Existing* level (Figure 24). Above the baseline level, 62 pairs of reciprocal links are identified from 467 program connections. In this section, reciprocal relations are examined in focus areas of *Child Health*, *Family Functioning*, and *Child Development*.

In Kern County, services in *Child Health* are intended to meet a wide range of special needs, such as immunizations, health insurance coverage, medically vulnerable infant support, nurse-family partnership, and water safety education. These programs offer joint support of dedicated nurses, hospital employees, and mental health professionals in different organizations. Based on Proposition 10, partnership building aims to strengthen service integration for well-rounded care provision. Therefore, active partnerships are needed to examine the service voids and enhance the complementary supports.

In comparison, programs for *Child Development* are rooted in specific communities. Outreach efforts may facilitate exchanges of service experiences from different program settings. Service providers in *Family Functioning* consist of both local FRCs and countywide child protection services, such as DR, DVRP, and GCP. It also includes referral services from 2-1-1 to facilitate program networking. Table 52 shows more links in *Family Functioning* because it contains more service providers. Based on the commission program classification (Ibid. 1), 41 pairs of active links are mutually acknowledged by service partners within each focus area. For complementary program support, 21 active links feature mutual connections across focus areas (Table 57).

These links reflect the establishment of joint partnerships among programs in *Child Health, Family Functioning,* and *Child Development*. While several programs offer multiple services in parent education, early care, child protection, and school readiness preparation (Ibid. 1), countywide programs often network with local service providers to identify and address child needs in family settings. Table 57 indicates more active reciprocal links *within* a focus area than *between* focus areas, indicating coherent service provider classification in First 5 Kern's (2023) strategic plan.

Table 57: Number of Active Reciprocal Links Beyond the Co-Existing Level

Link Nature	Focus Area	Link Count
Within a focus area	Child Health	14
	Family Functioning	20
	Child Development	7
Between focus areas	Child Health <-> Family Functioning	13
	Child Health <-> Child Development	4
	Child Development <-> Family Functioning	4

Following First 5 Kern's (2023) strategic plan, service integration is expected for all programs. The reciprocal network among First 5 Kern-funded programs includes 62 pairs of mutually confirmed partnerships above the *Co-Existing* level. Since the results are delimited to network counts, it should be noted that "not everything that counts can be counted."[34] To analyze the capacity of service integration, the strength of partnership connections is assessed by a *Co-Existing, Collaboration, Coordination*, and *Creation* (4C) model in the next section.

Justification of Model Selection for Partnership Evaluation

[34] www.quotationspage.com/quote/26950.html

Depending on local conditions, program features may vary across Kern County's valley, mountain, and desert communities, and so does the strength of network connection. Despite its baseline status, the *Co-Existing* relation could be reciprocated between programs for legitimate reasons. For instance, the Kern Valley Aquatics Program (KVAP) offers water safety and injury prevention education in Kern River Valley. Programs in Lost Hills, such as LHFRC, are not expected to transport children 100 miles away to access KVAP services. Hence, program *Co-Existence* could be grounded in the *Scope of Work and Evaluation Plan* pertinent to fulfillment of service delivery under First 5 Kern's (2023) strategic plan.

In examining network characteristics, Cross, Dickman, Newman-Gonchar, and Fagen (2009) argued, "Evaluating interagency collaboration is notoriously challenging because of the complexity of collaborative efforts and the inadequacy of existing methods" (p. 310). To simplify the undertaking, Project Safety Net of Palo Alto (2011) suggested a five-level model for network categorization that featured "formal communication" as a characteristic of *cooperation*. Because communications could be described as *frequent, prioritized,* and/or *trustworthy*, this model did not resolve the entanglement of cooperation features.

Besides the issue of mutual exclusiveness, partnership categorization needs to comprehensively cover different strength levels. In this regard, First 5 Fresno (2013) treated coordination and collaboration as the highest levels of program interaction, which could have inadvertently left no room for partnership improvement. Therefore, the Fresno approach inherited two additional problems: (1) It did not conform to Bloom's taxonomy that labeled creation as another level above integration (Airasian & Krathwohl, 2000), and (2) It downplayed the adequacy of *Co-Existing* partnerships for program referrals.

In amending these issues, service integration is conceived in this report from the context of institutional learning. The model itself is grounded on a well-established SOLO [Structure of the Observed Learning Outcome] taxonomy (Atherton, 2013; Biggs & Collis, 1982) that defines 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 to support the measure of ongoing improvement. The SOLO taxonomy was employed in several profound studies before, including a validity study of the national board certification (see Smith et al., 2005). The alignment in Table 58 illustrates a one-to-one match between the SOLO taxonomy and the 4C model for service integration.

Table 58: 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

Like the SOLO taxonomy, the 4C paradigm incorporates levels of classification that are both comprehensive and mutually exclusive. The literature-based 4C model was first

presented at the 2013 annual meeting of 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). Subsequently, the 4C model was employed to disseminate research findings in a nationally refereed journal (Wang et al., 2016).

Tom Angelo (1999), former director of the National Assessment Forum, maintained, "Though accountability matters, learning still matters most" (¶. 1). In the following section, the 4C model is adopted to assess the strength of service integration for enhancing partnership building. The structure of service integration is illustrated by *NetDraw* plots through social network analysis.

Evaluation of Network Strength According to the 4C Model

Results in Table 59 demonstrated a hierarchical feature of the 4C model – The reciprocal partnership count dropped as the network strength increased across the *Co-Existing*, *Collaboration, Coordination*, and *Creation* hierarchy, ending with the smallest number at the top level of new partnership creation. Built on the network classification, partnership strength can be computed to track the enhancement of service integration.

Above the level of program *Co-Existence*, a total of 53 pairs (i.e., 7+14+32) of the connections are reciprocated by partners within the *Collaboration, Coordination,* and *Creation* categories. In reality, far more links are non-reciprocal to feature asymmetric connections (Hansen, 2009). Table 59 shows that the mutual connections are rated for 20 pairs of active partnerships at different strength levels above *Co-Existence*. In contrast, 85 pairs of asymmetric connections involve *Co-Existence*. These reciprocal links may have one partner at the *Co-Existing* level and rely on the other at another C level for a more active connection.

Table 59: Distribution of Mutual Partnership Counts of Different Strengths

Scope	Strength	Partnership Count	Subtotal
Partnership within the same strength level	Creation Coordination Collaboration Co-Existing	7 14 32 173	226
Partnership across different strength levels	Involving Co-Existence Above Co-Existence	85 20	105

Beyond the general partnership patterns, the primary network is typically expected to involve a much stronger connection. Since not all the partnerships carry the same weight, the primary partnerships are identified by service providers during the ISQ data collection. In FY 2022-2023, the strength of eight reciprocal links is agreed upon by the mutual primary partners at the *Collaboration, Coordination*, or *Creation* levels (Table 60). The *Co-Existence* connections, while widespread in general program links (e.g., Figure 24), seem too weak to characterize the primary partnership, as shown by the zero count in Table 60. The overall network structure is stable because the mutual partners reciprocally identify most primary links at the same strength level.

Table 60: Counts of Reciprocal Primary Partnerships

Scope	Strength	Partnership Count	Subtotal
Primary partnership within the same strength level	Creation	4	8
	Coordination	2	
	Collaboration	2	
	Co-Existing	0	
Primary partnership across different strength levels	Involving Co-Existence	1	5
	Above Co-Existence	4	

It should be noted that effective program partnerships could have different strengths. For instance, referral services belong to the *Collaboration* category of the 4C model because it does not stipulate new service *creation*, nor does the one-to-one phone call involve a third-party intervention at the *Coordination* level. In another example, First 5 Kern funds KVAP in *Child Health*, KRVFRC in *Family Functioning*, and SFP in *Child Development* to support multiple service deliveries in the same region. The multilateral supports are at the *Coordination* level to integrate different services across focus areas. In combination, service integration is grounded on different partnership structures to meet local needs. As Provan, Veazie, Staten, and Teufel-Shone (2005) observed, "In the academic literature, network analysis has been used to analyze and understand the structure of the relationships that make up multiorganizational partnerships" (p. 603).

Although "reciprocity is a common property of many networks" (Garlaschelli & Loffredo, 2004, p. 4), asymmetric strengths may exist in network connections of primary partners (Antonucci & Israel, 1986; Shulman, 1976). The strength difference needs to be further examined in the next section because unilateral connections often lead to relation adjustments and instability (Kuhnt & Brust, 2014).

Examination of Primary Partnerships for Service Integration

In the field of network analysis, "Existing research has demonstrated that two primary features of networks, *network structure* and *the strength of ties*, have distinct effects on outcomes of interest" (Cross et al., 2009, p. 311). In this section, the primary partnership structure, including both reciprocal and unilateral links, is aggregated to construct inclusive network plots across programs of *Child Health, Family Functioning*, and *Child Development*.

Network Structure within Each Focus Area

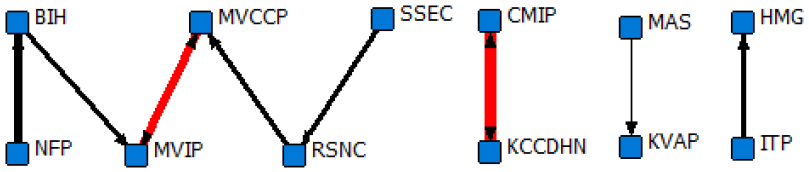
While a *saturation sampling technique* was adopted to construct the comprehensive network in Figures 24 and 25, the partnership could have different strengths, and not all the partners were of equal importance. Thus, an examination of primary partnership building is needed to prioritize key relations. Due to the split of program affiliation into different focus areas, the network of *primary* partners is expected to have a much smaller density than the *general* networks (see Figures 24 & 25). In this section, red-colored lines are employed to highlight reciprocal links. The line thickness indicates the strength of connections at different C levels.

1. Network among Programs in *Child Health*

Figure 26 shows the primary partnerships of service providers within *Child Health*.

With eight links (including two reciprocal links) connecting 12 nodes, the network computing in SAS indicates an average of 0.83 links per node. The entire network density is 0.08. This index can be used to compare with other networks later on.

Figure 26: Network Structure among Primary Partners in *Child Health*



Inspection of Figure 26 reveals the mutual connections of CMIP and KCCDHN at the highest *Creation* level. Both programs offer mobile service deliveries across Kern County. MVIP and MVCCP show another reciprocal link. The strength is mutually acknowledged at the *Coordination* level. Care coordination, particularly for medically vulnerable infants, has a bridging role to network with RSNC and SSEC in addressing special needs. They also connect to BIH and NFP for infant health care. As pivotal members, MVIP and MVCCP are located in the middle of a network and share common result indicators of *medical home provision* (RI 1.1.5) and *special needs services* (RI 1.4.2). According to Ramanadhan et al. (2012), "Networks that are highly centralized can spread information and resources effectively from the influential members" (p. 3).

Infant and Toddler Program (ITP), also known as *CASA of Kern County* in Chapter 2, needs to offer ASQ-3 screening, for which HMG is the service provider. Hence, ITP approaches HMG for service coordination to identify developmental delays. Water safety education is provided by MAS and KVAP. MAS recognizes KVAP as a primary partner. The initiation of primary partner connection could be based on the fact that MAS has a longer history of program funding from First 5 Kern, which emphasizes service integration. Meanwhile, because the programs are in different communities, the asymmetrical link is reported at a *Co-Existence* level.

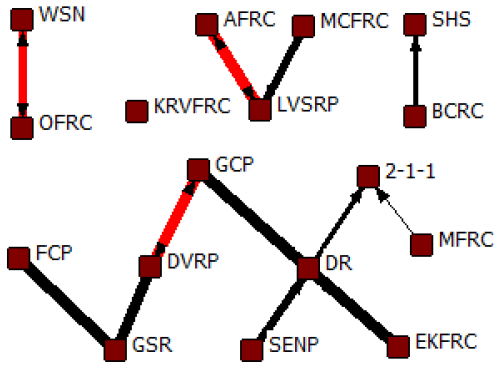
As Albrectsen (2017) suggested, an impactful service network should be built on program features. Hence, the interpretation of reciprocal links is inseparable from the program characteristics. For instance, CMIP and KCCDHN incorporate comparable indicators of screening services on child wellbeing (RI 1.3.2) and dental health (RI 1.3.4). Likewise, the mutual connection of ITP and HMG is supported by similar result indicators on provider training (RI 4.3.1 and 4.4.1). MAS considers KVAP a primary partner because both programs offer cardiopulmonary resuscitation (CPR) education and swimming lessons for children and parents/guardians (RI 1.6.2-1.6.4).

In reality, programs in *Child Health* do not operate in isolation. For instance, a child's health status can influence their ability to learn and interact with peers, which in turn affects their emotional wellbeing (Halfon, Shulman, & Hochstein, 2001). Hence, the largest network in Figure 26 involves both medical health (e.g., MVIP) and mental health (RSNC) programs. Proposition 10 emphasizes the systems of care, which requires its funded programs in *Child Health* to collaborate on early childhood support. Fragmented services often lead to duplication of efforts, gaps in service provision, and confusion for families seeking support (Bronfenbrenner, 1979). To address the needs, programs for referral services and family support compose another network below for coordinating, streamlining, and ensuring comprehensive services in the household settings.

2. Network among Programs in *Family Functioning*

Service integration not only maximizes the use of resources but also creates a smoother, more understandable pathway for families in need. In Figure 27, DVRP and GCP form a reciprocal partnership at the *Creation* level to offer preventative services for parents/guardians (RI 2.1.6) and children (RI 2.1.9) in the middle of unstable family relations. AFRC and LVSRP also reciprocally connect at the *Creation* level for sharing result indicators in general case management for children (RI 2.1.7) and parents or guardians (RI 2.1.4). In addition, they engage in family support services (RI 2.4.3) and collaborative meetings (RI 4.2.1) in neighboring communities. Likewise, WSN and OFRC are operating in the same Ridgecrest community to help establish and improve family function. WSN provides group therapy and education for child protection that can mutually benefit from home-based support of OFRC (RI 3.1.2). Their connections are reciprocated at the *Coordination* level beyond the program coexistence.

Figure 27: Network Structure among Primary Partners in *Family Functioning*



One program, KRVFRC, serves the community of Kern River Valley. The geographic isolation hinders its connection to other programs in the same focus area. The remaining 16 program nodes in Figure 27 show 12 primary partnership links. Three of the links are reciprocal. Hence, the network has an average of 0.94 links per node. The entire network density is 0.06. Proposition 10's call for collaborative programming accentuates the need for resilience-building measures that are family-centric, ensuring children not only develop but thrive despite challenges (Walsh, 2003). In that spirit, DR for Child Protection has become the most sought-after program for primary partnership building in this network.

Among the unilateral links, FCP approaches GSR when providing early childcare education and caregiver training. As a family resource center, GSR offers broad-based family support through case management, parenting classes, referrals, and early learning activities. Family support programs, such as EKFRC and GSR, also rely on DR and DVRP to create safety nets for children and families. The guardianship caregiver setting in GCP also depends on the outcome of domestic violence control from DVRP. These connections show the strongest strength at the *Creation* level.

The network connections could be between family resource centers (FRC) (e.g., BCRC -> SHS and MCFRC -> LVSRP) or between FRCs and family protection programs (e.g., OFRC -> WSN and SENP -> DR). In some cases, the primary partnership building needs referral program connections, such as the solicitation of 2-1-1 support, to bridge MFRC and DR (Figure 27).

It has been widely acknowledged that the family unit is at the heart of the systems of care approach (Bronfenbrenner, 1986). Research suggests that when families are engaged and supported, outcomes for children improve significantly (Dunst, Trivette, & Hamby, 2007). First 5 Kern followed the proven practice of funding both FRCs and family protection programs. The involvement of more service providers also increased the average number of links per program in comparison to the network in *Child Health* (see Figure 26).

3. Network among Programs in *Child Development*

It should be noted that families are nested in communities, and each community has its unique needs and strengths. By emphasizing Systems of Care, Proposition 10 allowed county commissions to assess and respond to local needs (Kreuter & Lezin, 2002), which ensures that programs are culturally relevant, practical, and aligned with community priorities.

By design, programs in *Child Development* are community-based, with local service delivery as the main task. Although no reciprocal links are identified from the primary partnership network within this focus area (see Figure 28), IMPACT chooses BCDC as its partner at the *Creation* level partly because both programs support developmental screenings (RI 1.3.1). Due to its remote location at the southwestern edge of the San Joaquin Valley, WSOLC is a stand-alone FRC denoted as an isolated node. The remaining 10 programs, including IMPACT funded by First 5 California, are networked by seven links, yielding an average of 0.7 links per node. The network density is 0.08.

Meanwhile, most primary partnerships are built on one-to-one connections at the *Collaboration* level without an intervention from a third party. At the *Coordination* level, LHFRC treats DSR as its primary partner for an extensive overlap of result indicators (RI 2.1.4, 2.1.7, 3.1.1, 3.1.2, 4.2.1, 4.3.2, 4.3.3) across general case management, parent education, center-based and home-based activities, collaborative meetings, and articulation meetings.

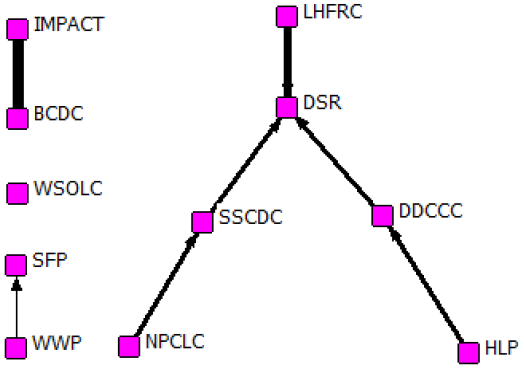
Although BCDC did not actively initiate the partnership, IMPACT unilaterally considers BCDC a creative partner. BCDC's training of early childcare and education providers (RI 4.3.1) enhances the quality of early learning and care environments that is advocated by the IMPACT legacy of the state commission.[35] The DSR partnership is also solicited by SSCDC and DDCCC, both programs support early childcare and education for children with family stability issues (Ibid. 1). Perhaps due to its responsibility in offering court-mandated parenting classes, NPCLC in *Family Functioning* indicates its primary partnership with SSCDC at the *Collaboration* level. Parent education is also a cornerstone of HLP's initiation of its primary partnership with DDCCC.

As Krebs (2011) pointed out, "What really matters is where those connections lead to – and how they connect the otherwise unconnected!" (¶. 4). In Kern River Valley, SFP is the only First 5 Kern-funded program to support *Child Development*. Likewise, WWP provides early childhood education in Boron near the east border of Kern County. Without these service providers, these hard-to-reach communities are unlikely to have program support in early childhood education. WWP received funding before SFP and partnered with SFP to extend the service coverage. By integrating services, prioritizing family

[35] https://www.ccfc.ca.gov/partners/qris.htmlt

engagement, and allowing for community-specific tailoring, First 5 Kern has used Proposition 10 revenue to pave the way for a more holistic, efficient, and effective support system in traditionally underserved regions.

Figure 28: Network Structure among Primary Partners in *Child Development*



4. Program Network Between *Child Health* and *Family Functioning*

Family environments can either be protective factors, enhancing resilience and promoting health, or risk concerns that compound health issues (Repetti, Taylor, & Seeman, 2002). Reciprocally, child health challenges may strain family functioning, leading to emotional stress and financial burdens (Raina et al., 2005). Built on the mutual connections, "There is currently movement internationally towards the integration of services for young children and their families, incorporating childcare, education, health and family support" (Nichols & Jurvansuu, 2008, p. 117). In Figure 29, service providers in *Family Functioning* and *Child Health* are represented by brown and blue nodes, respectively. Program links are drawn to describe the structure of primary program partnerships between the focus areas.

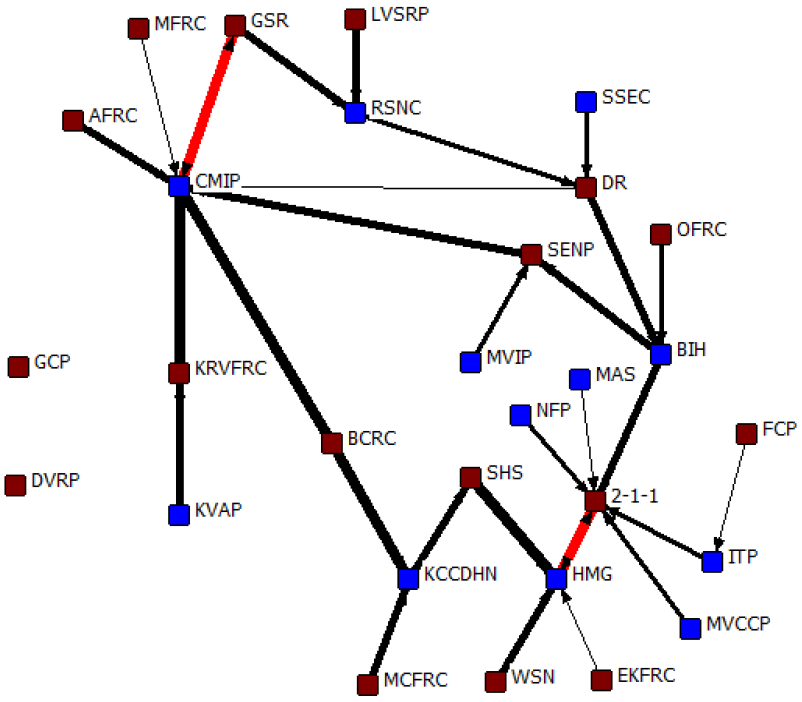
The result indicators of GCP and DVRP deal with preventative services to cope with family instability (RI 2.1.6, 2.1.9) unrelated to *Child Health* and show no primary links to the blue-colored nodes in Figure 29. For the remaining programs, the primary partnership network between focus areas contains 27 service providers with 31 links, including two reciprocal ones. The average link per node is 1.15. The overall network density is 0.04. Two pairs of programs, HMG vs. 2-1-1 and CMIP vs. GSR, demonstrate reciprocal links at the *Creation* level. HMG offers a remote screening option with support from a Development Specialist through 2-1-1 networking (Ibid. 1). CMIP is a "children's mobile immunization unit — a vaccination clinic on wheels" to visit GSR regularly (Mayer, 2022). GSR also actively promoted the service in English and Spanish online.[36]

Since the network is delimited to primary partners, 26 out of the 31 links (or 84%) are at a level above *Co-Existence*. Due to its referral service, 2-1-1 is the most solicited program by six partners. Most programs only identify one primary partner except for BCRC, BIH, DR, and GSR. Unlike other programs, BCRC and KCCDHN share RI 2.1.7 for general case management, which may have contributed to the elevation of their partnership with KCCDHN to the *Creation* level. Similarly, both BCRC and CMIP have a parent education component as their result indicator, and the common interest might have

[36] https://www.gfusd.net/apps/news/article/1788647

led BCRC to claim this partnership at the *Creation* level. SENP is offered by Clinica Sierra Vista, which considers BIH as its service provider.[37] BIH indicates SENP and 2-1-1 as partners at the *Coordination* level for service delivery and referral. Besides a Co-Existence relation with CMIP, DR identifies BIH as a partner at the *Coordination* level, and both programs support the Safe Sleep Coalition with other service providers.[38] Aside from the afore-mentioned reciprocal relation with CMIP, GSR seeks a partnership from RSNC under the joint leadership of the Kern County Superintendent of Schools.[39]

Figure 29: Network between *Family Functioning* and *Child Health*



Although not all the links in Figure 29 are reciprocal, 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). For unilateral links, programs in *Child Health* recognize at least one primary partner in *Family Functioning*. It reflects the fact that family support is essential for the proper functioning of any program in *Child Health*.

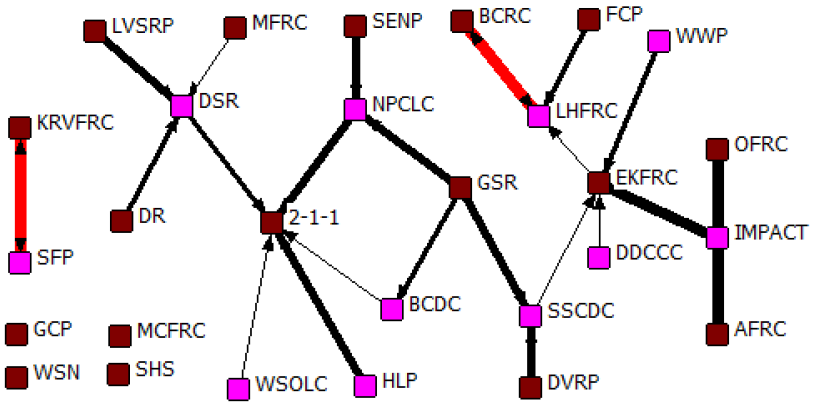
5. Program Network Between *Child Development* and *Family Functioning*

The intricacies of child development are not confined solely to the partnership support in Figure 28. They are deeply rooted in the dynamics of the family unit where the child grows. The profound interconnection is recognized by Proposition 10, which accentuates the importance of collaborative efforts between *Child Development* and *Family Functioning* domains. In Figure 30, service providers in *Child Development* and *Family Functioning* are represented by pink and brown nodes, respectively. Because of its emphasis, IMPACT, a project funded by the State Commission, is also highlighted in a

[37] https://www.findhelp.org/clinica-sierra-vista--ridgecrest-ca--family-resource-centers/5990480648077312?postal=93305
[38] https://kernpublichealth.com/safe-sleep/
[39] https://www.icarol.info/ResourceView2.aspx?org=2285&agencynum=5643684

pink node. Program links are drawn to describe the structure of primary program partnerships between the focus areas.

Figure 30: Network between *Child Development* and *Family Functioning*



Self-contained result indicators in *Child Development* are already set for four programs in *Family Functioning*, GCP (RI 2.1.9), MCFRC (RI 2.1.7), SHS (RI 2.1.7), and WSN (RI 2.1.9). Perhaps due to their functioning in family case management services (RI 2.1.7) and domestic violence prevention (RI 2.1.9), the primary partners of these programs are within *Family Functioning* (Figure 27), instead of *Child Development* (Figure 30). The deviation between internal and external service integration is called Simpson's Paradox (see Kock & Gaskins, 2016), which justifies the need for partnership comparison between and within focus areas.

The primary partnership contains 24 nodes and 25 links for the remaining network connections, rendering a 1.04 average link per node. The overall network density is 0.05. The overall network density is 0.05. Tracking and improving the density is important because a child's earliest experiences and lessons stem from the family environment. The quality of home interactions, emotional support, and cognitive stimulation are regarded as primary determinants of a child's developmental outcomes (Bronfenbrenner & Morris, 2006). KRVFRC and SFP contribute to improving family functioning and child development in the same community. The complementary roles are recognized in Figure 30 at the *Creation* level. LHFRC and BCRC link reciprocally to address result indicators of Home-Based Activities (RI 3.1.2) and General Case Management (RI 2.1.7).

As in Figure 29, 2-1-1 is the most solicited program for service referral in Figure 30. As a network of primary partnerships, 19 out of the 25 links (or 76%) are above the *Co-Existence* level. Due to service overlaps, nearly half of the programs in *Child Development*, such as DSR, LHFRC, NPCLC, and WSOLC, provide similar services like FRCs in *Family Functioning*. The program structure confirms First 5 Kern's emphasis on supporting stable and nurturing family dynamics to ensure that children reach key developmental milestones for school readiness. To recap the commonality in the *Scope of Work*, Table 61 lists the result indicators that support the primary partnership connections between *Focus Area II: Family Functioning* and *Focus Area III: Child Development* to confirm the network foundation.

Table 61: Common RI Attained by Partners in Focus Areas II and III

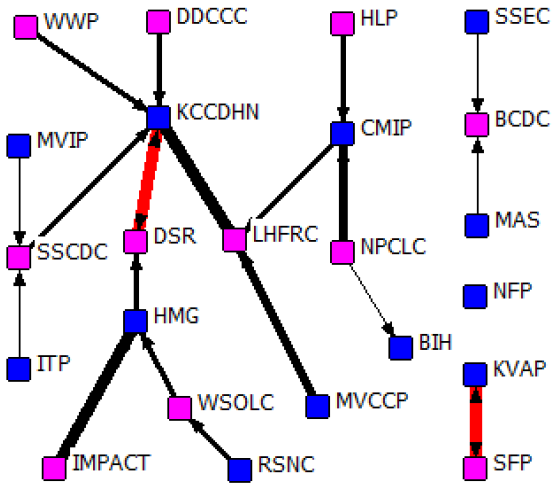
Primary Partners	Result Indicators
AFRC-HLP	1.3.1. Seventy-two children received developmental screenings
BCRC-LHFRC	2.1.4. Forty-one parents/guardians received general case management services, including home visits 2.1.7. Forty-four children received general case management services, including home visits 3.1.2. Thirty-three children participated in educational home-based activities
LVSRP-DSR-MFRC	2.1.4. Seventy-three parents/guardians received general case management services, including home visits 2.1.7. Ninety-six children received general case management services, including home visits 2.4.3. Twenty-two hundred, ninety-seven parents/guardians received support services
SENP-NPCLC	2.2.1. Seventy-one parents/guardians received court-mandated parent education
KRVFRC-SFP	2.2.3. Sixty parents/guardians participated in educational workshops
GSR-BCDC -HLP -NPCLC -SSCDC	3.1.1. Two hundred, seventy-six children participated in educational center-based activities
WWP-EKFRC	3.1.1. Forty-four children participated in educational center-based activities

6. Program Network Between *Child Development* and *Child Health*

Child Development is inherently linked to health outcomes. An integrated approach ensures that health and developmental professionals collaboratively design strategies tailored to child needs (Zuckerman et al., 2004). Reciprocally, children with robust health are better poised to achieve developmental milestones (Hertzman, 2004). In Figure 31, primary partnerships are plotted for programs between *Child Development* and *Child Health*. These focus areas are differentiated by blue and pink colors for the program nodes. The network contains 24 primary partnerships across 23 nodes. On average, each node has 1.04 links. The overall network density is 0.05. With no exception, each program in *Child Development* has at least one connection to a program in *Child Health.* As mutual primary partners, SFP and KVAP link their complementary services for school readiness and family support in Kern River Valley. DSR serves the second-largest city in Kern County and creates a reciprocal partnership with KCCDHN for oral health support.

For programs in *Child Health*, NFP appears to be an isolated node in Figure 31. In Figure 26, however, NFP coordinates its services with BIH as a primary partner in infant care. Hence, Simpson's paradox resurfaced when the network pattern expanded to multiple focus areas. Likewise, BIH delimits its infant support within the African-American community and shows no connection initiation to programs in *Child Development*. BCDC is a specialized program to support parenting teens in childrearing practice. Due to its narrow focus, BCDC rated all partnerships at a *Co-Existence* level. Simpson's paradox is also reflected in the BCDC connection for having nine partners, not necessarily the primary ones, ranked the network strength at the *Collaboration, Coordination*, or *Creation* levels.

Figure 31: Network between *Child Development* and *Child Health*



In contrast, FRCs offer general family support and need services from programs in *Child Health*. For instance, LHFRC treats KCCDHN as a creative partner even though KCCDHN did not consider LHFRC a primary partner. The asymmetry seems to indicate that health services are often solicited by programs in *Child Development*, such as the links from DDCCC, HLP, NPCLC, and WWP. Meanwhile, countywide health programs partner with service providers in *Child Development* to meet the demands of *remote* communities (e.g., DSR, LHFRC) and/or *special needs* support (e.g., BCDC, DDCCC, SSCDC).

In summary, primary links are largely focused, resulting in around 0.70-1.15 partners per program across the network settings. However, the connection density seems lower for between-focus-area networks than within-focus-area networks (Table 62). The network findings fit the dual features of primary partners: (1) Their uniqueness requires low density; (2) Their preeminence stipulates the identification of approximately one primary partner per program.

Table 62: Primary Links Across Different Networks

Network	Average Link Count Per Node	Density
Focus Area I: Child Health	0.83	0.08
Focus Area II: Family Functioning	0.96	0.06
Focus Area III: Child Development	0.70	0.08
Focus Area I – Focus Area III	1.04	0.05
Focus Area II – Focus Area III	1.04	0.05
Focus Area I – Focus Area II	1.15	0.04

Still, primary partners only compose part of the System of Care. Other partners, as long as they do not stay at the level of *Co-Existence*, can be active players in collaborating, coordinating, and creating service integration. Thus, the contribution to network building does not have to be one size fits all. According to Kuhnt and Brust (2014), a lack of reciprocal partnerships "is only found in relations of exploitation maintained through asymmetries of power" (p. 1). The asymmetry is evident in the

network connections to 2-1-1 that are solely for referral purposes and can hardly reciprocate the role of primary partnership in direct service delivery.

Laramore (2020) emphasized *network density* as a summary index to measure node connectivity to quantify the network development beyond the scope of primary partnerships. By definition, network density is configured as *a ratio between the number of links and the maximum number of possible links*. Meanwhile, the average link account per node reflects program outreach through active partnership connections. At its core, partnership building involves the Collaboration, Coordination, and Creation of both unilateral and reciprocal networks to actively engage different stakeholders within and between focus areas. Table 63 contains density indices of active partnership connections. The node count (N) is perfectly correlated with the average link count. They are included in the table to quantify the network extent.

Table 63: Network Density for Active Partnership Connections

Network	N	Average Link Count Per Node	Density
Focus Area I: Child Health	12	3.83	0.35
Focus Area II: Family Functioning	17	7.24	0.45
Focus Area III: Child Development	10*	2.70	0.30
Focus Area I – Focus Area III	23*	2.35	0.11
Focus Area II – Focus Area III	28*	2.96	0.11
Focus Area I – Focus Area II	29	4.62	0.17

*The state commission's IMPACT project is included in the network. BCDC has no active partner identified.

The network density computing shows more active links for programs *within each focus area* than *between focus areas* (Table 63). In particular, the outreach effort seems more vigorous in *Focus Area I: Child Health* and *Focus Area II: Family Functioning*, which involves countywide service providers. In addition, more nodes are involved in these networks between focus areas. However, the density remains at 0.17 or lower, far below the density within a focus area. As illustrated by Simpson's Paradox in primary partnership analysis, the density comparison not only reveals the pattern variation across different network scopes, but also shows more room to improve the active partner network between focus areas.

As NAEYC (2020) insisted, "All domains of child development are important; each domain both supports and is supported by the others" (p. 9). Accordingly, ISQ data analyses are extended in this chapter on several dimensions, including the strength of program links, reciprocal versus unilateral partners, as well as primary and active network structures. Besides the empirical data tracking, the network examination conforms to the literature-based 4C model. Based on the axiom that the whole could be larger than the sum of its parts, partnership building can help strengthen the service capacity for young children and their families in Kern County.

Built on the summary of partnership building, First 5 Kern (2023) may take a further step to "facilitate turning the curve on result indicators" (p. 2). An examination of the network structure has implications for improving service integration. While it is believed 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), most primary links in Figures 26-31 and active connections in Figure 25 are unilateral. Carmichael and

MacLeod (1997) noted that asymmetric links are more likely to break the equilibrium and create stronger networks during the process of service system building. To support the ongoing progress, First 5 Kern has collected trend data to aggregate findings of child wellbeing and family conditions. The results are presented in Chapter 4 to delineate additional improvement of service outcomes on the time dimension.

Chapter 4: Turning the Curve

According to First 5 Kern's (2023) 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). Assessment of the turning the curve process requires data collection at different time points. In FY 2022-2023, the Core Data Elements (CDE) survey and birth survey are conducted to track the information on child wellbeing across 28 programs. In addition, the Family Stability Rubric (FSR) is employed to monitor changes in 14 indicators of family functioning across 15 programs.

The information gathering is protected by a research protocol that has been maintained with IRB of CSUB to ensure compliance of the data collection to federal, state, and local laws and regulations. As general guidance, consent forms are administered prior to data collection. Confidentiality training is offered multiple times throughout the year to meet the protocol requirement. Evaluation site visits are conducted regularly to monitor adverse effects across programs. Exercises of due diligence are critical because "The Children and Families Act of 1998 mandates the collection of data for the purpose of demonstrating result" (First 5 Kern, 2023, p. 2).

Mark Friedman (2011), the developer of the Results-Based Accountability model, defines *Turning the Curve* as "What success looks like if we do better than the baseline" (p. 3). In the following two sections, the FSR data are analyzed to show the strengthening of family functioning through the *turning the curve* process. In addition, indicators of program effectiveness from last year are treated as a baseline in the CDE and birth data analyses to assess the improvement of child wellbeing. The dual focus on child and family wellbeing is pertinent to First 5 Kern's status as *Kern County Children and Families Commission*.

Strengthening of Family Functioning in FY 2022-2023

Due to the service overlap, FSR data collection is not confined with service providers in *Parent Education and Support Services*. Programs in *Health and Wellness* and *Early Childcare and Education* are also involved in the data gathering (Table 64). For completion of this annual report, First 5 Kern started the FSR data collection from the baseline quarter of Fall 2022 to monitor the improvement of the home-supporting environment in 795 families, larger than 777 families last year. The data sizes are listed in Table 64 across 15 programs.

In this section, household conditions, including *food shortage, childcare,* and *housing* support, are tracked by multiple indicators in the FSR database. Based on Maslow's hierarchy, Cherry (2013) asserted that "Once these lower-level needs have been met, people can move on to the next level of needs, which are for safety and security" (¶. 2). Therefore, additional indicators of *job security* and *transportation* are analyzed within the first six months of First 5 Kern support. The period setting is intended to avoid widespread ceiling effects in the trend description.

Table 64: Scope of FSR Data Collection

Focus Area	Program*	Data Size
Health and Wellness	RSNC	70
Parent Education and Support Services	AFRC	32
	BCRC	33
	EKFRC	18
	GSR	45
	KRVFRC	120
	LVSRP	62
	MCFRC	53
	MFRC	120
	OFRC	63
	SENP	113
	SHS	16
	WSOLC	21
Early Childcare and Education	DSR	22
	LHFRC	7

*Program acronyms are listed in Appendix A. This applies to all tables in this chapter.

Food Needs

Meeting the food needs of children aged 0-5 is crucial for several reasons, ranging from physical development to cognitive functionality. Malnutrition in the early years can have irreversible consequences on brain development (Georgieff, 2007). The immune system also needs nutrition support (Calder & Kew, 2002). In Kern County, the annual median cost for an infant at a childcare center is $15,198.[40] By saving family costs in childcare, First 5 Kern intends to help alleviate the financial burden on food spending.

First 5 Kern monitored the financial burden on food spending in FSR data collection. At the program entry, 180 families in 12 programs indicated stress on food spending. The data tracking showed a reduction of the family count to 94 and 60 in months 3 and 6, respectively (Table 65). Seven programs reached a zero count in half a year. The improvement is important in child health because Kern County's child obesity rate is among the highest in California (Schmitt, 2022), and "Children who are food insecure may go to bed hungry. Food insecurity is paradoxically related to both hunger and obesity" (Children Now, 2018, p. 43).

Table 65: Number of Families with Stress on Food Spending

Program	Initial	3rd Month	6th Month
AFRC	12	2	1
BCRC	9	7	0
DSR	16	3	0
EKFRC	6	1	0
GSR	20	5	0
KRVFRC	33	16	15
LHFRC	3	0	0
MFRC	21	18	15
RSNC	19	17	9

[40] https://www.kidsdata.org/topic/1849/child-care-cost/table#fmt=3094&loc=127,347,1763,331,348,336,171,321,345,357,332,324,369,358,362,360,337,327,364,356,217,353,328,354,323,352,320,339,334,365,343,330,367,344,355,366,368,265,349,361,4,273,59,370,326,333,322,341,338,350,342,329,325,359,351,363,340,335&tf=141&ch=984,985,222,223

Program	Initial	3rd Month	6th Month
SENP	32	25	20
SHS	6	0	0
WSOLC	3	0	0

Nutrition Considerations

First 5 Kern monitored the number of families with unmet nutrition needs. The nutrition consideration during the early years is not merely a matter of ensuring that children don't go hungry; it is about laying a strong foundation for physical growth, cognitive development, and lifelong health outcomes. At the beginning of FY 2022-2023, 18 families in 11 programs indicated unmet nutrition needs. The family count decreased to 8 and 2 in the third and sixth months, respectively. Ten programs showed elimination of the nutrition concern within half a year (Table 66), and five of them maintained the best record during the data tracking. The index change is critical for young children because "addressing health and nutrition needs in the early years of life has important effects on children's long-term development" (Golden, 2016, p. 3).

Table 66: Number of Families with Unmet Nutrition Needs

Program	Initial	3rd Month	6th Month
AFRC	1	1	0
DSR	0	0	0
EKFRC	0	0	0
GSR	2	1	0
KRVFRC	4	2	0
LHFRC	0	0	0
MCFRC	0	0	0
RSNC	3	3	2
SENP	5	1	0
SHS	3	0	0
WSOLC	0	0	0

Free/Reduced Lunches

The rate of "free or reduced lunches" in schools is frequently utilized as a proxy indicator for the socio-economic status of families and the prevalence of child poverty in a given community or region. At the county seat, Bakersfield ranked among the nation's worst in childhood poverty (Comen, 2019). The situation could be worse in rural communities. In FY 2022-2023, 10 programs tracked the number of families that qualified for free/reduced lunch services. At the initial stage of program access, 153 families reported the need for free or reduced lunches for children in the households. The family count dropped to 77 and 40 in months 3 and 6, respectively. Within the first six months, the count reached zero in five programs. The data pattern in Table 67 portrays a positive trend in family support for child wellbeing because "poverty adversely affects structural brain development in children" (p. 1).

Table 67: Number of Families Needing Free/Reduced Lunches

Program	Initial	3rd Month	6th Month
AFRC	10	5	1
BCRC	13	12	3

Program	Initial	3rd Month	6th Month
DSR	13	2	0
GSR	30	10	0
KRVFRC	29	16	14
LHFRC	3	0	0
RSNC	16	14	7
SENP	17	17	15
SHS	12	0	0
WSOLC	10	1	0

Unmet Housing Needs

Children learn through interactions with their environments (Brooker, 2006). Strong links have been found in research literature between housing conditions and child development (Dockery, Kendall, Li, & Strazdins, 2010). Unmet housing needs can point to circumstances that compromise a child's health, safety, and development. (Desmond & Bell, 2015). Monitoring the needs may lead to more effective interventions to reduce child homelessness (Samuels, Shinn, & Buckner, 2010). In FY 2022-2023, First 5 Kern collected the FSR data to track the number of families in temporary facilities across 14 programs. Initially, 50 families reported unmet housing needs. The number subsequently dropped to 18 in the third month and 11 in the sixth month. Within half a year, 12 programs showed no families living in temporary facilities (Table 68). LHFRC, MCFRC, and MFRC maintained perfect records for the entire period.

Table 68: Number of Families Living in Temporary Facilities

Program	Initial	3rd Month	6th Month
AFRC	2	0	0
BCRC	4	2	1
DSR	1	1	0
EKFRC	1	0	0
GSR	4	0	0
KRVFRC	6	0	0
LHFRC	0	0	0
MCFRC	0	0	0
MFRC	0	0	0
OFRC	1	0	0
RSNC	2	2	0
SENP	25	13	10
SHS	3	0	0
WSOLC	1	0	0

First 5 Kern designated a focus area in Family Functioning to recognize the fact that stable housing is foundational to children's growth and wellbeing. In particular, as Gaitán (2019) pointed out, housing quality is associated with symptoms of child depression, anxiety, and aggression. Housing instability can impose elevated stress to undermine children's emotional and behavioral health and become disruptive to a child's education. The information presented in this section is important because the results of social-emotional screenings offered by First 5 Kern programs cannot be accurately interpreted without the household environment information.

Burden on Housing Expenditure

A significant portion of income directed toward housing can result in risks of frequent moving, eviction, or homelessness (Desmond, 2018). The spending burdens may be compelled to cut costs in areas that directly affect children's health and development, such as nutritious food, healthcare, and educational resources (Gershoff, Aber, Raver, & Lennon, 2007). The burden of housing expenditure inevitably impacts childrearing practice. Although house prices in Kern County are not as high as most coastal regions of California, the local income is also much lower than the average income across the state. 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).

First 5 Kern's program support may have helped families save money to cover housing expenditures. In FY 2022-2023, FSR data were gathered to track family burden from housing expenses in 11 programs. Upon the program entry, the results indicated a total of 131 families facing spending cut due to housing cost. At the end of month 3, the number decreased to 59. By midyear, the number was reduced to 33 (Table 69). Six programs reached a zero count in half a year, and LHFRC maintained the flawless record across the checking points. The results addressed the burden of housing spending because "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).

Table 69: Number of Families Cutting Spending Due to Housing Cost

Program	Initial	3rd Month	6th Month
AFRC	10	3	1
BCRC	4	3	0
DSR	15	2	0
GSR	19	4	0
KRVFRC	27	11	11
LHFRC	0	0	0
MFRC	14	14	10
RSNC	15	13	7
SENP	20	9	4
SHS	3	0	0
WSOLC	4	0	0

Unmet Medical Insurance Needs

Lack of health insurance can lead to delayed medical care, lack of preventive care, and unmet health needs. Families may become unstable due to the financial strain from high out-of-pocket medical expenses, cascading negative effects on children's overall wellbeing (Himmelstein, Thorne, Warren, & Woolhandler, 2009). For instance, "Children without health insurance are less likely to get the medical care they need" (American Institutes for Research, 2012, p. 15). To track this issue, First 5 Kern gathered health insurance data from eight programs. At the program entry, the issue of *unmet insurance needs* was reported by 28 families. In months 3 and 6, the total family count dropped to 13 and 1, respectively. The number of families with unmet insurance support became

zero in seven programs within half a year (Table 70). LHFRC and WSOLC maintained the perfect record for the entire period.

Table 70: Number of Families without Medical Insurance

Program	Initial	3rd Month	6th Month
AFRC	7	1	0
BCRC	6	5	1
DSR	3	1	0
GSR	10	6	0
LHFRC	0	0	0
OFRC	1	0	0
SHS	1	0	0
WSOLC	0	0	0

Stress on Medical Premium/Copay

Most medical insurance policies require premium or copayment for service access. Although the purpose is to make people more sensitive to service costs (McKinnon, 2016), financial stress can deter families from seeking timely medical care. First 5 Kern monitored FSR data on the copayment burden from 10 programs on the copayment impact. The number of families feeling the stress from medical premiums was 149 at the beginning. In months 3 and 6, the number dropped to 84 and 45, respectively. Despite the ongoing premium hike with the Affordable Care Act (Morse, 2019), four programs indicated no copayment stress in the midyear (Table 71).

Table 71: Number of Families with Stress on Medical Premium/Copay

Program	Initial	3rd Month	6th Month
AFRC	16	7	1
BCRC	8	8	2
DSR	11	2	1
GSR	25	9	0
KRVFRC	21	10	8
LHFRC	2	0	0
RSNC	21	19	10
SENP	35	29	23
SHS	8	0	0
WSOLC	2	0	0

Job Security

The stability and security of a parent's job can be a major determinant of a family's wellbeing, particularly for families with young children aged 0-5. Unstable employment often results in inadequate family income for early childhood support (Hill, Morris, Gennetian, Wolf, & Tubbs, 2013). Consequently, "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). The unemployment issue was a topic followed in the FSR data collection across 12 programs. The issue was reported by 73 families upon the program entry. The family count was reduced to 28 at the end of the first quarter and 16 by the midyear. In particular, the responses from seven programs indicated no issue of unemployment at the

end of the sixth month (Table 72). LHFRC shows the zero count across the entire tracking period.

Table 72: Number of Families with Unemployment Issue

Program	Initial	3rd Month	6th Month
AFRC	7	3	0
BCRC	3	2	1
DSR	10	2	0
EKFRC	6	1	0
GSR	7	2	0
KRVFRC	15	7	7
LVSRP	6	4	3
LHFRC	0	0	0
OFRC	9	3	2
SENP	6	4	3
SHS	3	0	0
WSOLC	1	0	0

Unmet Childcare Needs

Quality childcare settings provide structured environments that promote cognitive, social, and emotional development in young children. Center-based programs provide children with opportunities to interact with peers, fostering social skills and emotional regulation. Still, "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, "childcare expenses were among the most uncomfortable financial topics identified by respondents" (Holmes, 2019, p. 2). As a *turning-the-curve* indicator, program effectiveness is reflected by a decreasing number of households with unmet childcare needs. Results in Table 73 were derived from the FSR data in 13 programs. At the program entry, 30 families indicated unmet childcare needs. The result declined to 9 and 4 in months 3 and 6, respectively. No family reported unmet childcare needs in 11 programs by midyear. BCRC, LHFRC, and MFRC maintained the zero count during the data tracking.

Table 73: Number of Families with Unmet Childcare Needs

Program	Initial	3rd Month	6th Month
AFRC	2	0	0
BCRC	0	0	0
DSR	1	0	0
EKFRC	4	0	0
GSR	2	1	0
KRVFRC	9	3	3
LHFRC	0	0	0
MCFRC	1	0	0
MFRC	0	0	0
OFRC	5	1	0
RSNC	4	4	1
SHS	1	0	0
WSOLC	1	0	0

Availability of Convenient Childcare

Convenient childcare encompasses factors like proximity to home or work, flexibility in hours, and affordability. Such affordable arrangements can drastically influence family dynamics, parental stress levels, employment opportunities, and child development. "Without access to affordable and convenient childcare, many parents—mostly mothers—will find it increasingly untenable, financially and logistically, to work outside the home" (Vesoulis, 2020, p. 4). Based on responses from 11 programs, 165 families indicated no convenient childcare provider at the program beginning. The family count was reduced to 73 in the first quarter and 37 in the second quarter of FY 2022-2023. Seven programs reported no shortage of convenient childcare in the sixth month (Table 74). To the credit of First 5 Kern funding, local programs offered convenient childcare while other providers discontinued the service during the pandemic (Moorthy & Raya, 2020).

Table 74: Number of Families without Convenient Childcare Providers

Program	Initial	3rd Month	6th Month
AFRC	17	8	0
BCRC	6	1	0
DSR	13	3	0
GSR	19	9	0
KRVFRC	40	19	16
LHFRC	4	0	0
MCFRC	7	6	4
RSNC	20	18	8
SENP	15	9	9
SHS	12	0	0
WSOLC	12	0	0

Missing Work/School Due to Childcare

When parents miss work or school due to inadequate or unreliable childcare, it can have ripple effects on their financial stability, career progression, educational attainment, and the overall wellbeing of the family. In FY 2022-2023, 14 programs showed improvement on the issue of *missing work or school due to childcare*. In the beginning, the issue was acknowledged by 44 families. At the end of the first and second quarters, the number was reduced to 18 and 12, respectively. Eleven programs showed the elimination of this issue within six months (Table 75). LHFRC maintained the perfect record for the entire period.

Table 75: Number of Families Missed Work/School for Childcare

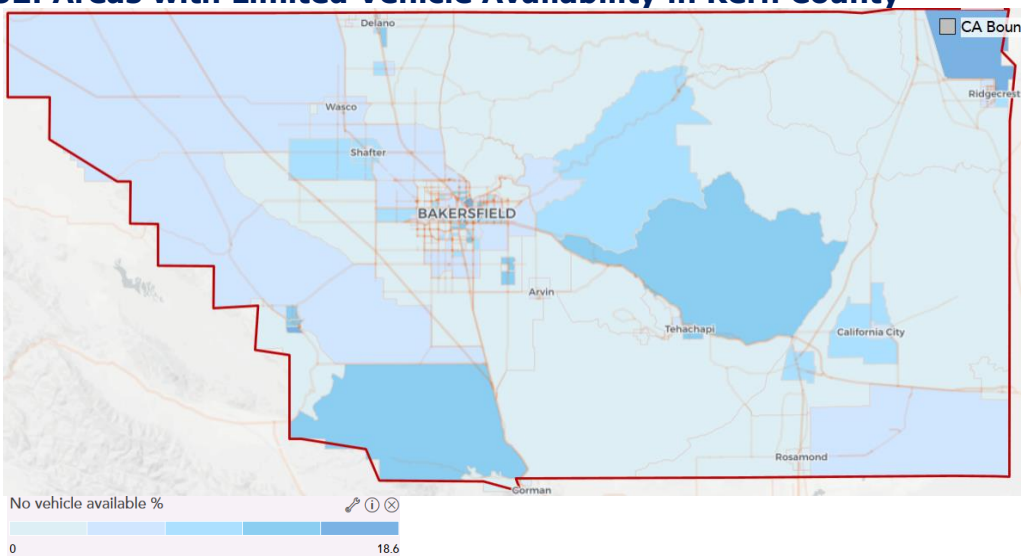
Program	Initial	3rd Month	6th Month
AFRC	4	0	0
BCRC	2	0	0
DSR	2	0	0
EKFRC	4	0	0
GSR	2	1	0
KRVFRC	7	4	3
LHFRC	0	0	0
LVSRP	1	0	0
MCFRC	1	0	0

Program	Initial	3rd Month	6th Month
OFRC	4	3	3
RSNC	12	10	6
SENP	3	0	0
SHS	1	0	0
WSOLC	1	0	0

Unmet Transportation Needs

Reliable transportation is fundamental for parents to maintain consistent employment, pursue education, and ensure their children's wellbeing. Unmet transportation needs are considered an indicator of a lack of family resources (Bixler, Miller, Mattison et al., 2020). A high incidence of parents missing work or school due to transportation can inform policymakers about inadequate public transit, the need for infrastructure investment, or the importance of subsidies for families in need (Sanchez, Shen, & Peng, 2004). For instance, dark-colored areas in Figure 32 highlight rural communities having limited vehicle availability and public transportation. Families with young children encounter difficulties in service access due to the need of "Broader and more frequent transportation services for medical appointments, dental appointments, and other services are needed".[41]

Figure 32: Areas with Limited Vehicle Availability in Kern County



Addressing transportation barriers can result in more stable families, better economic outcomes, and more cohesive communities. It was confirmed by the FSR data from FY 2022-2023 that 50 families indicated *unmet transportation needs* prior to their service access to 11 programs. Improvement of this issue occurred by the end of the first quarter when the family count dropped more than half to 17. At midyear, five families reported *unmet transportation needs*. The FSR data showed that nine programs eliminated transportation issues at the end of the sixth month (Table 76).

[41] http://www.first5kern.org/wp-content/uploads/2018/01/Ridgecrest-Area-6-Town-Hall-Recap-071317.pdf

Table 76: Number of Families with Unmet Transportation Needs

Program	Initial	3rd Month	6th Month
AFRC	2	0	0
BCRC	2	0	0
DSR	1	1	0
EKFRC	1	0	0
GSR	3	1	0
LHFRC	1	0	0
MCFRC	1	0	0
RSNC	11	10	4
SENP	7	4	1
SHS	1	0	0
WSOLC	20	1	0

Missing Work/School Due to Transportation

Families without consistent transportation often face challenges in maintaining employment, which can jeopardize their economic stability. Reliable transportation also ensures consistent school attendance and access to educational resources for career development. Table 77 contains the number of families with members *missing work or school due to transportation*. The results from 11 programs showed that 32 families reported transportation needs before receiving First 5 Kern-funded services. The family count decreased to 14 in months three and seven at midyear. Nine programs reported no families *missing work or school for transportation reasons in month 6*. DSR, EKFRC, LHFRC, and WSOLC upheld the zero count for the entire period. Improvement in this front is particularly relevant to the delivery of First 5 Kern-funded services because "In rural areas, public transportation options are scarce and have limited hours of service" (Waller, 2005, p. 2).

Table 77: Number of Families Missed Work/School for Transportation

Program	Initial	3rd Month	6th Month
AFRC	2	0	0
BCRC	2	0	0
DSR	0	0	0
EKFRC	0	0	0
GSR	3	0	0
KRVFRC	8	3	2
LHFRC	0	0	0
LVSRP	2	0	0
RSNC	12	11	5
SHS	3	0	0
WSOLC	0	0	0

The Burden of Transportation Expenditure

For families with young children, especially those aged 0-5, high transportation costs can significantly strain budgets. Constant worry about spending can induce stress in parents, affecting their emotional wellbeing and potentially their interactions with their children. In FY 2022-2023, FSR data were gathered to track the number of families *with financial burdens for transportation*. The initial figure showed 51 families with the financial

burden before service access in 11 programs. The family number dropped to 22 and eight in months 3 and 6, respectively. Eight of the programs showed zero family count by midyear (Table 78), and no family in LHFRC reported the burden across the checking points. The trend of improvement is important for child service access in remote communities.

Table 78: Number of Families with Financial Burden for Transportation

Program	Initial	3rd Month	6th Month
AFRC	8	1	1
BCRC	3	1	0
DSR	1	0	0
EKFRC	1	0	0
GSR	13	5	0
LHFRC	0	0	0
LVSRP	2	1	0
RSNC	10	9	5
SENP	10	5	2
SHS	1	0	0
WSOLC	2	0	0

In summary, local programs make extensive contributions to the improvement of early childhood support on time dimension. By saving family expenditures on childcare, the entangled issues of adequate *food supply, childcare, job security, housing*, and *transportation* have been alleviated within the first six months of program service. The FSR findings in Tables 65-78 demonstrated improvement in family functioning on 14 indicators in FY 2022-2023. The support is particularly important for narrowing the equity gap because childcare costs have exceeded federal subsidy payments to low-income parents (Murrin, 2019).

Improvement of Child Wellbeing between Adjacent Years

Based on the state statute, Proposition 10 delimits the service population to ages 0-5. "During this period, the brain shapes key abilities for long-term wellness, such as forming trusting relationships, being open to learning, and regulating emotions" (Briscoe, 2019, p. 1). To remain in the age boundary, the service population must refresh annually. Five-year-olds from last year have reached age 6 this year, and newborns within the past 12 months are added to the service population. Although the baseline characteristics, such as birth weight and ethnicity, are invariant at any two points in time, result tracking is needed to reflect the ongoing change of service recipients each year.

The state commission pointed out, "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" (First 5 California, 2016, p. 15). Following the broad guidelines, indicators of child health and development also include the status of *breastfeeding, home reading*, and *preschool attendance*. In addition, child protection is illustrated by program support for *dental care, immunization*, and *smoke prevention* during the CDE data collection. In this section, the CDE and birth data are analyzed across programs to document the impact of First 5 Kern on improvements of child wellbeing in Kern County.

Well-Child Checkup

Well-child checkups during the ages of 0-5 are vital for ensuring that children are growing appropriately and can help address any nutritional concerns (World Health Organization, 2006). The visits establish trust and a bond between the child, parents, and the healthcare provider, which is beneficial if health issues arise later in life (Kuo et al., 2012). It also offers opportunities for parents to ask questions and receive guidance on issues unique to each child (Hagan, Shaw, & Duncan, 2008). However, "Too few California kids are receiving the health screenings they need" (Children Now, 2018, p. 29).

To fill the void, well-child checkups normally start a few days after birth (Bedner, 2018). In FY 2022-2023, 11 programs indicated an increase in the percentage of children with an *annual well-child checkup visit* (RI 1.1.3). The visits also provide opportunities to foster communication between parents and doctors on a variety of healthcare topics, including safety, nutrition, normal development, and general healthcare (Medi-Cal Managed Care Division, 2013). On average, Table 79 showed that the rate of well-child visits increased from 87.4% to 94.2% between the adjacent years. The service outcome is demonstrated by CDE data from 512 children this year. In particular, BCDC, DSR, MVIP, and SFP achieved a rate of 100% completion on well-child checkups this year.

Table 79: Percent of Children with Annual Well-Child Checkups

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
BIH	27	77.8	16	93.8
BCDC	28	100	33	100
DDCCC	37	83.8	46	97.8
DSR	107	95.3	102	100
EKFRC	66	78.8	65	93.8
LVSRP	49	81.6	45	95.6
MCFRC	38	94.7	39	94.9
MVIP	46	100	38	100
SFP	30	96.7	18	100
SHS	75	81.3	92	88.0
WSN	28	71.4	18	72.2

Immunization

Immunization is crucial for protecting young children against various diseases, many of which result in severe complications (Orenstein & Ahmed, 2017). Furthermore, herd immunity protects those who cannot be vaccinated for certain medical conditions or weakened immune systems (Fine, Eames, & Heymann, 2011). The costs associated with treating vaccine-preventable diseases can be substantial, and vaccination generates substantial economic savings (Zipprich et al., 2015). Because immunizing children ages 0-5 is crucial for their individual protection, the wellbeing of their communities, and the economic health of society, First 5 Kern funded CMIP to extend immunization service across the county. Since its purchase of a service mobile unit in 2012, CMIP has been enhancing the program outreach to raise immunization rates in different communities. The support from immunization clinics is treated as an important result indicator (RI 1.3.10) in First 5 Kern's (2023) strategic plan.

Table 80 lists the percentage of children who completed *all immunizations* across 16 programs. The average percentage increased from 86.4% last year to 93.2% this year. This improvement was demonstrated by the CDE data from 918 children this year. BCDC, LHFRC, and SFP showed 100% completion of the recommended immunizations in FY 2022-2023. The improvement is worth noting because a decline in vaccination rates was reported across the nation during the pandemic (DeTrempe, 2020).

Table 80: Completion of All the Recommended Immunizations

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
BCDC	28	100	33	100
DDCCC	37	78.4	46	91.3
DSR	107	98.1	102	99.0
HLP	91	96.7	97	96.9
KRVFRC	85	72.9	119	82.4
LHFRC	47	97.9	43	100
LVSRP	45	85.7	45	91.1
MCFRC	38	65.8	39	92.3
MFRC	103	95.1	80	97.5
MVIP	46	91.3	38	92.1
OFRC	61	82.0	76	89.5
RSNC	40	95.0	41	97.6
SFP	30	100	18	100
SHS	75	88.0	92	93.5
WSN	28	46.4	18	77.8
WWP	46	89.1	31	90.3

Insurance Coverage

Health insurance enables children to receive timely regular medical care. The policy helps protect families from unexpected healthcare costs. The coverage for prescription medications is essential for managing chronic conditions or acute illnesses in young children. Adequate health care not only identifies and addresses health issues early on, but also leads to improved cognitive development for school readiness (Johnson & Schoeni, 2011). To meet this essential need, First 5 Kern (2023) identified two result indicators in its strategic plan:

- Number of families assisted with health insurance applications
- Number of children who were successfully enrolled into a health insurance program (p. 3)

The CDE data showed an increase in the percent of insurance coverage across 13 programs (Table 81). More specifically, the average percent of children *with insurance coverage* increased from 97.2% last year to 99.0% this year according to the CDE data from 731 children. A total of nine programs achieved a rate of 100% insurance coverage this year. BCDC, MVIP, SFP, WSN, and WWP have been maintaining the perfect record in consecutive years.

Table 81: Percent of Insurance Coverage

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
BCDC	28	100	33	100
DDCCC	37	97.3	46	97.8
GSR	75	93.3	75	96.0
HLP	91	98.9	97	100
KRVFRC	85	98.8	119	100
LHFRC	47	97.9	43	100
LVSRP	49	93.9	45	95.6
MVIP	46	100	38	100
OFRC	61	86.9	76	97.4
SFP	30	100	18	100
SHS	75	96.0	92	100
WSN	28	100	18	100
WWP	46	100	31	100

Home Reading

Home reading plays a pivotal role in various facets of children's development. First of all, reading aloud to young children promotes vocabulary expansion and language skills, setting the foundation for later literacy success. Engaging with books also fosters a child's concentration, comprehension, and critical thinking skills (Scarborough & Dobrich, 1994). Through reading, children can further explore emotions, relationships, and situations, helping them understand themselves and others (Mar, Tackett, & Moore, 2010). First 5 California (2018) reported that "Babies who are talked to and read to from the time they're born are better prepared by the time they start school" (p. 1). To track this indicator, Table 82 contains information about home reading activities between adjacent years. Fifteen programs demonstrated increases in the percentage of children who had *home-reading activities* twice or more per week. On average, the percentage across these programs increased from 80.9% last year to 87.5% this year. This outcome is supported by the CDE data from 1,670 children this year (Table 56). The home reading indicator also has broad implications for effective parenting. "When a child reads alongside an adult, there are plenty of opportunities for that adult to model and support self-control (such as sustaining attention) and problem-solving" (Barrett, 2019, p. 2).

Table 82: Children Being Read Twice or More Times in the Last Week

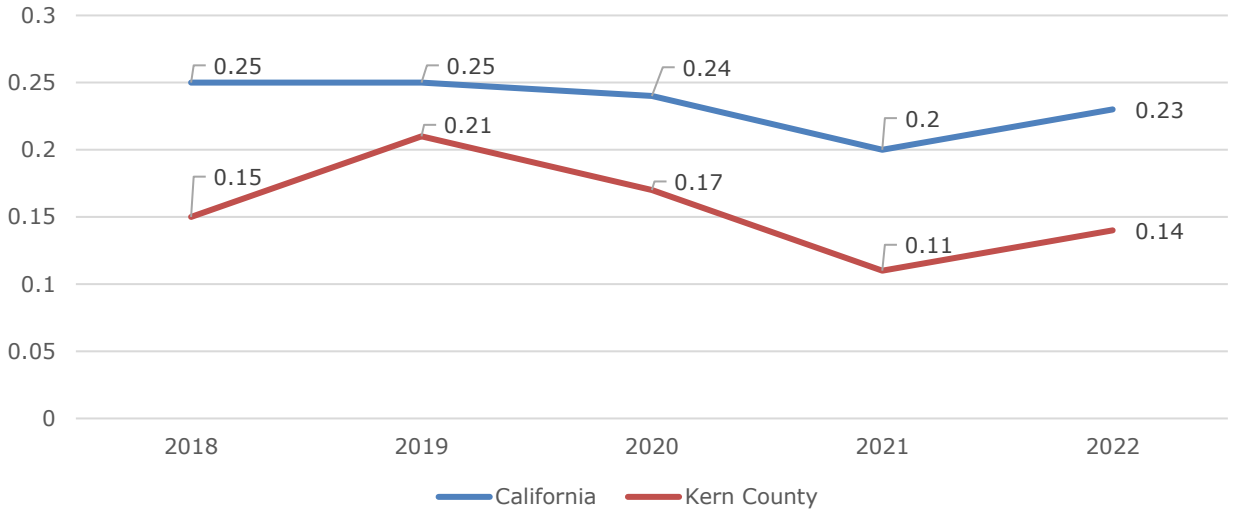
Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	30	83.3	32	95.1
BIH	27	63.0	16	75.0
BCDC	28	85.7	33	90.0
DDCCC	37	54.1	46	67.5
DR	906	68.1	974	76.4
EKFRC	66	81.8	65	86.2
GSR	75	73.3	75	80.0
KRVFRC	85	95.3	119	96.6
LHFRC	47	89.4	43	90.7

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
LVSRP	49	83.7	45	90.7
MCFRC	38	89.5	39	97.4
SFP	30	93.3	18	94.4
SHS	75	85.3	92	92.4
SSCDC	44	79.6	41	82.9
WSOLC	32	87.5	32	96.8

Preschool Attendance

Preschool attendance provides numerous advantages to young children, setting the stage for success in later years. The learning experience lays the groundwork for literacy, numeracy, and basic cognitive skills, helping children to be better prepared for formal schooling (Magnuson, Ruhm, & Waldfogel, 2007). Regular attendance allows children to consistently interact with peers, fostering social skills like cooperation, sharing, and conflict resolution (Bulotsky-Shearer, Dominguez, & Bell, 2012). The routine and schedule structure can help ease the transition to kindergarten (Reynolds, Magnuson, & Ou, 2010). Figure 33 shows a lower percentage of local children attending preschools than their peers across the state.

Figure 33: Percent of Children Attending Preschool in Kern County and California



* The ratio is derived from Census Forms B1401 and S0101.

In Table 83, program information was gathered to track the percentage of children *participating in preschool activities* on a regular basis. On average, the rate increased from 38.8% last year to 48.5% this year. The positive change is demonstrated by the CDE data from 1,872 children across 14 programs. All CDE respondents indicated regular preschool attendance in SSEC and WSOLC over the two-year period. Improvement in this indicator is important because "Decades of evidence show that children who attend preschool are more prepared for kindergarten than children who do not" (Weiland, Unterman, Shapiro, & Yoshikawa, 2019, p. 1).

Table 83: Regular Attendance of Preschool Since the Third Birthday

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
DDCCC	37	27.0	46	37.0
DR	906	22.8	974	22.9
EKFRC	66	19.7	65	27.7
GSR	75	1.3	75	10.7
HLP	91	42.9	97	60.8
KRVFRC	85	24.7	119	36.1
MFRC	103	19.4	80	37.5
OFRC	61	31.1	76	40.8
RSNC	40	90.0	41	92.7
SENP	103	8.7	90	30.0
SFP	30	33.3	18	50.0
SHS	75	22.7	92	32.6
SSEC	46	100	67	100
WSOLC	32	100	32	100

Dental Care

The primary teeth are susceptible to decay, often referred to as early childhood caries. Regular dental visits can help in the early detection and prevention of cavities (Tinanoff & Reisine, 2009). Introducing children to dental care at an early age can establish a lifetime of healthy oral hygiene practices (Kay & Locker, 1996). Regular check-ups ensure that the child's jaw and teeth are developing correctly, potentially identifying early issues that might require intervention. More critically, oral infections can lead to more serious ailments, including heart disease. Early dental care can mitigate these risks (Panagakos & Scannapieco, 2011). Because "children with poor dental health are almost three times as likely to miss school as their peers" (American Institutes for Research, 2012, p. 14), dental care is directly related to school readiness.

First 5 Kern (2023) allocated funding to address Result Indicator 1.1.6, "Number of children with an established dental home", and track oral health conditions. Since December 2001, KCCDHN has been teaming up with preschools and elementary schools throughout the county to perform oral health screenings, fluoride and/or sealant applications, as well as prophylaxis - all at little or no cost to parents. Children identified as needing further treatment are then scheduled to meet dentists in their offices.

Table 84 contains the percentage of children *with annual dental checkups* across 15 programs. Because infants were recommended to have their first dental visit by their first birthday,[42] dental care is generally applicable to most children ages 0-5. On average, the overall percentage increased from 49.3% last year to 57.4% this year. The results are supported by new CDE data from 768 children this year.

[42] http://www.aapd.org/assets/2/7/GetItDoneInYearOne.pdf

Table 84: Percent of Children with Annual Dental Checkups

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	30	43.3	32	46.9
BCDC	28	46.4	33	54.5
DDCCC	37	35.1	46	50.0
EKFRC	66	47.0	65	61.5
HLP	91	79.1	97	82.5
KRVFRC	85	37.6	119	43.9
LHFRC	47	91.5	43	93.0
MCFRC	38	57.9	39	64.1
MVIP	46	4.3	38	7.9
OFRC	61	50.8	76	61.8
RSNC	40	17.5	41	34.1
SENP	103	46.6	90	60.0
SFP	30	80.0	18	83.3
WSN	28	17.9	18	27.8
WWP	46	84.8	31	90.3

Prenatal Smoking

Prenatal smoking poses serious risks to both the mother and the developing fetus. It increases the risk of premature birth, which can lead to a range of health complications for the newborn (Shah & Bracken, 2000). Babies born to mothers who smoke are more likely to have a low birth weight and respiratory problems (DiFranza, Aligne, & Weitzman, 2004). Negative impact on maternal health, including ectopic pregnancy, placental abruption, and placenta previa (Ananth, Savitz, & Luther, 1996). It was urged by Proposition 10 to educate the public "on the dangers caused by smoking and other tobacco use by pregnant women to themselves and to infants and young children" (p. 3).

To facilitate child protection, First 5 Kern actively supports the local smoke cessation campaign. On average, the CDE data indicated a decline in the proportion of *mothers smoking during pregnancy* from 14.3% last year to 6.1% this year. These 18 programs in Table 85 provided services for 1,339 newborns this year. Eight of the programs reported no smoking issues in the end. BCDC, BCRC, and DSR maintained the perfect record in adjacent years.

Table 85: Percent of Mothers Smoking During Pregnancy

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	28	10.7	31	0
BCDC	10	0	16	0
BCRC	7	0	15	0
BIH	26	26.9	16	6.3
DDCCC	25	28.0	17	11.8
DR	884	14.4	797	13.9
DSR	57	0	75	0
EKFRC	53	5.7	55	5.6

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
HLP	54	7.4	41	2.4
KRVFRC	52	34.6	70	25.7
LHFRC	12	16.7	18	5.6
LVSRP	21	19.0	10	10.0
MFRC	71	1.4	45	0
OFRC	51	17.6	45	11.1
SFP	30	13.3	17	0
SSEC	16	25.0	23	17.4
WSOLC	32	18.8	30	0
WSN	28	17.9	18	0

Full-Term Pregnancy

A full-term pregnancy, which is generally defined as one that lasts between 39 and 41 weeks, has numerous benefits for both the mother and the newborn. In the final weeks of pregnancy, significant growth occurs in the brain to develop critical neural connections (Kinney, 2006). Babies born at full term have a reduced risk of vision and hearing complications compared to those born prematurely (Jain, 2007). Full-term infants are less likely to require care in a neonatal intensive care unit (NICU), reducing medical costs and emotional distress for parents (Tomashek, Shapiro-Mendoza, Davidoff, & Petrini, 2007). In reality, however, "many new moms might not have people or resources in their life to help them through such an important time" (LaVoice, 2016, ¶. 8). Early and regular prenatal care is important for the health of an inexperienced mom and her infant. Program support from First 5 Kern is reflected by a high rate of full-term pregnancy through stress reduction.

In the CDE survey, data on whether a child had a full-term pregnancy were coded in categories of *full-term, premature, unknown*, or *no response*. Table 86 shows that the rate of *full-term pregnancy per program* increased from 75.5% last year to 90.9% this year across 13 service providers. Altogether, these programs served 401 children in FY 2022-2023. The improvement implied a substantial decrease in social costs because "The average first-year medical costs are about ten times greater for preterm infants than full-term infants" (Wasson & Goon, 2013, p. 28).

Table 86: Increase of Full-Term Pregnancy Between Two Adjacent Years

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	28	82.1	31	96.8
BCRC	7	85.7	15	93.3
BIH	26	73.1	16	75.0
DDCCC	25	11.8	17	88.0
DSR	57	87.7	75	92.0
EKFRC	53	86.8	55	87.3
GSR	65	81.5	64	95.3
LHFRC	12	66.7	18	100
MCFRC	19	84.2	19	89.5

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	28	82.1	31	96.8
OFRC	51	72.5	45	82.2
SFP	30	96.7	17	100
SSCDC	17	70.6	11	81.8
WSN	28	82.1	18	100

Low Birth Weight

Low birth weight (LBW), typically defined as a birth weight of less than 2,500 grams (5.5 pounds), can pose significant health challenges for infants. LBW babies have an increased risk of developing chronic health conditions in adulthood, including hypertension, cardiovascular disease, and type 2 diabetes (Barker, Eriksson, Forsén, & Osmond, 2002). LBW is associated with developmental delays, lower cognitive abilities, and learning disabilities later in life (Hack, Klein, & Taylor, 1995). Due to an underdeveloped immune system, LBW infants are more susceptible to infections (Stoll et al., 2002). Care for LBW babies can be costly to burden families and the health care system (Russell et al., 2007). Hence, reducing the rate of LBW is of paramount importance not just for the immediate health and survival of the newborn, but also for long-term developmental, cognitive, and health outcomes. 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".[43] The issue is particularly relevant to Kern County for its top sixth and eighth ranks across the state on LBW and obesity.[44] The pattern needs to be reversed by effective programs, such as the ones funded by First 5 Kern.

To address these issues, First 5 Kern supported *Systems of Care* that offered a combination of education, prevention, and intervention services in prenatal care. As an outcome measure, child birth weight was coded in six categories: *less than 3lbs 4oz*, *3lbs 5oz – 5 lbs 7oz*, 5lbs 8oz – 7lbs 15oz, *8lbs or more*, *unknown*, and *no response*. Table 87 shows a reduction in the average LBW rate from 21.9% last year to 12.9% this year in 16 programs. These programs served a total of 670 children this year.

Table 87: Proportion of Cases for Decreasing Low Birth Weight

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	28	14.3	31	9.7
BCDC	10	10.0	16	6.3
BIH	26	15.4	16	6.3
DSR	57	19.3	75	6.7
GSR	65	18.5	64	3.1
HLP	54	16.7	41	12.2
KRVFRC	52	17.3	70	8.6
LHFRC	12	16.7	18	11.1
MFRC	71	5.6	45	4.4

[43] http://www.sciencedaily.com/releases/2011/03/110310070311.htm
[44] http://www.kidsdata.org

Program	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	28	14.3	31	9.7
MVIP	39	82.1	33	60.6
NPCLC	47	14.9	67	10.4
OFRC	51	33.3	45	17.8
SHS	68	8.9	87	7.0
SSEC	16	31.3	23	21.7
WSN	28	32.1	18	11.1
WWP	21	14.3	21	9.5

Breastfeeding

Breastfeeding has long been advocated for its array of benefits to both the infant and the mother. Breast milk is rich in antibodies to help the baby fight off viruses and bacteria, reducing the likelihood of illnesses like diarrhea and pneumonia (Hanson, 2007). It also provides the ideal balance of nutrients for an infant's growth and development. Some studies suggest that breastfeeding can lead to higher IQ scores in later childhood (Horta, Loret de Mola, & Victora, 2015). Furthermore, mothers who breastfeed have a reduced risk of breast and ovarian cancers, and it may assist in post-partum weight loss (Chowdhury et al., 2015). Breastfeeding promotes a closer emotional bond between the infant and the mother due to the release of the hormone oxytocin (Uvnäs-Moberg, Widström, Nissen, & Björvell, 1990).

Built on these benefits, the Children's State Policy Agenda included a target to increase the breastfeeding rate (First 5 California, 2015b). To document the progress, In a Birth Survey item is employed in this report to track breastfeeding responses that are categorized in *yes, no, unknown*, and *no response* groups. In Table 88, the average breastfeeding rate across 17 programs increased from 68.7% last year to 81.1% this year. This change supported the healthy growth of 1,332 children in Kern County. Furthermore, the improvement has enhanced the nurturing parenting process as "Babies benefit from the closeness [with mothers] during breastfeeding" (Robison-Frankhouser, 2003, p. 28). LVSRP reached a rate of 100% in FY 2022-2023.

Table 88: Increase in Breastfeeding Rate Between Two Adjacent Years

Program*	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	28	75.0	31	80.6
BCDC	10	70	16	87.5
BIH	26	84.6	16	87.5
DDCCC	25	40.0	17	76.5
DR	884	47.3	797	57.3
DSR	57	70.2	75	85.3
EKFRC	53	64.2	55	76.4
HLP	54	74.1	41	85.4
LVSRP	21	71.4	10	100
MFRC	71	76.1	45	77.8
NFP	28	85.7	49	91.8
OFRC	51	60.8	45	75.6

Program*	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
AFRC	28	75.0	31	80.6
SENP	64	75.0	54	83.3
SFP	30	70.0	17	88.2
SSCDC	17	88.2	11	90.9
SSEC	16	50.0	23	60.9
WSOLC	32	65.6	30	73.3

Prenatal Care

Timely prenatal care plays a critical role in ensuring the health and wellbeing of both the mother and the fetus throughout pregnancy. It allows for the early identification of high-risk pregnancies (Partridge, Balayla, Holcroft, & Abenhaim, 2012). It enables healthcare providers to educate expectant mothers about pregnancy, labor, breastfeeding, balanced nutrition, and newborn care (Kotelchuck, 1994). Despite its importance, "For a variety of reasons, high-risk mothers may delay or avoid prenatal care" (Wasson & Goon, 2013, p. 28). To combat this issue, the "Number of pregnant women referred to prenatal care services" is listed as RI 1.1.2 in First 5 Kern's (2023) Strategic Plan. Programs received Proposition 10 funding to provide education and service access to pregnant mothers. Based on the survey of prenatal care responses in *yes, no, unknown*, and *no* categories, the average rate of *monthly prenatal care* increased from 96.1% in the last year to 99.4% this year across 16 programs that served 539 families (Table 89). Seven programs reached 100% this year. BCDC, BCRC, BIH, LVSRP, MFRC and SSCDC upheld the perfect record for two years.

Table 89: Percent of Mothers Receiving Prenatal Care

Program*	FY 2021-2022		FY 2022-2023	
	N	Percent of Children	N	Percent of Children
BCDC	10	100	16	100
BCRC	7	100	15	100
BIH	26	100	16	100
DDCCC	25	88.0	17	100
DSR	57	98.2	75	98.7
GSR	65	96.9	64	98.4
LHFRC	12	91.7	18	100
LVSRP	21	100	10	100
MCFRC	19	89.5	19	100
MFRC	71	100	45	100
NFP	28	96.4	49	100
SENP	64	96.9	54	98.1
SFP	30	93.3	17	100
SHS	68	94.1	87	95.4
SSCDC	17	100	11	100
WSN	28	92.9	18	100

In summary, improvement in child wellbeing has been revealed through the CDE data analyses. 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 checkups, up-to-date immunizations*, and *insurance coverage*. Progress in early childhood education was demonstrated by the expansion of *home reading activities* and *preschool learning opportunities*. As indicated by results in Tables 79-89, the value-added assessments show better service outcomes this year to support an assertion in First 5 Kern's (2023) 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). Based on systematic analyses of FSR and CDE data in this chapter, ongoing improvement of child wellbeing and family support has been summarized on multiple aspects and across different program sites (see Tables 65-89). The result triangulation reconfirmed the positive impact of First 5 Kern-funded services to support the *Turning the Curve* process on the time dimension.

Chapter 5: Conclusions and Future Directions

In the first four chapters, empirical findings are gathered to report the effectiveness of First 5 Kern funding at both the commission and program levels per stipulation of Proposition 10. Under the paradigm of Results-Based Accountability, Chapter 1 contains the information to describe the commission's statutory foundation and annual accomplishments in grant administration. Assessment results are delineated in Chapter 2 to address the performance of programs in *Child Health, Family Functioning*, and *Child Development*. Network analyses are conducted in Chapter 3 to document the partnership enhancement in *Systems of Care*. Improvement of child wellbeing and family functioning is summarized in Chapter 4 to track the *turning the curve* process on 25 indicators (see Tables 51-61, 63-76). Altogether, compelling evidence has been articulated to reach a well-grounded conclusion, i.e., the commission has sponsored "local programs that promote early childhood development in the areas of health and wellness, early childcare and education, parent education and support services, and integration of services" (First 5 Kern, 2023, p. 2).

In meeting the state commission requirement, "Evaluation should be conducted in such a way that it provides direct feedback to the County Commission and to the community as a whole" (First 5 California, 2010, p. 17). Beyond the extensive data examination, this chapter is devoted to recapturing the essence of more qualitative feedback. In particular, holistic stories are synthesized from service providers to highlight the benefit of Proposition 10 funding for local children and their families. This chapter also designates one additional section, *Policy Impact of Evaluation Outcomes*, following the state report template.[45] The entire report ends with a review of the past recommendations and an introduction to new recommendations for the next fiscal year.

Impact of First 5 Kern-Funded Programs

The impact stories come from 40 programs, 39 funded by First 5 Kern and one by the state commission (see Table 90) in FY 2022-2023. The program domain is based on features of the primary responsibilities of service providers. Many stories illustrate that well-rounded services have been performed at a level above and beyond the program commitments in the local strategic plan (Ibid. 13), as well as the *Scope of Work and Evaluation Plan* for each program.

Table 90: Sources of Success Stories across Programs and Domains

Domain	Program
Child Health	Black Infant Health Program
	CASA Infant/Toddler Program
	Children's Mobile Immunization Program
	Help Me Grow Kern County
	Kern County Children's Dental Health Network
	Kern Valley Aquatics Program
	Make A Splash

[45] https://www.ccfc.ca.gov/pdf/commission/meetings/handouts/Commission-Handouts-2023-04-20/Item%209%20-%20Annual%20Report%20Guidelines.pdf

Domain	Program
	Medically Vulnerable Care Coordination Project of Kern County
	Medically Vulnerable Infant Program
	Nurse Family Partnership Program
	Richardson Special Needs Collaborative
	Special Start for Exceptional Children
Family Functioning	2-1-1 Kern County
	Arvin Family Resource Center
	Buttonwillow Community Resource Center
	Differential Response Services
	Domestic Violence Reduction Project
	East Kern Family Resource Center
	Family Caregivers Project
	Greenfield School Readiness
	Guardianship Caregiver Project
	Kern River Valley Family Resource Center
	Lamont/Vineland School Readiness Program
	McFarland Family Resource Center
	Mountain Communities Family Resource Center
	Oasis Family Resource Center
	Shafter Healthy Start
	Southeast Neighborhood Partnership Family Resource Center
	Women's Shelter Network
Child Development	Blanton Child Development Center
	Delano School Readiness
	Discovery Depot Child Care Center
	Health Literacy Program
	Lost Hills Family Resource Center
	Neighborhood Place Community Learning Center
	Small Steps Child Development Center
	South Fork Preschool
	West Side Outreach and Learning Center
	Wind in the Willows Preschool
First 5 California	Improve and Maximize Programs so All Children Thrive

In *Child Health*, MVIP is funded to provide home-based medical case management. A medically fragile toddler with Rubinstein Tayebi syndrome, a rare genetic disorder, showed congenital anomalies. The language barrier caused the mother to miss appointments and medication refills. A nurse offered case management services to help the child's mother prepare emergency formula, diapers, wipes, and developmental toys.

Meanwhile, the mother disclosed domestic violence in Spanish. MVIP provided vital assistance to handle both medical and family issues encountered by this child (Ibid. 3).

In addition to the home-based support, First 5 Kern funded SSEC to deliver center-based services for children under special circumstances. For example, a 3-year-old girl with blindness, a G Tube, and Walker Warburg Syndrome (WWS) has been attending SSEC for almost a year. WWS caused frequent muscle spasms, developmental delay, and occasional seizures. Even with light perception, the girl was nonmobile and nonverbal. Her mother testified that the SSEC program has taken care of the family, enabling her to complete school and find a job. She stated, "If it wasn't for this program, I would have to quit my job since a lot of people are scared to care for a child with special needs" (Ibid. 3).

In *Family Functioning*, First 5 Kern funded programs at FRCs to create a support system for young children and their families across the county. Impact stories reflected critical services in difficult circumstances, including (1) childcare resource assistance for a mother of three children; (2) legal support for a mother in an abusive circumstance; (3) custody support for two grandchildren who lost their mother during a car accident; (4) case management services for a preschooler who lived with a single mother and lost an uncle due to COVID-19; (5) reading log creation for parent education; (6) improvement of family support for a foster parent; (7) Nurturing-Parenting training for a mother in a suspected domestic abuse environment; (8) preschool accommodation for a child with down syndrome; (9) program referral for a girl with speech problems; (10) safe home support for a mother with an infant; (11) case management services for a mother with partial custody of her two preschoolers; (12) Court-Mandated Parenting classes for a mother of seven children; (13) resource help for a mother of 3 children; and (14) support network building for a mother to have child medical care coverage (Ibid. 3).

The local FRCs offer various services, programs, and resources to strengthen family functioning. For example, a mother of three came to the Arvin Family Resource Center seeking assistance. The Support Services Advocate assessed the family's childcare needs and connected them to the McKinney Vento Homeless Assistance Program within the school district. Affordable housing applications were filed, and the United Way of Kern was contacted to provide shoes, clothing, books, food, and school supplies. During the case management, the mother has attended nurturing parenting classes to gain new skills (Ibid. 3).

In *Child Development*, First 5 Kern implemented its mission to strengthen local capacity building. Regular training was offered to connect childcare providers with their coaches, and the participants were honored for their involvement in Kern Early Stars. Providers were able to take photos with their coaches and indicate what participation in Kern Early Stars has meant to them and how the children they care for have benefited. (Ibid. 3)

In another story from the Delano School Readiness (DSR) program, two children lost their mother in a car accident. Their grandmother had health issues, including very severe shortness of breath, muscle aches, and difficulty breathing. The program offered learning opportunities to strengthen school readiness for the grandchildren and Nurturing Parenting skills for the grandmother. In FY 2022-2023, DSR provided case management services to 31 children and 21 parents or guardians. The program took part in 10

collaborative meetings and three articulation meetings to enhance its partnership with 19 service providers.

These stories confirmed that First 5 Kern-funded programs have made a lasting impact on children, families, and entire communities. The support network became essential when parents had few places to seek assistance. In partnership with First 5 Kern, professional programs have effectively used the tobacco tax dollars from Proposition 10 to invest in the future generation throughout the traditionally underserved region.

Extraction of Qualitative Outcomes from Text Analytics

While examples of the impact description illustrate authentic and in-depth stories on the extensive services funded by First 5 Kern, result aggregations are needed to justify the overall accountability of the state investment in all local programs. Repeated listing of individual stories, albeit the genuine details endorsed by grounded theories for qualitative investigation, is delimited to subjective interpretation and does not achieve the goal of objective result replication.

In this section, natural language processing (NLP) is applied to transform unstructured text from impact stories into normalized data suitable for analysis by machine learning algorithms. It is well-known that "Today's natural language processing systems can analyze unlimited amounts of text-based data without fatigue and in a consistent, unbiased manner."[46] Text analytics has overcome seemingly insurmountable issues of qualitative inquiry and inductive reasoning that hinder independent verification of the result summary from data extraction (Sarkar, 2019).

The methodology advancement is spearheaded by an R package, Quantitative Analysis of Text Data (quanteda). According to Benoit et al. (2018),

> quanteda is an R package providing a comprehensive workflow and toolkit for natural language processing tasks ... Using C++ and multithreading extensively, quanteda is also considerably faster and more efficient than other R and Python packages in processing large textual data. (p. 774)

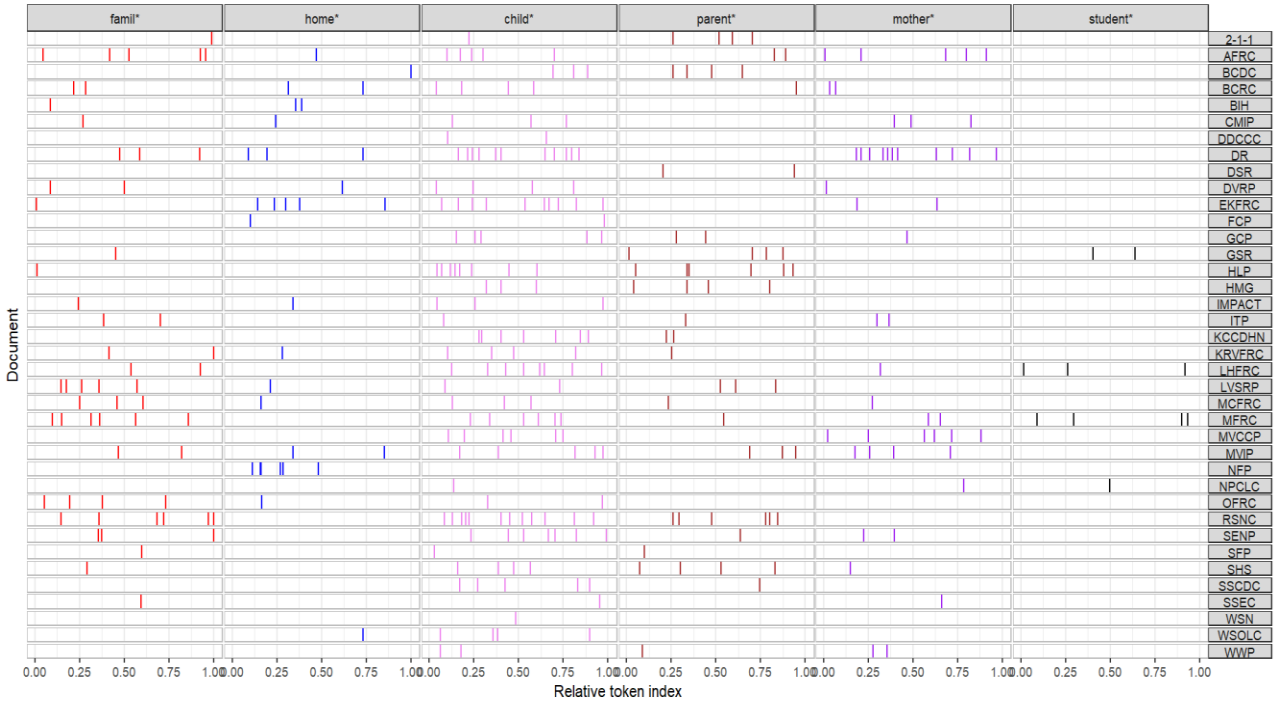
To date, the R package application has been widely adopted by large-scale assessment projects of the federal government (Caro & Biecek, 2017; Matta, Rutkowski, Rutkowski, & Liaw, 2018).

To analyze overall features of the impact stories, R scripts are developed to complete *tokenization, stopping-word/punctuation cleaning*, and *dictionary stemming* of NLP. In text mining, Hutchinson (2022) recommended a lexical dispersion plot (LDP) in which "each strike along the word offset axis signals that a specific word is mentioned within the corpus of data" (p. 56). Based on the density of strikes, LDP allows researchers to determine "how many times the word (or multiple words) occurs from the beginning to the end of the text" (Amin et al., 2022, p. 25). In Figure 34, keywords stemmed from "family", "home", "parent", or "mother" appeared in the story extraction from all programs except for WSN, which showed the importance of environmental support for child growth. The WSN story came from a women's shelter setting in which a single mom with limited

[46] https://www.linguamatics.com/what-text-mining-text-analytics-and-natural-language-processing

English skills received help to raise an infant girl (Ibid. 7). Likewise, "child" was mentioned by all programs except for BIH, DSR, and NFP. The BIH described the experiences of an applicant in a Licensed Vocational Nursing program, DSR depicted a custody case of a grandmother, and NFP reported its support for a teen mother. Altogether, 97.4% of the stories were focused on family functioning, and 92.3% of the stories were linked to early childhood services. In addition, stories from GSR, LHFRC, MFRC, and NPCLC highlighted program assistance for "student" in library and early learning settings (Ibid. 7).

Figure 34: Frequently-Mentioned Words in Impact Stories at the Program Level



In addition to comparing frequently-mentioned words across individual stories, Figure 35 has been created to plot the frequencies of word appearance across these impact stories to gain the overall picture of the topic coverage. For the result summary, top-impact words were stemmed to reduce the term matrix sparsity. For instance, the NLP function has truncated "families" as "famili" and "service" as "servic" for common token aggregation. As a result, *child* as the top impact word appearing 150 times across the program stories. *Children* also surfaced more than 90 times. *Parent*, *famili, mother*, and *mom* repeated a total of 366 times. With no exception, the remaining top-impact words conveyed provisions of program services to address the needs of clients or cases. The results are aligned with the recognition of *child* and *family* as the primary service entities in Proposition 10.

Furthermore, "A wordcloud plot is an appealing visual tool that can be used to summarize textual data" (Mostafa, Feizollah, & Anuar, 2023, p. 12434). Within the scope of First 5 Kern support, impact stories could be gathered from the key stakeholders of children and families. Last year, the top-impact words were more related to *child support* stories (Wang, 2023). In Figure 36, a word cloud plot is constructed in such a way that "The size of each word and its closeness to the cloud center determine its significance" (Mostafa et al., 2023, p. 12434). Inspection of this plot confirms a switch of the story emphasis to *case management* this year.

Figure 35: Top-Impact Words across Impact Stories

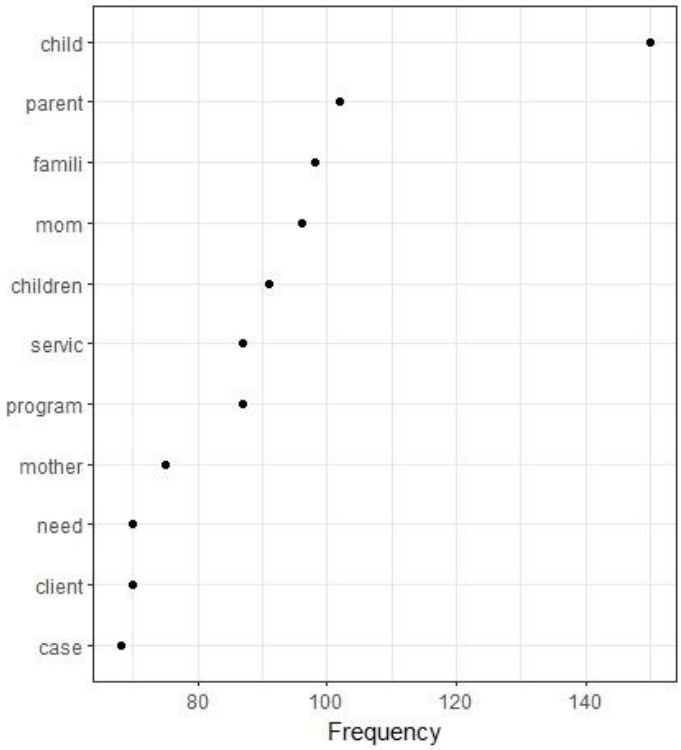
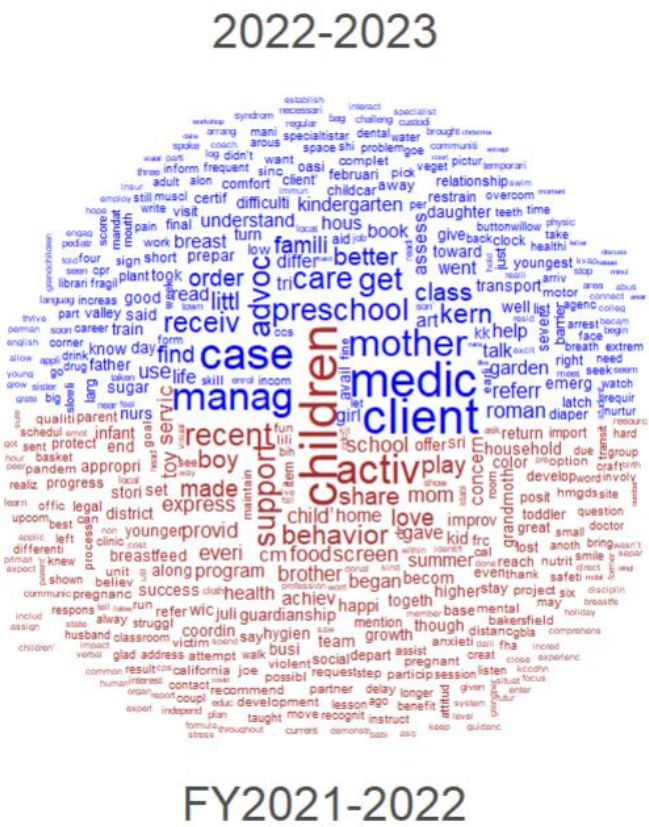
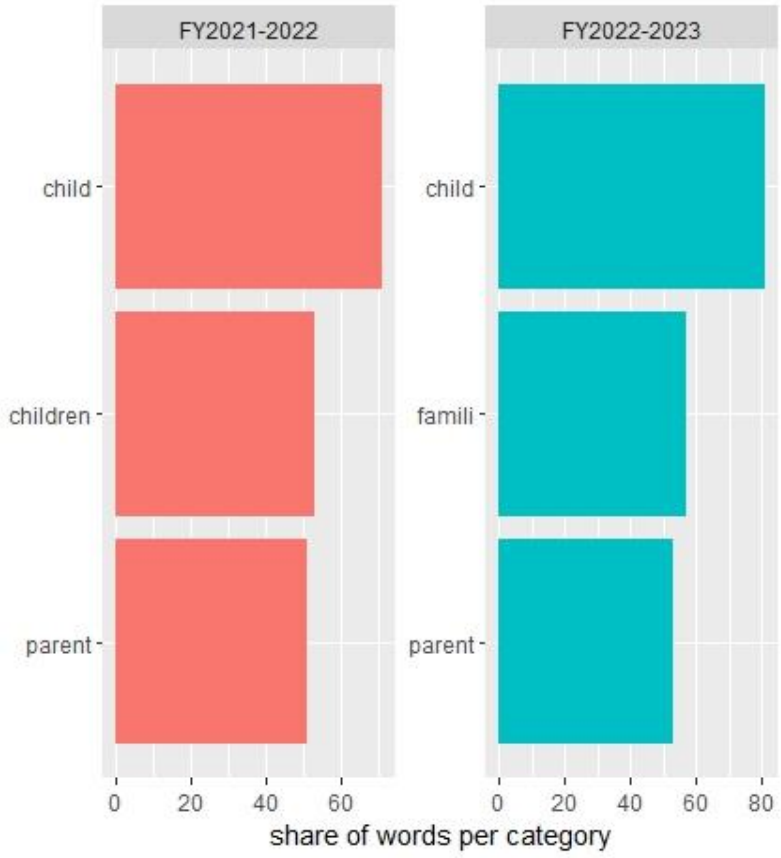


Figure 36: Word Cloud Plot of Tokenized Keywords



Despite the story variations, the support for children and families remains critical. While children ages 0-5 are fragile, parents play a key role in supporting well-rounded child development. The top three tokens featuring the impact stories between adjacent years are plotted in Figure 37. Besides illustrating a change of the story emphasis from *children* to *families* in case management, the token extraction repeatedly highlights *parent* as a core component of program support with more than 50 frequency counts. The information extraction backs First 5 Kern's (2023) designation of *Parent Education and Support Services* as a local focus area to match the result domain of *Family Functioning* in the state strategic plan (First 5 California, 2019).

Figure 37: Featured Tokens in Impact Stories Between Adjacent Years



Beyond the top-impact word analysis, a correlation plot is created to describe the story similarities between adjacent years. The similarity scale has a value of 0 for dissimilar stories and 1 for completely similar stories. A white color is used to represent no similarity, and a blue color for complete similarity. Figure 38 shows a high similarity of First 5 Kern support for maintaining consistent service delivery in these two years.

A plot of the token-indicator relations is drawn to reveal conceptual connections across the impact stories (Figure 39). The network contains six nodes. *Child* and *program* are at the center. *Home*, *parent*, and *program* show the strongest links to support *child*. The child-school and program-parent connections are relatively stronger than the remaining links. Networks involving nodes *student* and *school* are of center-based in nature and do not show strong links to *home* and *parent*. *Student* is positioned as a leaf node with *child* as the only target of network support for home-to-school transition. The

tokenized terms have 14 pairs of links across six nodes, with an average 2.33 links per node. The entire network density, as computed by the Statistical Analysis System (SAS),[47] is 0.47, with the majority of connections toward the centrality nodes, *child* and *program*. The emphasis on *program* reconfirms a case management focus in the impact stories this year (Figure 36).

Figure 38: Correlation Plot of Story Similarities Between Adjacent Years

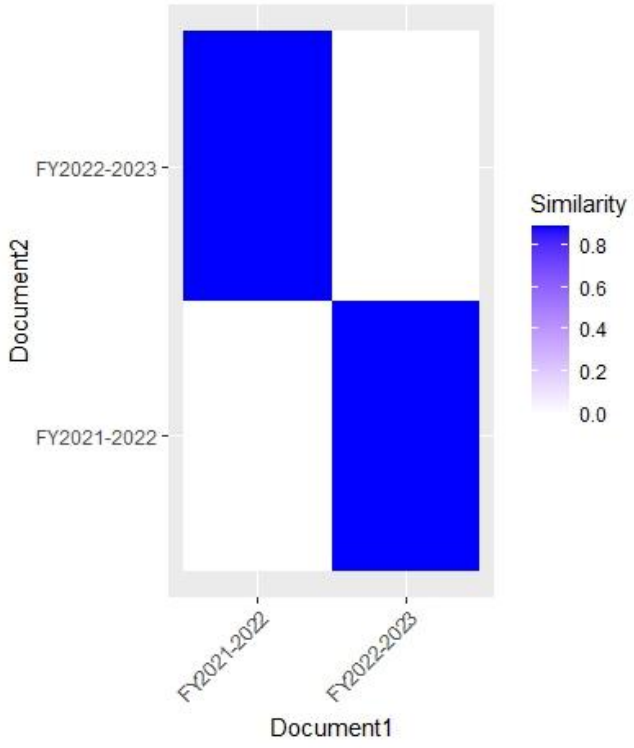
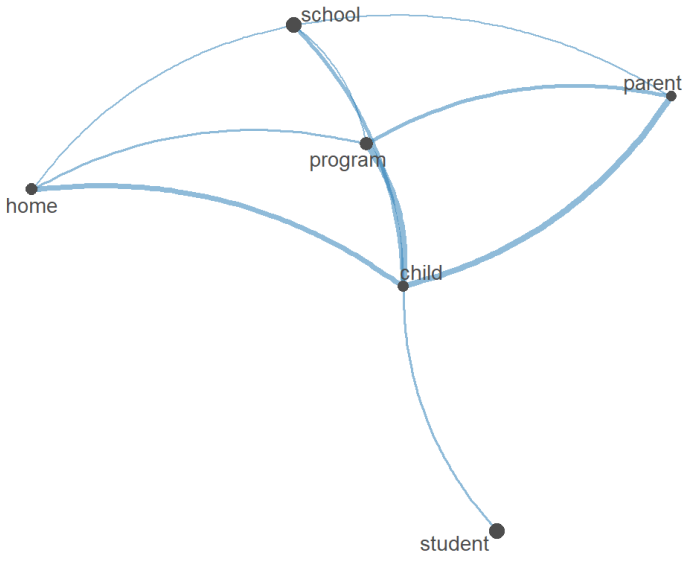


Figure 39: Token-Indicator Relations Behind the Impact Stories



[47] https://v4e053.vfe.sas.com/SASStudioV/

In summary, text analytics not only offered a summary description of service emphasis at the program level (Figure 34), but also illustrated the overall features of First 5 Kern support across the impact stories (Figures 35-37). The result comparison between adjacent years showed a similar program impact as conveyed by the local stories. The qualitative data mining has depicted a token-indicator relation plot (Figure 39) to clarify indispensable components in the *System of Care*. Based on the story highlighting and text parsing, Proposition 10 has undoubtedly sculpted a brighter future for children aged 0-5 in Kern County.

Policy Impact of First 5 Kern Funding

In the evolving landscape of early childhood development initiatives, few measures have been as influential in California as Proposition 10. Instituted in 1998, this initiative aimed to channel funding from tobacco taxes towards supporting children from prenatal stages up to five years old. The policy impact has been illustrated on both time and space dimensions.

In 2007, a grand jury report indicated that "The first major problem discussed was the report entitled, 'First 5 Kern Annual Report of Findings' (published August 31, 2006). The basis of the findings of the ARC [Applied Research Center] evaluation was questioned" (Ibid. 5). In 2023, a new grand jury testified that "The on-going annual evaluations ensure that current needs of children are being addressed" (Ibid. 6). This contrast shows that First 5 Kern has regained the public trust in its annual evaluation report.

Across the state, the ban on the sale of flavored tobacco products has accelerated the revenue decline from Proposition 10, generating two grand jury reports this year. While the Solano report urged the county commission to "Develop further sources of income, both public and private, to maintain and expand delivery of services" (Ibid. 7), the Kern report commended First 5 Kern for conducting "research into First 5 Kern's Goals, Objectives, and Result Indicators" (Ibid. 6). The evaluation evidence has resulted in a strong policy recommendation for the Kern County Board of Supervisors to find "other revenues to continue the programs for children 0 to 5 years of age, by January 2, 2024" (Ibid. 6).

In summary, First 5 Kern's program evaluation not only informs its strategic plan on reporting program outcomes and community impact, but also promotes policy discussion on funding sustainability. Transparency of First 5 Kern evaluation is demonstrated by its annual report that has been peer-reviewed by the Education Resources Information Center (ERIC) of the United States Department of Education (Wang, 2023).

Past Recommendations Revisited

In the annual report FY 2021-2022, three recommendations were made for First 5 Kern:

1. Complete the target setting for result indicators in the strategic plan;
2. Increase the result indicator coverage by First 5 Kern-funded programs;
3. Adopt feasible measures of quality control on DRDP data collection to evaluate the effectiveness of eight programs in *Child Development*.

The first recommendation was grounded on the demand of Proposition 10 for strategic planning on the ending products prior to program funding. The target setting for specific result indicators is essential for tracking program performance, and thus, addressing the results-based accountability. In FY 2022-2023, the commission and TAC examined the meaningful measures of each result indicator, including adjustments to the indicator wording. Thus, First 5 Kern has implemented the first recommendation.

Proposition 10 requires an annual review of the local strategic plan to close the gap between *desired* and *implemented* early childhood services. TAC has led the commission to expand the result indicator coverage by First 5 Kern-funded programs. The effort is likely to renovate the commission's strategic plan for the next funding cycle. Hence, the second recommendation has been fully addressed by the commission.

The third recommendation dealt with inadequate DRDP data collection from pretest and posttest settings. A program like HLP has phased out the DRDP data collection from the *Modified Essentials View* instrument. While this issue was not delimited to this particular data gathering, First 5 Kern has made an ongoing effort to tackle the third recommendation.

In summary, actions have been taken by the commission to respond to all three recommendations from last year. The attempt to address the first two recommendations was led by TAC in its year-long effort across multiple meetings. The DRDP instrument change was a program decision, which happened to be in alignment with the third recommendation.

New Recommendations

The reporting period for FY 2022-2023 ends on June 30, 2023, according to the state fiscal year setting. In five months, Proposition 10 will reach its 25th anniversary. Since its inception, First 5 Kern has invested over $200 million in early childhood programs across the county. Within this year, the commission funded 39 programs to benefit over 9,000 children, 11,000 parents, and nearly 200 childcare providers[48] in its focus areas of *Child Health, Family Functioning, Child Development*, and *Systems of Care*. While the revenue generation remains at 50 cents per pack of cigarettes, the ongoing decline in tobaccos consumption has been sharply accelerated by the state ban on commercial flavored tobacco products this year, which led county commissions to seek additional resources beyond Proposition 10 (Ibid. 7). The Kern County Board of Supervisors was urged by a grand jury to find other revenues for the program continuation (Ibid. 6). The first recommendation is for First 5 Kern to **overcome a seemingly sunset atmosphere by increasing its professional visibility and partnership building**. Besides the fact that the same challenge has been imposed externally on all county commissions across the state, First 5 Kern-funded service providers within the local communities also face a sharp increase in their operation costs due to inflation. The commission can actively engage in the public dialogue toward creating a comprehensive solution that involves all key stakeholders across the state.

In the grand jury report (Ibid. 6), First 5 Kern was commended for its extensive work on updating the commission's goals, objectives, and result indicators. These

[48] https://www.first5kern.org/25thminigrant/

components are essential to developing a new strategic plan that guides the justification of results-based accountability according to state statutes. While applauding this impressive task, the Principal Investigator of First 5 Kern evaluation assumes that adequate attention has been given to its service continuation, which precludes a complete replacement of all the existing result indicators. Thus, the second recommendation is to request First 5 Kern to **identify a set of anchoring items from the current result indicator and target settings** so that ongoing service improvement can be effectively assessed between the adjacent funding cycles. This recommendation will directly address the *turning-the-curve* component of the results-based accountability on the time dimension.

Another key component of results-based accountability hinges on ascertaining whether service recipients are better off (Friedman, 2011). In *Child Development*, for instance, DRDP data collection includes pre-assessment and follow-up assessment to show the differences each program made during the funding period. As shown in Table 45, ten DRDP data were gathered this year, and three of them showed no data tracking. The data tracking for each of the other five DRDP program assessments ranged from one to four cases. Altogether, eight out of the ten DRDP data sets demonstrated a lack of data tracking. When the assessment data were gathered from either pre- or follow-up assessments, but not both, it hindered a proper evaluation of the service impact per requirement of the program funding. The **third recommendation is for First 5 Kern to ensure adequate data gathering across the majority of the programs in DRDP assessment**. This recommendation is grounded on a clear commitment from the commission's strategic plan that requires the collection and analysis of data to evaluate the effectiveness of funded programs.

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Appendix A – Index of Program Acronyms

Kern County (2-1-1) – 44, 45, 46, 47, 81, 82, 87, 89, 90, 91, 93, 119

Appendix B – Technical Advisory Committee

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