1a/b How key data were identified, disaggregated, and analyzed.

In April 2014, we began intensive data analysis for the SSIP by re-reviewing state (aggregate) child outcomes data that had been previously submitted for Indicator 3 in our FFY11 and FFY12 Annual Performance Reports (APR). These data are summarized in Table 1 below.
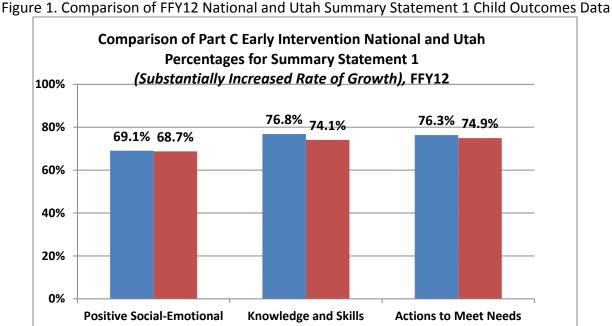
Table 1. APR Indicator 3 Targets and Actual Data for Part C Children Exiting in FFY11 and FFY12

Summary Statements	FFY11		FFY12	
	Target (%)	Actual % (n=2,447)	Target (%)	Actual % (n=2,698)
Outcome A: Positive social-emotional skills (including social relationships)				
1. Of those children who entered or exited the program below age expectations in Outcome A, the percent who substantially increased their rate of growth by the time they exited the program.	80.60%	69.18%	80.90%	69.06%
2. The percent of children who were functioning within age expectations in Outcome A by the time they exited the program.	65.20%	56.54%	65.50%	57.47%
Outcome B: Acquisition and use of knowledge and skills (including early language/communication and early literacy)				
1. Of those children who entered or exited the program below age expectations in Outcome B, the percent who substantially increased their rate of growth by the time they exited the program.	84.60%	78.14%	84.90%	77.25%
2. The percent of children who were functioning within age expectations in Outcome B by the time they exited the program.	58.00%	54.23%	58.30%	51.68%
Outcome C: Use of appropriate behaviors to meet needs				
1. Of those children who entered or exited the program below age expectations in Outcome C, the percent who substantially increased their rate of growth by the time they exited the program.	84.00%	77.06%	84.30%	76.30%
2. The percent of children who were functioning within age expectations in Outcome C by the time they exited the program.	67.50%	62.81%	67.80%	60.79%

FFY11 was the first year since child outcomes data collection began in FFY07 that Utah's data reflected a full cohort of children exiting Part C with child outcomes ratings. In FFY12, there was a slight increase in the number of children with entry and exit scores at exit, which paralleled the child count increase observed during this time period. Targets were not met in any outcome areas for both summary statements in FFY11 and FFY12, and were reset in FFY13.

Although there was non-significant slippage across the actual summary statement data in all outcome areas from FFY11 to FFY12, the same two trends were observed each year. First, Summary Statement 1 percentages were higher than Statement 2 percentages in all three outcome areas. This pattern is not unexpected, given the population of infants and toddlers in early intervention, many of whom are more likely to increase their rate of growth while served but may still not be functioning within age expectations at exit. Second, for Summary Statement 1, Outcome A percentages were lower than either Outcomes B or C percentages, while for Summary Statement 2, Outcome B percentages were lower than either Outcomes A or C percentages. Utah's EIS providers report that assessments for young children are lacking in sensitivity in the measurement of social/emotional development. In a recent needs assessment of Utah's Comprehensive System of Personnel Development (CSPD), EIS providers report feeling inadequately prepared to recognize and address developmental delays and progress in this area. In summary, this review of aggregate data identified Outcomes A and B as being possible areas of focus for further drill down.

We also reviewed aggregate national and Utah child outcome trends for FFY12 across all outcome areas for both summary statements. These data are shown in Figures 1 and 2. Following the trend observed for Utah's Table 1. data for FFY11 and FFY12, national FFY12 percentages were higher for Summary Statement 1 than Summary Statement 2. Comparing Utah to national FFY12 data, Utah's Summary Statement 1 percentages in the three outcome areas were approximately 1-2% higher than the corresponding national average percentages. For Summary Statement 2, Utah's data were 5-9% higher in all outcome areas than the national data.

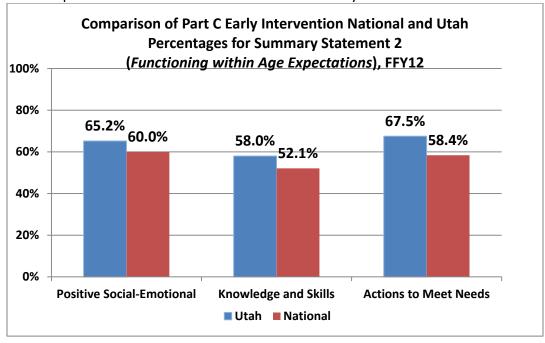Figure 1. Comparison of FFY12 National and Utah Summary Statement 1 Child Outcomes Data

Figure 2. Comparison of FFY12 National and Utah Summary Statement 2 Child Outcomes Data

Comparison of Part C Early Intervention National and Utah Percentages for Summary Statement 2 (*Functioning within Age Expectations*), FFY12

Outcome	Utah	National
Positive Social-Emotional	65.2%	60.0%
Knowledge and Skills	58.0%	52.1%
Actions to Meet Needs	67.5%	58.4%

The next step in our SSIP data analysis process was to select variables by which to disaggregate FFY12 and FFY13 child outcomes data. When child outcomes reporting was introduced in FFY07, Utah's statewide data system, the Baby and Toddler Tracking System (BTOTS), was enhanced to enable the collection of child outcome entry and exit ratings, and the calculation and reporting of progress categories and summary statement percentages. These data can be run for any desired time period, both in aggregate, i.e., state, for the Annual Performance Report (APR), and disaggregated by EIS provider, for public reporting of program profiles. Because each of our 15 EIS providers has non overlapping service boundaries, our program level data is equivalent to disaggregating by geographic region. We did consider several other variables, however, for disaggregation: (1) primary setting; (2) race/ethnicity; (3) gender; (4) primary language; (5) age; and (6) child/family socioeconomic status. The first five variables were readily available in BTOTS, however, socioeconomic status was not.

Disaggregating child outcomes data by the child's primary service setting was eliminated immediately as a possibility. Our settings data would have shown too little variability to have been informative as most of our 15 EIS providers deliver the majority of IFSP services, as measured using the December 1 child count, in the natural environment.

Race/ethnicity, gender, and primary language variables were identified as viable options for disaggregation, particularly because they are all "static" child characteristics across enrollment

and a specified time period such as a fiscal year. They also lend themselves easily to dichotomization for disaggregation. For race/ethnicity, we were interested in examining child outcomes for White children vs. children of all other races and ethnicities. Gender is, of course, already a dichotomous variable (i.e., male, female) so no further adjustment was necessary. [Given that almost twice as many boys as girls are enrolled in Part C services in Utah, we wondered if there might be differences in developmental progress by gender but also wondered how we could address such differences in our SSIP and SiMR.] Thirty-two primary languages are currently reported for children served in Utah Part C in a "typical" year, with English being the most frequently occurring and Spanish, a distant second most frequently occurring, primary language. We considered disaggregating primary language using three categories—English, Spanish, and "all other languages"—but the frequencies of each of the Spanish and "all other languages" categories were low or zero in some EIS programs so it did not make sense to examine them separately. We thus decided to dichotomize primary language into "English" and "non-English" categories only.

We also considered, but decided against, disaggregating our child outcomes data by child age because it is also a non-static child characteristic over time. Using age as a variable would have required a rule to determine what age or age range to assign to a child in a specified time period such as a fiscal year. This exact issue was raised by the Infant Toddler Coordinators' Association in 2014 when OSEP proposed that states begin reporting cumulative child count data by child age. OSEP decided against disaggregating cumulative child count data by age.

Finally, examining child outcomes by child/family socioeconomic status was of interest and we spent a great deal of time investigating the viability of disaggregating child outcomes in this manner. Only the annual family fee amount was captured electronically in BTOTS, with family income and family size variables available only on paper. We attempted to create a proxy variable for child/family socioeconomic status by using the annual family fee amount in conjunction with the child public insurance eligibility status, which is also in BTOTS. We were hoping to be able to identify a child/family for a specified fiscal year in one of three ways: having no fee; having a fee between $10 and $200; or being public insurance-eligible. We encountered two main setbacks. First, in many cases, a child may be public insurance-eligible in the first year of life based on medical conditions and/or diagnoses rather than because of family income, and we could not distinguish definitively between the two possibilities from information currently in BTOTS. The second issue was that a child's public insurance eligibility status is not always static over a specified time period such as a fiscal year; it is determined using family income on a month-to-month basis if a child is not eligible due to medical conditions. Thus we needed an algorithm to flag a child/family as public insurance-eligible or not for a specified time period. In addition, the annual family fee amount might change over the course of a year if a family's income changed or they encountered extenuating circumstances that would alter the fee, resulting in the dilemma of which fee amount to choose to represent the child/family's socioeconomic status in the time period of interest. We discussed the merits of several rules, but in the end, concluded we did not have sufficient or reliable data to disaggregate child outcomes data by socioeconomic status at this point in time.

In summary, we chose to disaggregate child outcomes data in four ways for our SSIP data analysis: 1) by EIS program; 2) by race/ethnicity (White vs. all other races/ethnicities); 3) by primary language (English vs. non English); and 4) by gender (male vs. female).

Given the significant amount of data to review—three child outcome areas with two summary statements each for four disaggregated variables and 15 EIS providers in two time periods—we put considerable thought into how to compile, analyze, and present the data in a coherent manner before any preparation began. We anticipated making the data available to three main audiences—BWEIP office staff; individual EIS providers; and the broader stakeholder group (which included EIS providers)—all of whom might have slightly different needs and interests. We did not think it was necessary to de-identify data, i.e., remove provider names and the number of children exiting with outcome scores for each provider, for internal BWEIP use or when we gave EIS providers their own child outcomes data. However, we did want to anonymize information shared publically with the broader stakeholder group, at least until EIS providers had had the opportunity to review and digest their own data and decide whether full disclosure was appropriate. To anonymize our data, we randomly assigned each EIS provider a letter that was used consistently instead of the program name and removed n's throughout all analyses.

We selected different approaches to analyze our disaggregated child outcomes data. We used histograms to examine child outcomes data disaggregated by EIS providers. Figure 3 shows an example of year-to-year comparisons of one EIS provider's data—percentages for Outcome A, Summary Statement 2—for the time period FFY09-12 to corresponding state (aggregate) data. Histograms such as the one shown in Figure 3 were created for each EIS provider compared to aggregate data for the FFY09-12 time period for all of the six possible child outcome area-summary statement combinations.

Figure 3. Example of Year-to-Year Comparisons for a Single EIS Provider

Program A Percentages for Outcome A (*Positive Social-Emotional Skills*) for Summary Statement 2 (*Exited within Age Expectations*), FFY09-12
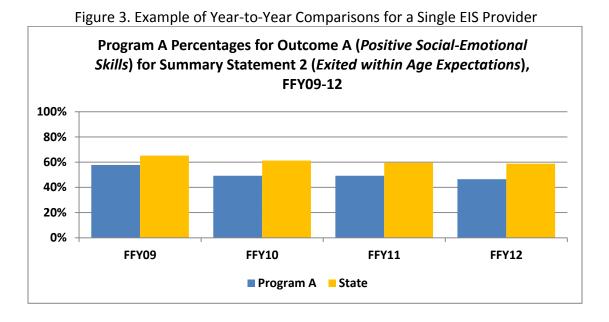
Figure 4 is an example of side-by-side comparisons of multiple EIS providers in FFY12 showing percentages for Outcome A for Summary Statement 2. The EIS provider data is ordered from lowest to highest and the state average is included as the right-most percentage as a reference point. Histograms such as the one shown in Figure 4 were created showing all 15 EIS providers' FFY12 data compared to aggregate data for all of the six possible child outcome area-summary statement combinations.
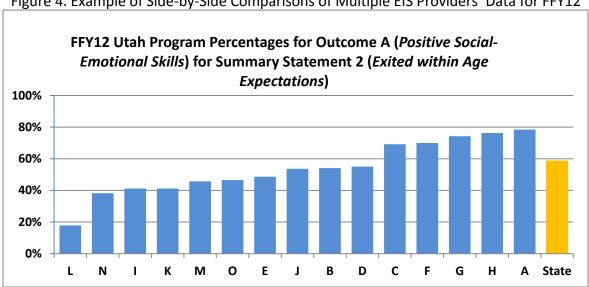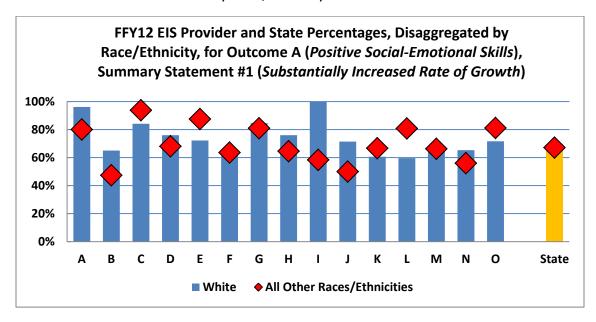
Figure 4. Example of Side-by-Side Comparisons of Multiple EIS Providers' Data for FFY12

FFY12 Utah Program Percentages for Outcome A (*Positive Social-Emotional Skills*) for Summary Statement 2 (*Exited within Age Expectations*)

We used both histograms and the "meaningful differences" calculator to examine differences in the categories of each disaggregated variable—race/ethnicity, primary language, and gender—across EIS providers and state by outcome area and summary statement. Figure 5 is an example of side-by-side comparisons of multiple EIS providers in FFY12 showing percentages for Outcome A for Summary Statement 2, disaggregated by race/ethnicity. For each EIS program, the blue histogram bar represents the percentage for White children who exited within age expectations for Outcome A, while the red diamond represents the corresponding percentage of children of all other races and ethnicities. The EIS provider data is ordered by the randomly-assigned letter ID and the state average is included as the right-most percentage in the histogram, as a reference point. Histograms such as the one shown in Figure 5 were created showing all 15 EIS providers' FFY12 data compared to aggregate data for the three disaggregated variables for all of the six possible child outcome area-summary statement combinations.

Figure 5. Example of Side-by-Side Comparisons of Multiple EIS Providers' Data Disaggregated by Race/Ethnicity for FFY12

FFY12 EIS Provider and State Percentages, Disaggregated by Race/Ethnicity, for Outcome A (*Positive Social-Emotional Skills*), Summary Statement #1 (*Substantially Increased Rate of Growth*)

We used the ECO Center's Meaningful Differences Calculator in our data analysis in several ways: (1) to compare state (aggregate) child outcomes data year to year for multiple years (FFY11 to FFY12, FFY12 to FFY13); (2) to compare EIS program data to state data for FFY12 and FFY13; and (3) to compare state and EIS program data for the disaggregated variables for FFY12 and FFY13. After reviewing histograms for state and EIS program data disaggregated by gender and acknowledging our discomfort writing a SiMR and implementing improvement strategies targeted at either boys or girls, we decided not to analyze this variable using the Meaningful Differences Calculator. Table 2 is an example of how the Meaningful Differences Calculator was used with FFY12 state data, disaggregated by race/ethnicity, to determine whether there were differences by outcome area and summary statement.

Results of the meaningful differences analyses were summarized and shared with EIS providers and the broader stakeholder group in the format shown in Table 2, which is an example of FFY12 state end EIS program data disaggregated by race/ethnicity. Summary tables such as the one shown in Table 3 were distributed for all time periods and disaggregated variables.

Table 2. Example of Analyzing FFY12 State Data Disaggregated by Race/Ethnicity Using the Meaningful Differences Calculator

FFY12 State Summary Statement Percentages, Disaggregated by Race/Ethnicity

	Child Outcome	White			All Other Races/Ethnicities			Meaningful difference between White and All Other Races/ Ethnicities?
		The number of children the summary statement is based on	SS %	Confidence interval Summary Statement	The number of children the summary statement is based on	SS %	Confidence interval Summary Statement	
SS 1	Outcome A	1,705	69.81%	± 1.83%	644	67.09%	± 3.04%	No
	Outcome B	1,705	77.14%	± 1.68%	644	77.53%	± 2.71%	No
	Outcome C	1,705	76.61%	± 1.69%	644	75.45%	± 2.79%	No
SS 2	Outcome A	1,705	58.06%	± 1.97%	644	55.90%	± 3.22%	No
	Outcome B	1,705	51.26%	± 1.99%	644	52.80%	± 3.23%	No
	Outcome C	1,705	59.94%	± 1.95%	644	63.04%	± 3.13%	No

Table 3. Example of a Summary of Meaningful Differences Results for State and EIS Program Data Disaggregated by Race/Ethnicity

	Summary of Meaningful Differences Results for FFY12 State and EIS Program Child Outcomes Data, Disaggregated by Race/Ethnicity					
	Summary Statement 1			Summary Statement 2		
	Outcome A	Outcome B	Outcome C	Outcome A	Outcome B	Outcome C
State						
Program A						
Program B						
Program C		X			X	X
Program D					X	X
Program E	X					
Program F				X	X	X
Program G						
Program H	X					
Program I	X	X	X	X	X	X
Program J		X				
Program K			X	X		
Program L						
Program M						X
Program N						X
Program O	X			X		

Note: "X" denotes a meaningful difference between White children and children of all other races and ethnicities.

FFY13 State Child Outcomes Data, Disaggregated by Race/Ethnicity

	Outcome A: Positive Social Relationships	Outcome B: Knowledge and Skills	Outcome C: Actions to meet needs
White SS1	69.5%	76.4%	76.6%
All Other Races/Ethnicities: SS1	64.8%	73.1%	75.0%
White: SS2	56.3%	51.2%	58.9%
All Other Races/Ethnicities: SS2	53.0%	50.2%	60.1%

Another piece of the SSIP data analysis we undertook was a review of how many children exiting Part C had higher child outcome exit scores than entry scores to identify any differences across outcome areas. We were interested whether children entered early intervention services in any outcome area functioning at age level, which we defined as having an entry rating of a 6 or a 7, but exited not having made developmental progress, which we defined as having an exit rating of 5 or below. We examined this data in aggregate and disaggregated by EIS program for FFY11 and FFY12. The aggregate data for this analysis is presented in Table 4, and shows the number of children in each outcome area whose entry-exit rating pattern was high to low. (Note a child could show this pattern of scores in one outcome area or in all three.) In both time periods, many more children exited early intervention with a lower exit rating than their entry rating in Outcome A than either Outcome B or Outcome C. This result was very intriguing and we will be undertaking further analysis in Phase 2 of the SSIP to look at child age at the time the entry score was generated, how the child qualified for early intervention (standard score, qualifying medical condition, or informed clinical opinion), race/ethnicity, primary language and gender. Although only FFY11 and FFY12 data were available at the time

we ran this analysis, we have subsequently run FFY13 data and found similar trends across the three outcome areas.

Table 4. Frequency of High Child Outcome Entry vs. Low Child Outcome Exit Ratings, FFY11 and FFY12

Child Outcome Exit Rating	Child Outcome Entry Rating											
	FFY11						FFY12					
	Outcome A		Outcome B		Outcome C		Outcome A		Outcome B		Outcome C	
	6	7	6	7	6	7	6	7	6	7	6	7
5	79	20	23	9	42	6	63	14	32	5	45	10
4	19	7	6	3	6	1	15	6	9	2	6	2
3	8	5	5	7	1	0	8	2	4	1	4	1
2	3	1	1	2	0	0	3	1	1	0	0	0
1	2	0	1	1	0	0	1	0	0	0	0	0
Totals	111	33	36	15	49	7	90	23	46	8	55	13
	144		51		56		113		54		68	

1c Data quality

We have very few concerns about how child outcomes data is entered in BTOTS, however, because of the "human element" involved in generating child outcomes entry and exit ratings, we are more focused on the impact of data quality.

Overall, BTOTS is a robust data system that supports child outcomes data entry very well.

1. Several database processes are in place to ensure child outcomes data are collected for the children of the appropriate age.
   a. Child outcome entry ratings are required for children between six and thirty months of age at the time an initial Individualized Family Service Plan (IFSP) is entered in BTOTS. Children older than 30 months of age at the time of the initial IFSP are flagged as not needing any child outcome ratings. BTOTS generates an alert to remind the user to add the entry rating for children who were younger than six months of age at the initial IFSP as soon as the six-month age criterion is met.
   b. The child outcomes decision tree is embedded in BTOTS to assist the user in entering and generating ratings. It is also included it as part of the paper "Child Outcomes Summary Form" for easy reference in the field.
   c. A child outcomes calendar graphic is included in the data system that shows the user which months a child has received one or more IFSP services that count toward the "six consecutive months of IFSP services" definition. It indicates whether an exit rating would be required for a child, if he or she exited early intervention at the point of time the calendar is being viewed. The calendar graphic is displayed during

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the exit/deactivation process in BTOTS to alert the user that the child being exited needs an exit rating. BTOTS allows the user to finish the exit/deactivation process without entering a child outcomes exit rating but generates an alert to remind the user that it must be entered within 30 days of exit.

2. We have state and program-level aggregate child outcomes reports that can be run by both state and EIS program staff for any time period of interest.
   a. Missing child outcomes exit ratings are monitored using a report that identifies which children have exited Part C services in a specified time period and do not have but require a child outcomes exit rating. This report must be run by programs regularly as they are required to have no missing child outcomes data for every APR and program profile reporting period.
   b. Reports showing progress categories and summary statement percentages are used for APR reporting and generating program profiles.

3. As part of our SSIP activities this year, we added in BTOTS state and program-level disaggregated (by race/ethnicity, primary language, and child gender) child outcomes reports that are available state and at the program level.

4. This year, we reevaluated our child outcomes policy and decided to change BTOTS so that EIS providers were required to generate exit ratings for all children transferring in-state who met the criterion of having received "six consecutive months of IFSP services" at the time of transfer. In reviewing our child outcomes data, we had identified many children whose families did not want to continue Part C services or who were lost to contact after transfer without child outcome exit ratings, despite having received sufficient months of IFSP services. The BTOTS process as we had set it up initially reduced the total number of exiting children for whom we were to be able to measure developmental progress. Under the new BTOTS process, if a child continues in early intervention services in the receiving program after transferring, then we label the child outcomes exit rating generated by the sending program at the time of transfer as an interim or "ongoing" exit rating and require that the receiving program generate an exit rating when the child turns three or exits the program.

Due to EIS program staff turnover, we are aware of data quality issues arising from lack of familiarity with and understanding of both our data system and the child outcomes philosophy and methodology. During the preparation of our February 2014 APR, we noticed that child outcomes Summary Statement 2 percentages for four EIS providers were in the 80% to 92% range and were higher than the corresponding state Summary Statement 2 percentages in all

three outcome areas. We reviewed their SFY13 618 exiting data and found that in each program, the highest percentage of children had exited from Part C services eligible for Part B. We then discussed each EIS provider's child outcomes and exiting data with the EIS director and compliance staff and noted the lack of correspondence between having exiting children who are Part B eligible and having child outcomes progress ratings in all areas for these same children showing they are functioning within age expectations at the time of exit. We asked them to review with their staff the child outcomes methodology, including using the decision tree to generate ratings, and then to review entry and exit ratings for all children who had exited Part B eligible and report back to us on their findings and strategies to address.

In our follow-up conversations with these EIS providers, we concluded there were multiple issues affecting programs' understanding of the child outcomes methodology that were impacting data quality. We noted that program staff often did not "think functionally" but focused primarily on developmental testing instead of considering all data sources when they were generating child outcome ratings. Next, some staff did not understand key terms such as "foundational skills" and "intermediate foundational skills" from the child outcomes decision tree. They also told us they had a hard time judging the frequency of a child's skill use and level of functioning across settings and situations. Finally, when thinking about progress over time, they were more apt to compare a child's functioning at the time of exit to his or her functioning at the time of entry rather than to the functioning of a typically developing child of the same age.

Although these child outcomes data quality issues were most obviously apparent with the four EIS providers, we surmised that similar issues were likely to be occurring to some degree with other providers. We believed that all EIS providers, as well as BWEIP state office staff, could benefit from a child outcomes "refresher."   We worked extensively with Kathy Gillespi from ECTA to prepare a two-hour statewide mandatory child outcomes training that addressed the issues identified and many others. Materials were shared with all EIS provider staff prior to the two sessions in June 2014, one of which was recorded for future reference. One of the strategies we have discussed is to use this training to develop a CSPD credentialing requirement for all new early intervention staff.

1d Considering compliance data

This section addresses: "As part of its data analysis, the State should also consider compliance data and whether those data present potential barriers to improvement." (Indicator 11)

SPP/APR compliance data obtained from the BTOTS for FFY10-13 show a high level of statewide compliance for the timeliness Indicators 1 (Timely Services); 7 (Timely Initial IFSP); 8a (Transition Steps and Services); 8b (Notification to the SEA/LEA); and 8c (Timely Transition Conference). BWEIP has a system in place that identifies and corrects non-compliance, ensuring any individual instance of noncompliance is corrected in a timely manner, and is currently being implemented appropriately. APR Indicator 2 (IFSP Services in the Natural Environments) has steadily increased and from FFY08 low of71% to the FFY13 high of 95.4%.

The performance on these SPP/APR indicators and the monitoring of fiscal contract requirements, all contribute to maintaining a high level of compliance. These program structures ensure there are rules, processes, and methods in place that support compliance and improve performance.

The lack of administrative complaints, requests for mediation, and/or requests for due process hearings further supports the notion that these structures are sufficient, and that minimal noncompliance at the local EIS level should not be a barrier to the effective implementation of SSIP improvement activities.

1e Additional Data

Fishbone Analysis
Through broad data and infrastructure analysis, as well as stakeholder input, primary concerns and a potential focus for improving child outcomes were selected. Specific improvement strategies were chosen following the determination of SiMR. The SiMR was determined by disaggregating state and local Child Outcome Summary Form (COSF) data by race/ethnicity, primary language, and gender. After reviewing the data, the following SiMR was determined: By FFY18, BWEIP will increase child social relationships (Outcome A) by substantially increasing rate of growth (SS1) for children of culturally diverse backgrounds, which will be measured by child outcomes ratings.

After further discussion by the SSIP Core Work Team, it was concluded that a root cause analysis be conducted in order to identify local EIS program infrastructure and practices contributing to the low performance of the selected SiMR. The SSIP Core Work Team invited all 15 EIS providers to participate in a root cause analysis to address the identified SiMR. The chosen method of root cause analysis was a Fishbone Diagram (see attachment). Training on how to conduct a Fishbone Analysis was presented to EIS programs at their consortium on December 10, 2014. Six of the 15 local EIS programs chose to participate in the Fishbone Diagram activity, and included representation from both large and small EIS programs. When the Fishbone analysis process was finished, conclusions about the common causes and contributing factors for the SiMR were drawn, as shown in Table 1. The common identified causes were: (1) culture; (2) socioeconomic status; (3) education level of the family; (4) staff training; and (5) evaluation tool. Next EIS providers outlined contributing factors for each of the five causal areas.

1. *Culture*: Language barriers, traditions, role identities, religious differences, limited networking opportunities, relationship building/trust, and decreased acceptance and tolerance from family and/or providers.
2. *Socioeconomic Status*: Poverty, high stress, transportation issues and distance from services, unstable housing, and access to fewer resources (i.e. daycare, toys, food, etc.).
3. *Education Level of the Family*: Low motivation, fewer opportunities, limited financial resources, literacy barriers, lack of follow through with activities, and decreased parental understanding.
4. S*taff*: Cultural experiences, biases, extent of training on functional social emotional outcomes and evidence based practices, on the evaluation tool, and flexibility in schedule to meet family's needs.
5. *Assessment Tool*: Parent vs. provider report, variation of tools, lack of culturally appropriate and social emotional sensitive assessment tools, evaluator personalities during the initial vs. exit COSF, culturally and language inappropriateness, over vs. under reporting, and subjectivity of assessment tool.

The SSIP Core Work Team participated in a telephone/webinar discussion on March 5, 2015 to review the root causes, strengths and weaknesses from infrastructure analysis and the CSPD needs assessment results. The review resulted in grouping the coherent improvement strategies into focus areas of action that should result in a positive impact on the SiMR. The specific focus areas included: (1) assessment; (2) professional development; (3) family engagement; and (4) collaboration.

The coherent improvement strategies within the Theory of Action were presented to the SSIP Broad Stakeholder Group at the March 25, 2015 ICC meeting.

Table 1. Causes and Contributing Factors

Culture	SES Status	Education Level of the Family	Staff	Assessment Tool
Language Barriers	Poverty	Low Motivation	Cultural Experiences	Parent Report vs. Provider Report
Traditions	High Stress	Fewer Opportunities	Biases	Variation of Tools Used
Role Identities	Transportation Issues and Distance from Available Services	Limited Financial Resources	Training on the Evaluation Tool(s)	Evaluator Personalities during the Initial vs. Exit COSF
Religious Differences	Unstable Housing	Literacy Barriers	Flexibility in Schedule to Meet Family's Needs	Culturally and Language Inappropriateness
Limited Networking Opportunities	Fewer Available Resources	Lack of Follow-Through with Activities		Over vs. Under Reporting
Relationship Building/Trust		Decreased Parental Understanding		Subjectivity of the Tool
Decreased Acceptance/Tolerance from Family and/or Providers				

1f Stakeholder involvement in data analysis

In early April 2014, Baby Watch Early Intervention Program (BWEIP) staff attended ECTA regional SSIP Kickoff in Arizona. During the meeting ECTA and OSEP staff worked closely with the BWEIP to form a plan for SSIP Phase I. When we returned to Utah the SSIP BWEIP Team, drafted the SSIP Phase I. timeline, planned for broad data analysis and enhanced stakeholder involvement detailed in the preceding Overview section. SSIP BWEIP Team and our ECTA advisor decided it would be best to take a first pass and compile the data in a manageable form to present to the stakeholders.

SSIP Leadership Team Meeting – July 14, 2014
Prior to the SSIP Leadership Team meeting, data packets we compiled and sent to attendees. A conference call was held on June 26, 2014 to prepare attendees for an initial meeting of the SSIP Leadership Team.

Our ECTA advisor traveled to Utah to facilitate the activities planned for the day-long working meeting which included: a detailed overview of SSIP process; review of broad data analysis; identification of current practices and initiatives; identification of system strengths and challenges; an opportunity to provide input on a potential measureable result focus; and delineation of next steps, including forming a core work team.

As detailed in the previous section, the broad data review focused Utah APR Indicator 3(a) social-emotional skills and relationships, (b) knowledge and skills, and (c) action to meet needs. The participants also discussed progress data reflected in child outcomes Summary Statement 1, the percentage of children that substantially increased their rate of growth; and Summary Statement 2,the percentage of children that exit at age expectations. The data sparked many lively debates and the agenda was continued on two subsequent conference calls. At the end of the day, the SSIP Leadership Team concluded from this broad data analysis of child outcome data to:

- Consider disaggregating data by (1) primary setting; (2) race/ethnicity; (3) gender; (4) primary language; (5) age; and (6) child/family socioeconomic status;
- Look more closely at the differences between SS1 and SS2; and, that
- Family outcome data would not be included in the analysis as it could not be linked with child outcome data.

State Leadership Team Call – July 30, 2014 continuation of data discussion

State Leadership Team Call – August 14, 2014 continuation of data discussion

Core Work Team Call – September 9, 2014 continuation of data discussion

SSIP Broad Stakeholder Group Meeting - October 21, 2014

SSIP Stakeholder Meeting - SSIP Core Work Team presented the "meaningful differences" results to guide a discussion on recommendation for the SiMR. Each EIS program was given a packet with the "meaningful differences" data for their program and the state. As noted above, an extensive amount of data analysis had been conducted during the last seven months with no clear path to the SiMR. A sense of frustration was evident. Overall to date the data had revealed the following:

- Utah percentages are higher than the national averages on all three SS1 (Greater than expected growth);
- Utah percentages are lower than the national averages on all three of the SS2 (Exited within age expectations)(although almost same for Outcome C (Action to Meet Needs);
- All 6 Summary Statements decreased from 2012-2013 to 2013-2014 but there were no statistically meaningful differences identified;
- Statewide there are differences when comparing white to all other races; specifically there was a statistically meaningful difference for Outcome A, SS1 when comparing white to all other races; local meaningful differences were also identified but we a cautious interpreting because the numbers of children are smaller and therefore the confidence interval is rather wide; and,
- Statewide there are differences when comparing English to Non English; specifically there was a statistically meaningful difference for Outcome B for both Summary Statements and for Outcome C for SS2 (Exited within age expectations). Local meaningful differences were also identified but we were cautious in interpreting it because the numbers of children are smaller and therefore the confidence interval is rather wide.

As discussed in the data analysis section, the ECO "meaningful differences calculator" revealed information that we could use to develop our SiMR. The SSIP Stakeholder Group discussed the feasibility of selecting:
Statewide - Child Outcome A. Social Emotional (SS2); or
Statewide - Child Outcome B. Knowledge and Skills (SS2); or,
Subpopulation - Child Outcome A. Social Emotional (SS1) culturally diverse children

The group reached the conclusion that trying to make substantial gains in (SS2) exiting within age expectations would be very difficult given the nature of the population in early intervention. The Broad Stakeholder Group recommended the Subpopulation - Child Outcome A. Social Emotional (SS1) culturally diverse children as the focus for the SiMR.

In conclusion Stakeholders were involved in the data analysis in a variety of ways. The ECTA advisor and SSIP BWEIP Team worked together to plan activities, assemble resources,

summarize and analyze information gathered, and facilitate SSIP Leadership Team meetings and calls.   The SSIP Leadership Team also actively engaged in data analysis two in meetings and several calls. The SSIP Core Work Team trained the EIS programs to conduct the root cause analysis on cultural differences. Six local EIS programs participated in that process. The SSIP Leadership Team, through their representation on the SSIP Core Work Team, provided input and direction on data analysis, data disaggregation, infrastructure analysis, SIMR, root cause analysis, hypothesis, coherent improvement strategies and the theory of action. Over 340 EIS providers and administrators responded to the Comprehensive System Personnel Development (CSPD) Redesign Needs Assessment. The broad stakeholder groups at their respective EIS and ICC quarterly meetings received updates on the SSIP progress.