

**Michigan Early On®
Early Intervention
Fiscal Study**

February 2007

PREPARED BY:

SolutiOns

Consulting Group, LLC

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Thirty of the 57 Intermediate School Districts (ISDs) voluntarily agreed to participate in the survey activity that provides the foundation of the work. Without their effort and support, this Fiscal Study could not have happened.

Cost Study Survey Participants (N=30)		
Central East (N=8)	Southeast (N=6)	Southwest (N=6)
Clare-Gladwin RESD	Hillsdale ISD	Allegan County ISD
Clinton County RESA	Ingham ICC	Berrien ICC
Gratiot-Isabella RESD	Lenawee ISD	Branch ISD
Huron ISD	Livingston ESA	Eaton ISD
Lapeer County ISD	Oakland ISD	St. Joseph ISD
Saginaw ISD	Wayne County RESA	Van Buren ISD
Shiawassee County RESA	Upper Peninsula (N=5)	Northwest (N=2)
St. Clair RESA	Copper Country ISD	Charlevoix-Emmet ISD
Central West (N=3)	Delta-Schoolcraft ISD	Manistee ISD
Kent ISD	Dickinson-Iron ISD	
Newaygo ISD	Eastern Upper Peninsula ISD	
Ottawa ISD	Gogebic-Ontonagon ISD	
<i>We send our THANKS to these Participating ISDs!</i>		

These resources provided a variety of data that were pivotal to the successful completion of this project. SOLUTIONS Consultants assume responsibility for the analyses, interpretations and conclusions as represented in this Study report based upon data provided.

We were guided in our deliberations by the Fiscal Task Force, composed of a leadership across the variety of parents, state agencies and local program administrators. We extend our sincere appreciation to the following individuals for their gift of time, expertise and commitment. Without their guidance, the comprehensive application and utilization of the fiscal data would not have been as meaningful.

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The opinions, findings and “next steps” recommendations included in this Study report reflect those of the SOLUTIONS’ Consultants and are not necessarily those of the Michigan Departments of Education, Community Health and Human Services.

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Section 1: Introduction

In November 2004, the State Interagency Coordinating Council (SICC) proposed a process of redesigning *Early On*. The *Early On* Interagency Team recommended a redesign process and the SICC supported it at the February 2005 SICC meeting. The details of the eight-step process can be found at www.earlyonredesign.com. The redesign process is guided by a state leadership team comprised of SICC, state agency and family representatives. One vital step toward progress with the redesign effort was to bring forward answers to important finance related questions fundamental to enhancing the *Early On* system in Michigan. The leadership team recommended that MDE commission a Fiscal Task Force as part of the redesign process to oversee The Michigan *Early On* Fiscal Study.

Outcomes of the Fiscal Study include:

1. Identification of the cost and resources available in today's system for fully financing the Michigan *Early On* System,
2. Review of service patterns for children with Individualized Family Service Plans (IFSPs) and /or Individualized Education Programs (IEPs), and
3. Identification of the specific revenue streams that are in use to support Michigan *Early On*.

In November 2005, the Michigan Department of Education contracted with Solutions Consulting Group, LLC (Solutions) of Augusta, Maine to conduct the Fiscal Study to address these outcomes. *Solutions* has a demonstrated track record in analyzing cost, including specific experience with Part C of the Individuals with Disabilities Education Act (IDEA) and its requirements. Karleen Goldhammer of *Solutions* served as the principal investigator for the project. Ms. Goldhammer has been the Principal Investigator for similar projects in more than ten states. Members of the Financial Task Force representing *Early On* service areas, state agencies, parents, and other stakeholders met in a preliminary meeting on August 22, 2005 where the purpose was to:

- develop the context of the Study and define Study questions;
- review and assist with customizing survey instruments used in other states; and
- identify important elements necessary for success of the Study.

To prepare for the Fiscal Study, *Solutions* also conducted investigatory discussions with members of the three departments of state government involved with *Early On*. These interviews assisted with identification of issues at both the state and local levels and earmarked who should participate in the various aspects of Study activity. The detailed plan for the Study was then presented to the Fiscal Task Force for input in late February 2006. The Redesign Leadership Team approved the plan at their meeting in February. A list of the Study questions is included as Table 2, on page 5 of this Introductory Section.

Background

Early On is Michigan's response to the federal requirements for Part C of the Individuals with Disabilities Education Act (IDEA) to provide resources, supports and services for eligible infants and toddlers, birth to age three, and their families. This unique entitlement is an interagency, public and

private system that is designed to coordinate a variety of funding streams at the local, state and federal level. The Michigan Department of Education is the lead agency for *Early On* and grants funds to each of the 57 Intermediate School Districts to coordinate the Part C system, which consists of a variety of agencies and programs in each service area. *Early On* is guided, as required by IDEA Part C regulations 34 CFR 303.600, by the State Interagency Coordinating Council (SICC) which is made up of governor-appointed members from various stakeholder groups including state agencies, providers, and parents.

Design of the Study

With the guidance of the State Leadership Team and the Fiscal Task Force, the Study design was assembled to respond to the identified Study questions. Significant to the Study design was a lack of clarity and agreement about the definition of Part C early intervention services. As a result a key component of the Study, and its origination point, was a review of the services planned on the Individualized Family Service Plan (IFSP) or, in some cases, on an Individualized Education Program (IEP). The services as defined on the IFSP or IEP presented a clear starting point and offered a definition that could be universally applied and agreed upon. This definition constrains the extent of the study in at least two ways. First, if the planning for services on the IFSP or IEP was constrained in any way due to funding shortages or personnel shortages, there is risk that the costs in this Study are underrepresented. Second, the IFSP /IEP process may not include all services considered as early intervention, so the full benefit to Michigan's children is not intended to be captured within this study. However, the IFSP/IEP source provided a solid foundation for studying the cost of the *Early On* system.

Since the Fiscal Study was conducted in the midst of a redesign, the information base had to represent both "what is" from a historic standpoint and "what could be" based on the redesign process. Measuring historic performance is certainly an easier process than anticipating what has yet to be defined. The prospective work for the Study focused mostly on expanding the revenue base for services. Another design consideration was the level of depth that was needed for cost information, since so many of the Study questions were at a very macro level. The traditional cost survey instruments used in other states yielded a level of detail which was not necessary to answer the study questions for Michigan. In addition to having very little fiscal information routinely collected or reported, the financial information is not maintained separately within the ISDs and is challenging to obtain. As a consequence, alternate methods were used within this Study to present a broad baseline of information.

Data Gathering

Study data was gathered from a variety of existing sources, as well as a series of surveys administered with volunteering ISDs. The Michigan Department of Education provided cost information for all school districts across the state. While that cost information is not specific to Michigan *Early On*, it helps to establish the relationship between direct service personnel and all other costs. The Michigan Department of Community Health provided a link to Medicaid data. Available child specific data through Michigan *Early On* was also reviewed and used in the Study. In addition to existing data, several multi-purpose survey instruments were designed to answer specific questions and could, in

some instances, provide a second source of data to substantiate or validate information collected in other ways. Each survey stands alone with a richness of information and analysis that may be used to support future research.

- **Utilization:** A key component of the Study was to review both the planned and actual services delivered for each child and/or family participating in Michigan *Early On*. The Utilization analysis was conducted in two parts. First, a detailed review of the service summary page of an IFSP/IEP was undertaken. This document represents planned levels of service for a child enrolled in Michigan *Early On* and was gathered for children selected for participation in this Study. The second part of the utilization analysis was an Encounter Survey designed in part to capture actual delivered services. The Encounter Survey is a multifaceted tool designed to track services delivered to each selected child in the Study, as well as to detail how each clinician spends his/her time. Practitioners provided daily encounter information for a period of four (4) weeks.
- **Child Questionnaire:** The Child Questionnaire was put together as an attempt to get additional information on the types of eligibilities that children might have that are not being utilized for current service funding. It also requests additional information to allow interface with other state government data to find out current or potential revenue streams to support Michigan *Early On*.
- **Salary Survey:** The Salary Survey provides information on the hourly cost for professionals delivering early intervention services. This survey instrument provided data used to compute the average hourly personnel costs including both salary and benefits. Each position is listed with personnel type, the start date of employment, salary and total benefits. The Survey also helps us to understand the longevity of individuals in their current positions.
- **Revenue Component:** The IFSP/IEP funding source on the service summary page was the origination point for the revenue review. The Child Questionnaire and data exchange activities were also used in this component of review.

Selecting a Representative Sample

Generally there is no need to conduct surveys with the total population of children enrolled in a state's early intervention system. Sampling is an acceptable practice for gathering data that is reliable and valid. Sampling is also less costly and less intrusive than collecting information from the total population.

Determining sample size should consider several factors including population size, variability, and desired confidence levels. The smaller the total population, the larger the sample must be proportionally in order to achieve similar confidence levels. Figure 1: Sample Size provided some

guidance regarding sample size to achieve a 95% confidence level for most aspects of the Fiscal Study.

Figure 1: Sample Size	
Based on using simple Random Sampling, a confidence level of 95% and a +5% margin of sampling error.	
Population Size	Sample Size
10	10
25	24
100	80
500	217
1,000	278
10,000	370
100,000	383
1,000,000	384
PANAMS: Planning a Needs Assessment Management System EARLY CHILDHOOD 1991	

When sampling requires generalization to the population as a whole, the sampling design must be some kind of probability sampling. Simple random sampling is the most common and straight forward form of probability sampling. Other techniques might include systematic sampling where every “nth case” is selected. In systematic sampling, the starting point must be determined by chance. Chance can be as simple as flipping a coin to start the selection process. Stratified sampling allows for dividing the population into classes and was not used for the Fiscal Study.

Method for Determining System Cost

The method represents the intersection of five (5) different pieces of information detailed in Table 1:

1. The average hourly direct service personnel cost.
2. Total hourly direct service personnel cost, including personnel costs plus all relevant support and administrative costs necessary for the person to get the job done.
3. The percentage of time each direct service person spends in face-to-face activity. Dividing the total hourly cost by this percentage allows us to compute the hourly cost per face-to-face hour, sometimes referred to as a direct service hour.
4. The number of actual face-to-face service hours per child per month was computed. This monthly total was then annualized for an average number of annual face-to-face hours per child. Multiplying the annual hours per child by the number of children and the cost per hour is the basis for the total Michigan *Early On* service costs per year.
5. All other state level and support costs are added to the service total in order to compute the total cost of the *Early On* system in Michigan.

Table 1: Cost Study Results Michigan <i>Early On</i>		
1	Hourly Personnel Costs (weighted)	\$42.39
2	Hourly Admin & Support Cost	\$14.13
	Total Hourly Costs for All Hours	\$56.52
3	Percentage of Face to Face Time	46%
	Cost per Face-to-Face Hour	\$122.86
4	Annual Face-to-Face Hours Per Child	49.3
	Cost per Child	\$6,054.21
	Child Count	8455
	Total Service Costs	\$51,188,326.39
5	State Level Costs	\$2,784,617.00
	Estimated Michigan <i>Early On</i> System Costs Fiscal Year 2006	\$53,972,943.39
	Cost per child w/ Total system costs	\$6,383.55

Report Format

The report is written as a summary of the process used to respond to the Study questions. The material is divided into the following seven sections.

- Section 1: Introduction
- Section 2: Personnel
- Section 3: Utilization Information
- Section 4: Cost Information
- Section 5: Revenue Information
- Section 6: Encounter Information
- Section 7: Conclusions

Table 2 reflects the questions developed by the stakeholder group at the August 22, 2005 planning meeting for the Fiscal Study. The content of this report is intended to provide answers to these important questions.

Table 2: Michigan Early On Study Questions: August 22, 2005		
#	Question	Fiscal Study Activity
1.	What is the total <i>Early On</i> system revenue?	IFSP/IEP Summary, Child Questionnaire and data review
2.	Question # 2: What is the current level of funding from Temporary Assistance for Needy Families (TANF) and Child Care Development Funds (CCDF) and how do we preserve Maintenance Effort (MOE) responsibility?.	IFSP/IEP Review
3.	What is the total <i>Early On</i> system cost?	All survey activity plus MDE data
4.	How much Part C money goes to various state level departments – i.e. the top of the pyramid?	MDE budget and expenditure information
5.	What are the Regional differences for all Study findings?	All survey activity
6.	What is the average # of service hours per month for Part C only eligible children vs. Part C/Special Education eligible children?	IFSP/IEP Summary, Encounter Survey
7.	How many children are being served and what is the annual average cost per child, delineate Part C only and Part C/Special Education?	IFSP/IEP Summary
8.	What is the cost per child?	All survey activity plus MDE data
9.	What services are provided, by whom and the frequency/amount outcome?	IFSP/IEP Summary, Encounter Survey
10.	What are the average direct service and admin/support costs?	MDE School district data
11.	What is the ratio of direct services to indirect (admin/support) costs?	MDE School district data
12.	What is the current formula that is used for distribution of federal/state Part C funds?	MDE information
13.	How is our Part C federal allocation being used across service areas? What does it purchase?	IFSP/IEP Review

14.	How does an open ended service system (# of visits per child) work within a finite grant system? Perhaps with redesign – the financial system will change?	IFSP/IEP Review
15.	How do the cost results break out by racial/ethnic group – and how does that comparatively profile with state and local demographics?	<i>Early On</i> data system review
16.	Can we incorporate/analyze levels of risk and/or levels of need in this study?	Included with the analysis
17.	How do numbers of families/children connect to funding amounts?	IFSP/IEP Review/ Child Questionnaire
18.	How many children are receiving services or service coordination paid out of Part C federal allocation and also receiving same/similar service paid by a different funding source? (duplication or supplanting)	IFSP/IEP Review

The study questions along with other pertinent information will be analyzed throughout each section of the report. Some Study questions rely on multiple surveys plus additional data and may not be answered until the conclusion section of the report. Each report section is laid out with an overview of the activity including a more technical description of the process. The middle portion of each section of the report will attempt to analyze the information for relevance. Each section will also include a regional review and will try to provide additional insight as to why something might be occurring.

Section 2: Direct Service Personnel Costs

Personnel Cost Overview

Direct service personnel cost is typically the single most significant component of cost and includes all individuals who work directly with children and their families. The Salary Survey, conducted as a part of the Michigan *Early On* Fiscal Study, provided the detail necessary to compare wages, hours and to some degree, working conditions across the State. The primary purpose of the Salary Survey was to identify the hourly direct service personnel costs related to employees. The Salary Survey information included the collection of annualized wage and benefit information that was converted to a consistent hourly base for equivalent comparisons. For employees, cost is based upon both wage and benefit information. For those direct personnel engaged on a contractual basis where the employer has no employment tax obligation, the survey instrument requested information regarding terms of the contract so that equivalent hourly information could be computed.

The salary information was captured for those personnel who were providing direct *Early On* service to children, who were randomly selected, for participation in the Utilization Study component. Personnel, listed as part of each child's Service Summary Log, were included in the request for Salary Survey information. The Service Summary Log has either an Individualized Family Service Plan (IFSP) or an Individualized Education Plan (IEP) as the source for the information. This method provides a link between the child's service record and the personnel who deliver it.

Selected personnel were then grouped by employer, as identified on the Service Summary log and were prelisted on the Salary Survey Worksheet. This Worksheet was forwarded to the Intermediate School District (ISD) of the selected child. The *Early On* Coordinator at each ISD was responsible for forwarding the Worksheet to the appropriate person at each respective organization for completion. Employers were asked to provide actual payroll information based on the most recent completed payroll period and to return the completed survey directly to Solutions Consulting Group. The personnel type of each individual providing service was included as a distinct line on the original service summary log. All information is presented using an hourly basis regardless of wage, salary or contractual arrangements. This creates a consistent base for the purpose of comparisons and accounts for the variety of working conditions throughout the state's *Early On* System.

Salary Survey Information

Of the 461 participants solicited for inclusion in the Salary Survey, 21 ISDs representing 219 employees actually participated. The 219 employees represent slightly more than 151 full time

Employer Type	Participants Requested	% Requested	Participants Received	% Received
ISD	339	74%	189	86%
Other	122	26%	30	14%
Total	461	100%	219	100%

equivalents (FTE), assuming 2,080 annual work hours, or 40 hours per week and 52 weeks per year. Slightly more than \$10.7 million dollars in wage and salary information is represented in the Survey.

The overall average hourly personnel cost, without benefits, based on the Survey results is \$34.21 per hour as depicted in Table 4.

Benefit Information

The cost of benefits (\$4,728,814) represented in the Salary Survey is 44% (Table 4) of wage and salary costs (\$10,745,573). Another way to look at the same information is to compare the benefit cost to total personnel costs; in which case, the benefit total of \$4,728,814 is 30.6% of the overall Personnel Costs of \$15,474,388. The 30.6% of total personnel costs and the 44% of wage and salary represent two different ways of looking at the same information.

The combined federal tax rate is expected to be 7.65% of wage and salary costs; the Survey results are consistent with that expectation. The remaining benefit costs of health insurance, retirement, and “other” represent 36% of wage and salary costs, which is unusually high when looking at other “like”

Surveys conducted by the Principal Investigator (PI). It is also high even when comparing to other salary information for Michigan, which will be discussed later in this Report. The driver of the higher cost of benefits is that nearly all employees have both health benefits and retirement benefits.

- 93% of all surveyed employees have health insurance or a cost of 21% when the benefit exists, which is slightly higher than the 19.4% when comparing all employees. The 21% is computed by dividing the percentage of costs for all survey participants which is 19.4% by the percentage of people having the benefit which is 93% (19.4%/93%=21%).
- 99% of all surveyed employees have retirement benefits or a cost of 15% (15%/99%) when the benefit exists. In this case nearly all employees have retirement so there is no difference when only considering employees with the benefit. The 15% remains unchanged when divided by the 99% (15%/99%=15%).

Regional Participation Analysis

A regional analysis (Chart 1) provides four (4) different ways that regional representation was reviewed. Programs were designated as either part of the Central, North, South or Upper Peninsula. The first bar on the chart represents the distribution of the 6/30/2005 Child Count depicted by the four (4) early intervention regions. The next four (4) bars displayed represent:

- a) the individual employees regardless of the work hours for the organization;

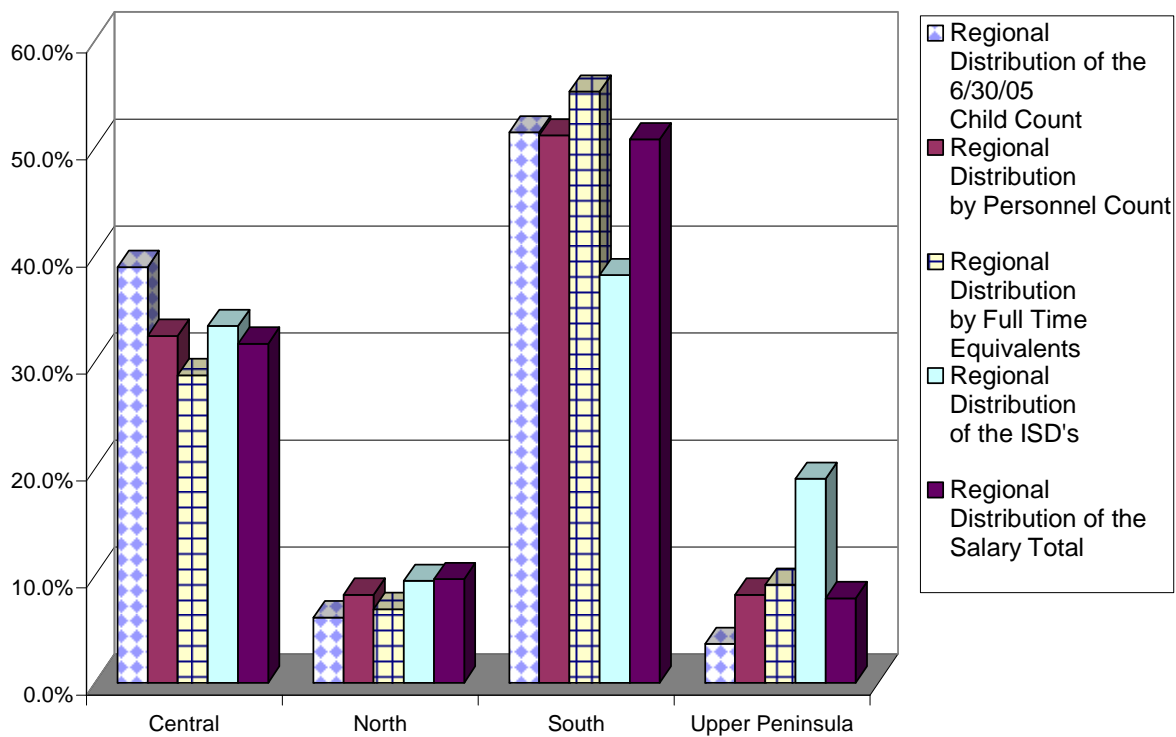
Table 4: Salary Survey Information		
<i>Description</i>	<i>Amount</i>	<i>Percent</i>
Salary	\$10,745,573	
Benefit Total	\$4,728,814	44.0%
Personnel Costs	\$15,474,388	
Annual Work Hours	314,104	
Compensated Hours Off	16,394	
FTE	117.94	
FICA	\$660,133	6.1%
Medicare	\$155,811	1.5%
FUTA	\$7,392	0.1%
SUTA	\$32,805	0.3%
Retirement	\$1,606,851	15.0%
Health	\$2,082,749	19.4%
Other	\$183,074	1.7%
Annualized Salary	\$16,684,275	
Average Hourly Amount without benefits	\$34.21	

- b) the full time equivalent (FTE) representation of the employee based on 2,080 work hours;
- c) the number of ISDs that participated in the Survey; and
- d) the total salary amount reported.

Based on this analysis, there is good geographic distribution and most regions appear to be reasonably represented. For the South and the Upper Peninsula, the fourth (4) bar, which represents the count of ISDs, simply shows that the ISDs in the South are larger in terms of the number of children per ISD at an average of 550 (4,396 12/1/2005 Child Count / 8 ISDs or 550 children) and the ISDs in the North are smaller in size (521 12/1/2005 Child Count / 2 ISDs or 261 children). This is the least important comparison. When analyzing overall regional representation, the remaining comparisons are relatively aligned and tell us that there is good geographic distribution with the sampling process.

Chart 1

Salary Survey Participation by Region



Personnel Types

All Salary Survey participants were grouped according to the personnel types as indicated on the encounter or service summary logs. Each position, submitted as a line item on the Salary Survey, was converted to the full time equivalent (FTE) number of work hours based on 2,080 annual hours. The “Total Salary” is then divided by the “Sum of FTEs” shown” in Table 5 to show the salary amounts by personnel grouping. This means that salary information for each type and for the totals is weighted

for actual work time. A half-time position will have half the impact on the final hourly amount as a full time position. The hourly amount is computed by dividing the “Salary Total” by one “FTE,” which is 2,080 work hours per year.

Table 5: Salary Survey - Average Salary by Personnel Types					
	Personnel Count	Sum of FTE	Total Salary	Average	Average Hourly
Unknown	3	1.59	\$161,671	\$101,379	\$48.74
Audiologist	5	2.52	\$230,524	\$91,488	\$43.98
Family Therapist	4	3.69	\$132,656	\$35,974	\$17.30
Nurse	12	10.56	\$500,543	\$47,378	\$22.78
Occupational Therapist	29	17.52	\$1,538,113	\$87,774	\$42.20
Physical Therapist	24	16.41	\$1,392,307	\$84,832	\$40.78
Physical Therapist Assistant	1	0.41	\$35,419	\$87,185	\$41.92
Psychologist	1	0.81	\$41,227	\$51,043	\$24.54
Registered Dietitian	1	0.64	\$27,262	\$42,764	\$20.56
Service Coordinator	3	2.24	\$88,501	\$39,519	\$19.00
Social Worker	30	22.02	\$1,070,411	\$48,621	\$23.38
Special Educator	56	40.16	\$2,816,882	\$70,138	\$33.72
Speech-Language Pathologist	39	25.26	\$2,171,042	\$85,946	\$41.32
Teacher	3	2.20	\$86,552	\$39,394	\$18.94
Teacher Consultant	5	3.04	\$317,275	\$104,502	\$50.24
Vision Specialist	3	1.95	\$135,188	\$69,447	\$33.39
Total	219	151.01	\$10,745,573	\$71,157	\$34.21

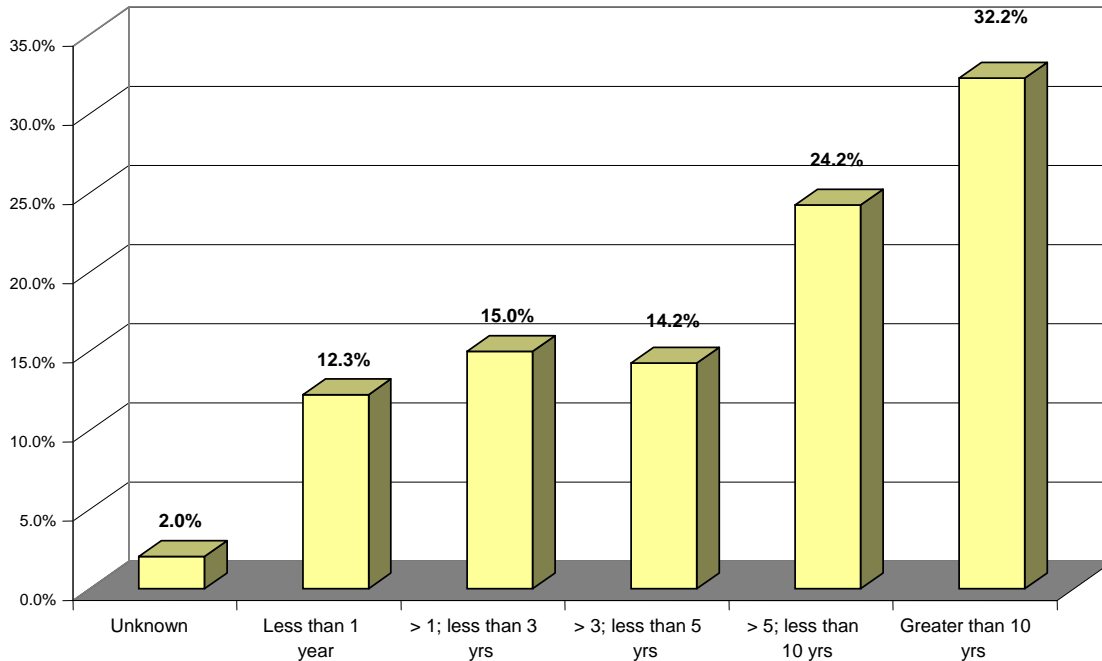
Length of Employment (Longevity): In addition to salary and benefits, each employee was listed with their employment start date which provides some insight into longevity. Of the 219 participating employees, 211 provided detailed month and year of their employment start date. Longevity is represented in Chart 2 and shows the percentage of employees by length of employment, using five (5) time period groupings. Over 32% have been employed more than 10 years, which is significant. The majority of all employees (56.4%) have been in the system five (5) years or more.

This kind of longevity is not typical of other states where the Principal Investigator (PI) has conducted similar studies. In the Commonwealth of Virginia, for example, about 7% of all employees have been in their jobs for 10 years or more. For the state of New Mexico, about 13% have been employed for 10 years or more. The only parallel is in the state of Connecticut, where a long-standing program run with state employees has unusually high longevity driven by salaries that are higher than what is common in the private provider programs. The only attrition that is occurring in the Connecticut state program is through retirement. This program is only one component of the state’s Part C service delivery system, and serves children with a specific disability. State leadership in Connecticut is not replacing personnel in these positions, but rather contracting out for these services within the existing

private provider community. Michigan salary and longevity characteristics parallel this Connecticut state program when comparing ISD employees to other provider types. Conversely, states with lower than average salaries typically see much higher turnover levels.

Chart 2

Percent of FTE's by Length of Employment



Regional Wage and Salary Analysis

Table 6 represents the varying hourly rate for each region. The Personnel Count, FTE and Total Annual Salary are simply summed, by region, within the Salary Survey database. Average salary is computed by dividing the Total Annual Salary by the FTE. Average Hourly amount is computed by dividing Average Salary by 2,080 work hours. On the surface the results show evidence of differing hourly costs by the regions reviewed. From the external salary information reviewed and shown in Table 9, it is clear that the regional variance should show Detroit and Ann Arbor in the southeast as having the highest salary amounts. The average hourly rate for the Central and North region is 10% and 41% higher respectively than the state average. Further review of the salary information for the different regions shows that the higher average hourly amount for the North region is driven in large part by the longevity of employees for that region. Review of this information with the Fiscal Task Force supports the theory that this longevity is, in fact, driven by the higher than average salaries paid by the ISDs.

Region	Personnel Count	Sum of FTE	Total Salary	Average	Average Hourly
Central	71	43.40	\$3,403,210	\$78,415	\$37.70
North	18	10.38	\$1,038,865	\$100,071	\$48.11
South	112	83.40	\$5,455,226	\$65,407	\$31.45
Upper Peninsula	18	13.83	\$848,273	\$61,351	\$29.50
Total	219	151.01	\$10,745,573	\$71,157	\$34.21

Table 7 below shows the percentage of each type of personnel employed by region. In the South and Upper Peninsula regions, the greatest percentage of personnel is in the category of Special Educator at 32.6 and 27.3% respectively. This type of position accounts for 19.8% of the Central and 6.2% of the North region's personnel. The majority of personnel in the Central region are relatively evenly distributed between Nurse, Occupational Therapist, Physical Therapist, Social Worker and Speech-Language Pathologist categories. There is a correlation between a salary amount and the Personnel type that shows higher payment for therapist type positions versus the educator types.

	Central		North		South		Upper Peninsula	
	Sum of FTE	% Sum of FTE	Sum of FTE	% Sum of FTE	Sum of FTE	% Sum of FTE	Sum of FTE	% Sum of FTE
Unknown	1.11	2.6%			0.48	0.6%		
Audiologist	1.61	3.7%			0.91	1.1%		
Family Therapist					3.69	4.4%		
Nurse	5.73	13.2%			2.97	3.6%	1.86	13.5%
Occupational Therapist	6.07	14.0%	2.24	21.6%	6.83	8.2%	2.39	17.3%
Physical Therapist	5.01	11.6%	1.09	10.5%	9.31	11.2%	1.00	7.2%
Physical Therapist Assistant					0.41	0.5%		
Psychologist					0.81	1.0%		
Registered Dietitian							0.64	4.6%
Service Coordinator	0.56	1.3%			1.00	1.2%	0.68	4.9%
Social Worker	6.06	14.0%	0.36	3.5%	13.74	16.5%	1.86	13.4%
Special Educator	8.57	19.8%	0.64	6.2%	27.18	32.6%	3.78	27.3%
Speech-Language Pathologist	8.30	19.1%	3.01	29.0%	12.32	14.8%	1.63	11.8%
Teacher					2.20	2.6%		

Teacher Consultant			3.04	29.2%				
Vision Specialist	0.36	0.8%			1.58	1.9%		
Total	43.40	100%	10.38	100%	83.40	100%	13.83	100%

Table 8 depicts the percentage of the FTE's by length of employment and region. The North region has a heavy concentration of employees in the "Greater than 10 years" category of almost 50%.

	Central	North	South	Upper Peninsula
Unknown	7.06%	0.00%	0.00%	0.00%
Less than 1 year	11.91%	14.04%	13.19%	6.33%
> 1; less than 3 yrs	10.84%	6.16%	15.71%	30.38%
> 3; less than 5 yrs	14.08%	0.00%	16.72%	10.58%
> 5; less than 10 yrs	29.62%	29.87%	21.01%	22.57%
Greater than 10 yrs	26.48%	49.94%	33.37%	30.15%
Total	100%	100%	100%	100%

Market Comparison

Table 9 provides information from Salary.com, Inc. which shows some variation in wages based on region. The personnel types most aligned with service provider types participating in Michigan *Early On* were selected for comparison. Salaries for the Detroit area are slightly more than 6.5% higher than the State average. Ann Arbor also shows slightly higher than average salary amounts. The Salary Survey average of \$34.21 is higher than the information obtained through the salary.com data review. It was the general consensus of the Fiscal Task Force that salaries paid by the ISDs were driven by the contract negotiation process with little flexibility and are known to be higher than the general employment within Michigan.

Personnel Type	Ann Arbor	Battle Creek	Benton Harbor	Detroit	Grand Rapids	Lansing	Muskegon	Saginaw	Average
Audiologist	\$ 29.41	\$28.43	\$27.63	\$30.60	\$28.43	\$28.98	\$ 28.31	\$ 28.63	\$ 28.72
Occupational Therapist	\$ 29.96	\$28.97	\$28.14	\$31.18	\$28.97	\$29.52	\$ 28.84	\$ 29.17	\$ 29.25
Physical Therapist	\$ 30.93	\$29.90	\$29.06	\$32.19	\$29.90	\$30.48	\$ 29.77	\$ 30.11	\$ 30.20
Social Worker BSW	\$ 21.10	\$20.40	\$19.82	\$21.96	\$20.40	\$20.79	\$ 20.31	\$ 20.54	\$ 20.61
Speech Language Pathologist	\$ 29.08	\$28.12	\$27.32	\$30.26	\$28.12	\$28.66	\$ 28.00	\$ 28.31	\$ 28.40
Dietician	\$ 24.14	\$23.34	\$22.68	\$25.12	\$23.34	\$23.79	\$ 23.24	\$ 23.50	\$ 23.57
Psychologist	\$ 37.58	\$36.34	\$35.31	\$39.11	\$36.34	\$37.03	\$ 36.18	\$ 36.59	\$ 36.70
Social Worker (MSW)	\$ 25.04	\$24.21	\$23.53	\$26.06	\$24.21	\$24.68	\$ 24.11	\$ 24.38	\$ 24.45
Registered Nurse	\$ 18.49	\$17.88	\$17.37	\$19.24	\$17.88	\$18.22	\$ 17.80	\$ 18.00	\$ 18.06
Physician Pediatrics	\$ 72.56	\$70.16	\$68.17	\$75.51	\$70.16	\$71.50	\$ 69.85	\$ 70.64	\$ 70.85
Teacher,	\$ 24.00	\$23.21	\$22.55	\$24.98	\$23.21	\$23.65	\$ 23.10	\$ 23.37	\$ 23.44

Table 9: Salary.Com Data Review for 02/2006 (Hourly)

Personnel Type	Ann Arbor	Battle Creek	Benton Harbor	Detroit	Grand Rapids	Lansing	Muskegon	Saginaw	Average
Elementary									
Preschool Teacher	\$ 24.04	\$23.25	\$22.59	\$25.02	\$23.25	\$23.69	\$ 23.14	\$ 23.41	\$ 23.48
COTA	\$ 19.58	\$18.93	\$18.39	\$20.37	\$18.93	\$19.29	\$ 18.85	\$ 19.06	\$ 19.12
PTA	\$ 20.45	\$19.77	\$19.21	\$21.28	\$19.77	\$ 20.1	\$ 19.69	\$ 19.91	\$ 19.97
Case Worker (Home Care)	\$ 21.19	\$20.49	\$19.91	\$22.05	\$20.49	\$20.88	\$ 20.40	\$ 20.63	\$ 20.69
Psychiatric Tech	\$ 13.53	\$13.08	\$12.71	\$14.08	\$13.08	\$13.33	\$ 13.02	\$ 13.17	\$ 13.21
Average Professional	\$ 30.53	\$29.52	\$28.68	\$31.77	\$29.52	\$30.08	\$ 29.39	\$ 29.72	\$ 29.81
Average Paraprofessional	\$ 18.69	\$18.07	\$17.55	\$19.44	\$18.07	\$18.41	\$ 17.99	\$ 18.19	\$ 18.25
Average All Types	\$ 27.57	\$26.65	\$25.90	\$28.69	\$26.65	\$27.17	\$ 26.54	\$ 26.84	\$ 26.92

In addition to the salary.com information, a review was done using the U.S. Department of Labor Bureau of Labor Statistics Wage and Hour Information. The information represented Michigan data from May 2005. A review of comparative average salaries looks like the *Early On Salary Survey* results would be in the 90th percentile rather than around the 50th percentile. The website is located at http://www.bls.gov/oes/current/oes_mi.htm.

Regional Analysis-Benefits

The Salary Survey indicated that benefits, as a percentage of total personnel costs, remained relatively consistent across regions, as illustrated in Table 10. Across the board, retirement and health benefits as a percentage of total personnel costs are a significant part of this total.

Table 10: Salary Survey - Benefits Totals

	Statewide		Central		North		South		Upper Peninsula	
Salary	10,745,573		3,403,210		1,038,865		5,455,226		848,273	
Benefit Total	4,728,814		1,489,579		513,987		2,378,883		346,366	
Personnel Costs	15,474,388	30.6%	4,892,789	30.4%	1,552,852	33.1%	7,834,109	30.4%	1,194,638	29.0%
FICA	660,133	6.1%	204,906	6.0%	64,410	6.2%	338,224	6.2%	52,593	6.2%
Medicare	155,811	1.5%	49,347	1.5%	15,064	1.5%	79,101	1.5%	12,300	1.5%
FUTA	7,392	0.1%	1,792	0.1%	-	0.0%	4,760	0.1%	840	0.1%
SUTA	32,805	0.3%	7,776	0.2%	-	0.0%	21,384	0.4%	3,645	0.4%
Retirement	1,606,851	15.0%	514,607	15.1%	186,110	17.9%	791,759	14.5%	114,375	13.5%
Health	2,082,749	19.4%	685,692	20.1%	161,075	15.5%	1,081,472	19.8%	154,510	18.2%
Other	183,074	1.7%	25,459	0.7%	87,329	8.4%	62,183	1.1%	8,103	1.0%

Salary.com, Inc. was utilized to verify the benefits as reported and to identify regional differences, if any. For all personnel types, benefits as a percentage of total personnel costs averaged a little more than 18%. This is again significantly different from the results of the Salary Survey process

administered on behalf of the *Early On* system which shows benefits as a percentage of total personnel costs to be at 30.6% as shown in Table 4.

Table 11: Benefits as a Percentage of Salary

Practitioner	Ann Arbor	Battle Creek	Benton Harbor	Detroit	Grand Rapids	Lansing	Muskegon	Saginaw	Average
Audiologist	20%	20%	21%	20%	19%	19%	19%	19%	20%
Occupational Therapist	19%	20%	19%	19%	19%	20%	19%	19%	19%
Physical Therapist	19%	19%	19%	19%	19%	19%	19%	19%	19%
Social Worker BSW	21%	21%	21%	20%	21%	21%	21%	21%	21%
Speech Language Pathologist	19%	20%	20%	19%	20%	19%	20%	19%	20%
Dietician	21%	21%	20%	20%	21%	21%	21%	21%	21%
Psychologist	18%	18%	18%	18%	18%	18%	18%	18%	18%
Social Worker (MSW)	20%	21%	20%	20%	21%	20%	21%	21%	21%
Registered Nurse	22%	22%	22%	21%	22%	22%	22%	22%	22%
Physician Pediatrics	15%	15%	15%	14%	15%	15%	15%	15%	15%
Teacher, Elementary Educa	21%	21%	21%	20%	21%	21%	21%	21%	21%
Preschool Teacher	21%	21%	20%	20%	21%	21%	21%	21%	21%
COTA	21%	22%	21%	21%	22%	21%	22%	21%	21%
PTA	21%	21%	22%	21%	21%	21%	21%	21%	21%
Case Worker (Home Care)	21%	21%	21%	21%	21%	21%	21%	21%	21%
Psychiatric Tech	24%	24%	25%	24%	24%	24%	24%	24%	24%
Average All Types	20%	20%	20%	20%	20%	20%	20%	20%	20%

Employee Hourly Cost

The difference in hourly wage amounts between ISD employees and non-ISD employees must be considered in the final analysis of hourly cost to be used in the financial modeling for the Fiscal Study. Table 12 shows the average hourly wage amount separated by ISD employer type and non-ISD employee type, with the latter being about half as much per hour. The last column, which represents the weighted hourly amount by employer type, is simply the average hourly amount multiplied by 76% ($37.19 \times .76=27.34$) for ISD representation and 24% ($19.86 \times .24=5.26$) for non-ISD participation. The weighted total hourly cost is \$32.60 per hour. The 76% and 24% are shown in Table 1 as the percentage of each type based on the personnel requested as participants in the Salary Survey. Since the requested participation levels were part of the random selection process, that weighting represents the true distribution by employment types across the system. That weighting is more relevant than the actual submitted information.

Employer Type	Personnel Count	Sum Of FTE	Total Salary	Average	Average Hourly	Weighted for ISD/Non-ISD
ISD	189	125.08	9,674,286	77,346	37.19	27.34
Non-ISD	30	25.93	\$1,071,287	\$41,310	\$19.86	\$5.26
Total	219	151.01	\$10,745,573	\$71,157	\$34.21	\$32.60

Benefit Percentage

A similar process was used for computing benefits as a percentage of total cost. Again, there was a notable difference between benefits for

Employer Type	Salary	Benefits	Total Personnel costs	Benefit as a % of Total Personnel Costs	Weighted %
ISD	\$ 9,674,286	\$4,402,244	\$ 14,076,530	31.3%	23.8%
Non-ISD	\$ 1,071,287	\$ 326,571	\$ 1,397,858	23.4%	5.6%
Overall effective benefit percentage					29.4%

ISD employer types and non-ISD employer types. The final numbers to be used within the financial modeling is 29.4% of total personnel costs since it represents the weighted average benefit percentage.

Section 3: Utilization Section

Utilization Service Summary Overview:

The IFSP/IEP Service Summary component of the Michigan Fiscal Study provides an opportunity to review the planning process for early intervention services and serves as the foundation for many portions of the Study, including the following:

1. Practitioners listed on the IFSP/IEP for the selected group of children were also selected for the Encounter Survey component of the Study. The concept is to have the complete complement of practitioners reporting on delivered services for any child selected for the IFSP/IEP review. This way the study will look at all services for any selected child.
2. The actual services received by children and families were tracked through the Encounter Survey activity for a four (4) week period.
3. The Encounter Survey was also used to identify the percentage of time practitioners spend in direct services with children and families.
4. Practitioners for the Encounter Survey were also selected for the Salary Survey.
5. IFSP/IEP services were annualized using frequency, intensity, location and duration to analyze characteristics of the volume of services across the entire *Early On* system.
6. Service detail on the IFSP/IEP is a link to funding source since this information sets the stage for the revenue portion of the Study.
7. The funding indicator was a link to the Revenue Survey activity;
8. The specificity of service frequency was used to annualize services received under Michigan *Early On*.

The Utilization Review consisted of several steps: the child selection process, the IFSP/IEP Service Summary review, completion of the Child Questionnaire, and completion of the Service Encounter Log. Detailed written instructions for all portions of the Utilization Study were provided by mailing each ISD a packet of information, followed up with telephone and e-mail support. All 57 ISDs were invited to participate.

Child Participation:

A method of selection was developed to assure that participants were randomly selected and would be representative of the State as a whole. Each ISD was asked to complete an alphabetical list of the names of children actively enrolled in Michigan *Early On* as of April, 2006. The list was to include all *Early On* eligible children with an IFSP/IEP, regardless of the number of hours of service that they received. In order to assure the random nature of the “starting point” for participation, ISDs were instructed to flip a coin to determine if the designated selection would be initiated from either the first

or second position on the list. Using this as the starting point, every fifth name was selected.

Study Participants	6/2006 Child Count	Eligibility Category	Study Participants %	6/2006 Child Count %
21	0	Unknown	2.9%	0.0%
368	5136	Part C	50.5%	58.5%
340	3643	SpEd	46.6%	41.5%
729	8779	Total	100.0%	100.0%

Thirty ISDs returned participation sheets that included 759 children actively enrolled and participating in the *Early*

On system. This represents slightly less than 53% (30/57=53%) of the ISDs and 9% (759/8,547=9%) of the total June 30, 2005 child count of 8,547. The results are slightly less when comparing the selected population to the updated Child Count numbers in June 2006. The Study selection sample has proportionately more children meeting the Special Education (SpEd) eligibility criteria, at 46.6% as shown in Table 14. Since the sample selection yielded a higher percentage of children meeting the SpED eligibility criteria for Part C, there is risk that the Fiscal Study costs are slightly inflated. The rationale for this statement will become clearer as the reader reviews these findings. More detail about other risks inherent in the Study are discussed in the Conclusion Section of this Report.

An age comparison of the sample population to the total number of children in the June 2006 database reveals that the sample selection was reasonably representative. Table 15: Comparison of Age in Sample to the Total Population shows nearly 31% for both groups at age 1 and 51% for both groups at age 2. The sample group has a proportionately larger group of children under a year of age. The age computation for the June database used June 30 and the sample age was computed based on April 30.

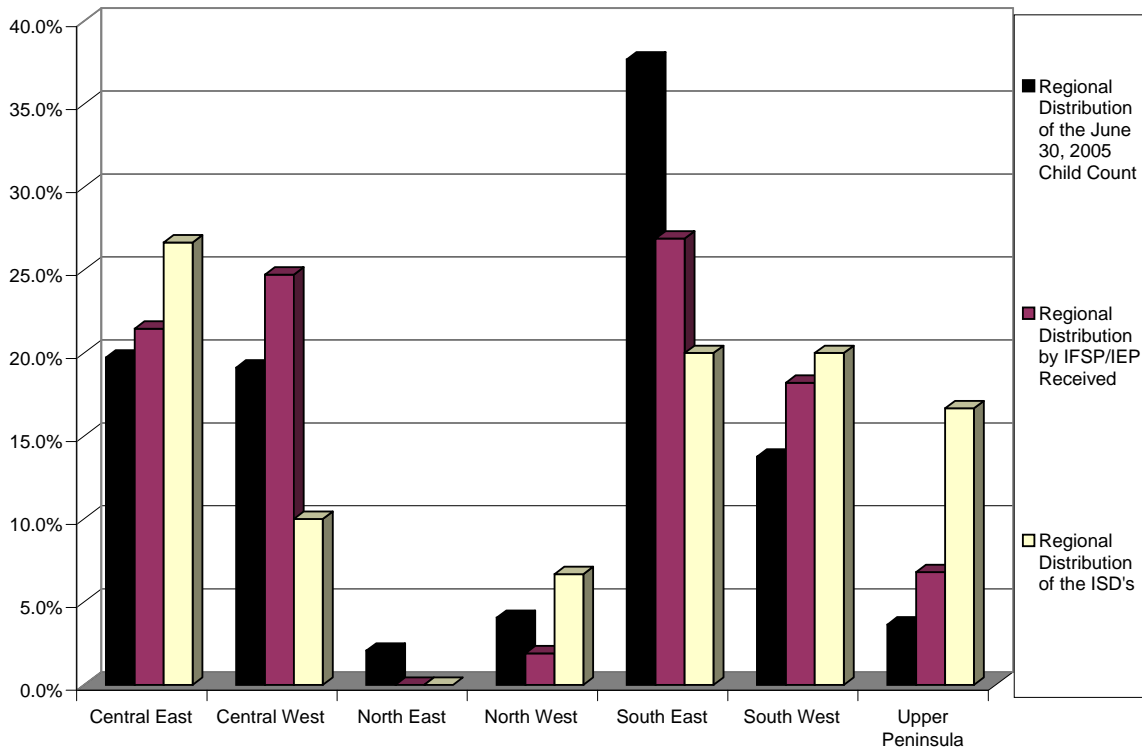
Age	06/2006 Count	% of Total	Sample Count	% of Total
0	1,210	13.8%	113	15.8%
1	2,715	30.9%	218	30.6%
2	4,457	50.8%	365	51.2%
3	397	4.5%	17	2.4%
	8,779	100.0%	713	100.0%

Regional Analysis:

A regional analysis, provided in Chart 3 on the next page, illustrates three (3) ways that regional representation was reviewed. The first bar represents the distribution of the 6/30/2005 Child Count for the seven (7) early intervention regions. Participants are delineated by region in the list below and in the acknowledgement pages of the Introductory Section of this Report. The next two bars represent: a) the number of IFSP/IEPs; and b) the number of participating ISD's. Based on this analysis, there appears to be good, overall distribution and all regions appear to be reasonably represented with the exception of the very small Northeast Region.

1. Central East: Clare-Gladwin RESD, Clinton County RESA, Gratiot-Isabella RESD, Huron ISD, Lapeer County ISD, Saginaw ISD, Shiawassee County RESA, St. Clair RESA
2. Central West: Kent ISD, Newaygo ISD, Ottawa ISD
3. Northwest: Charlevoix-Emmet ISD, Manistee ISD
4. Northeast: No participation
5. Southeast: Hillsdale ISD; Ingham ICC; Lenawee ISD; Livingston ESA; Oakland ISD, Wayne County RESA
6. Southwest: Allegan County ISD, Berrien ICC, Branch ISD, Eaton ISD, St. Joseph ISD, Van Buren ISD,
7. Upper Peninsula; Copper Country ISD, Delta-Schoolcraft ISD, Dickinson-Iron ISD, Eastern Upper Peninsula ISD, Gogebic-Ontonagon ISD

Chart 3: Early On Fiscal Study Regional Distribution



IFSP/IEP Service Summary:

Figure 2: IFSP/IEP Service Summary Issues Noted

- No ISD Identified
- Missing Frequency, Intensity and Period
- Missing Frequency, Intensity or Period
- Frequency or Period listed as parent request, to be determined, as needed or consult
- No Start and/or End dates
- A range was used for frequency and intensity

The IFSP/IEP Service Summary was to be completed by the child’s service coordinator. The survey document was designed to capture the services listed on the selected child’s active IFSP or IEP on the day of the selection process. Service summaries were completed by all 30 ISDs who committed to the process, with a total of 729 children with IFSPs or IEPs. Most of the 30 children not submitted (759-729=30) were subsequently found to be inactive and could not be included in this or subsequent portions of the Study.

It is worth noting that, in the first round of data received on the IFSP/IEP Survey forms, more than half of the forms lacked the data specificity necessary to compute annual service levels.

Based on work performed for other states by the Principal Investigator, this is not an uncommon occurrence in the field of early intervention. However it is cause for the State Lead Agency to consider strengthening the base of IFSP/IEP training so that the required elements of the document are always represented. Items denoting the lack of specificity are listed in Figure 2: IFSP/IEP Service Summary Issues Noted.

The IFSP/IEP survey data was annualized using the service detail page to compute the planned levels of service scheduled for fiscal year 2006.

- **Start and End Dates:** Either the actual start date or July 1, 2005 was used if the start date was prior to the start of the fiscal year. The same holds true with the end date. If the actual ending date extended beyond June 30, 2006, the calculation assumed the fiscal year end date rather than the actual. The concept was to look at the slice of services planned for fiscal year 2006. For example, if the child's IFSP/IEP had a start date of February 9, 2006 and an end date February 7, 2007, the process assumed February 9, 2006 as the start date and forced the fiscal year end date of June 30, 2006 as the end date.

- **Number of Service Days:** The number of days used for computing the fiscal year 2006 service is 141 days (2/9/2006 to 6/30/2006) rather than the 365 days (2/7/2006 to 2/7/2007) specified on the IFSP/IEP. In addition, it was important to compute the number of months the child would be in service during fiscal year 2006. This was computed by taking the 141 days and dividing it by 30.4 to compute the number of child service months that relate to the total planned service levels. The 30.4 is simply 365 days per calendar year divided by 12.

Period	Factor
Day	1
Month (mo)	30.4
One time only	365
Quarter	91
Week	7
Year	365
Bi-Annual	182.5
2 Months	60.8
1 - 2 Months	45.6
Bi-Month	60.8
3 - 6 Months	136.8
4 Months	121.4
5 Months	151.8

- This accounts for the irregularity in the number of days per month.
- **Frequency:** This is often stated in terms of the number of events per period, e.g., two times a month. For the purpose of computing an annualized number, a “Period Conversion Chart” was created identifying the number of days in each respective period. The Period Conversion Information is shown in Table 16. Forty one percent of all services are specified as “monthly”. Twenty nine percent are designated as weekly, and 25% have an annual frequency specified.
 - **Intensity:** This identified the duration of each session, e.g., 60 minutes or one (1) hour. The most common intensity is identified at 60 minutes which occurs for 55.6% of all service lines reported ($907/1620=55.6\%$). The next three most common are 90 minutes for 9%, 30 minutes at 8% and 45 minutes at 7%. Together these four (4) intensity levels account for 80% of the intensity levels specified on IFSPs or IEPs.
 - **Computation:** For an IFSP/IEP service line specifying two (2) sessions per month for 60 minutes each session the annualized service hours would be computed as follows:
 - Number of Service Days is 141 for the time period of February 9, 2006 through June 30, 2006.
 - The period is monthly (30.4), meaning that 4.6 periods exist within the dates, or during the 141 days specified on the IFSP/IEP ($141/30.4=4.6$ events). For this IFSP or IEP, the child would be in service for a total of 4.6 months in fiscal year 2006.
 - Sessions are planned for two (2) times a month, for a total of 9.2 times during FY 2006.

- Each of the 9.2 sessions is scheduled to last for one (1) hour, meaning that the service total is planned at 9.2 hours for Fiscal Year 2006.
- It is planned that this child would be receiving two hours of service per month.

Each service for each child is computed in the same manner and tallied to account for an annualized total of a little more than 33,875 hours of planned service hours for the randomly selected children in the Utilization Study. In addition to computing the planned hours of service, it was important to compute the number of service months represented by each child since IFSPs and IEPs start and stop at random times. The child service month computation was calculated using the same start and end criteria. The only difference was that a single number was computed per child. For example, if the child had two services that lasted the full 12 months, the number of child service months was computed at 12 months. If the child had multiple services with varying start dates, the longest number of child months is selected. In the next example, a child with one service for the full 12 months and another starting six months into the process still has 12 child months before this computation.

As seen in Chart 4, the planned and actual service hours of service are delineated by the type of service. Planned services represent the percentage of total service hours by service type for Fiscal Year 2006. Actual services are based on the Encounter Survey conducted in April 2006 with practitioners serving the children selected for participation in the study. There are some notable differences when comparing planned to actual service by type. Some differences occur because of the methods used to collect planned data versus actual delivered service data. Services with the annual frequency designation are the most affected by the design of the study. Service Coordination and Family Training account for about half of the service lines marked as annual. Another issue that may be more concerning is that practitioners did not use the IFSP/IEP to distinguish and track the delivered service type. Whether this issue was a flaw of the study or the existing practice is unknown.

Special Instruction is the service with the highest volume within the *Early On* System with a little over 41% for planned services and nearly 31% for actual. The next highest type of planned service was Family Training at close to 20%. The percentage of actual services delivered show less Special Instruction and Family Training and more of the therapy type services of Occupational, Physical and Speech.

Chart 4: Service Summary-Planned and Actual Services by Type

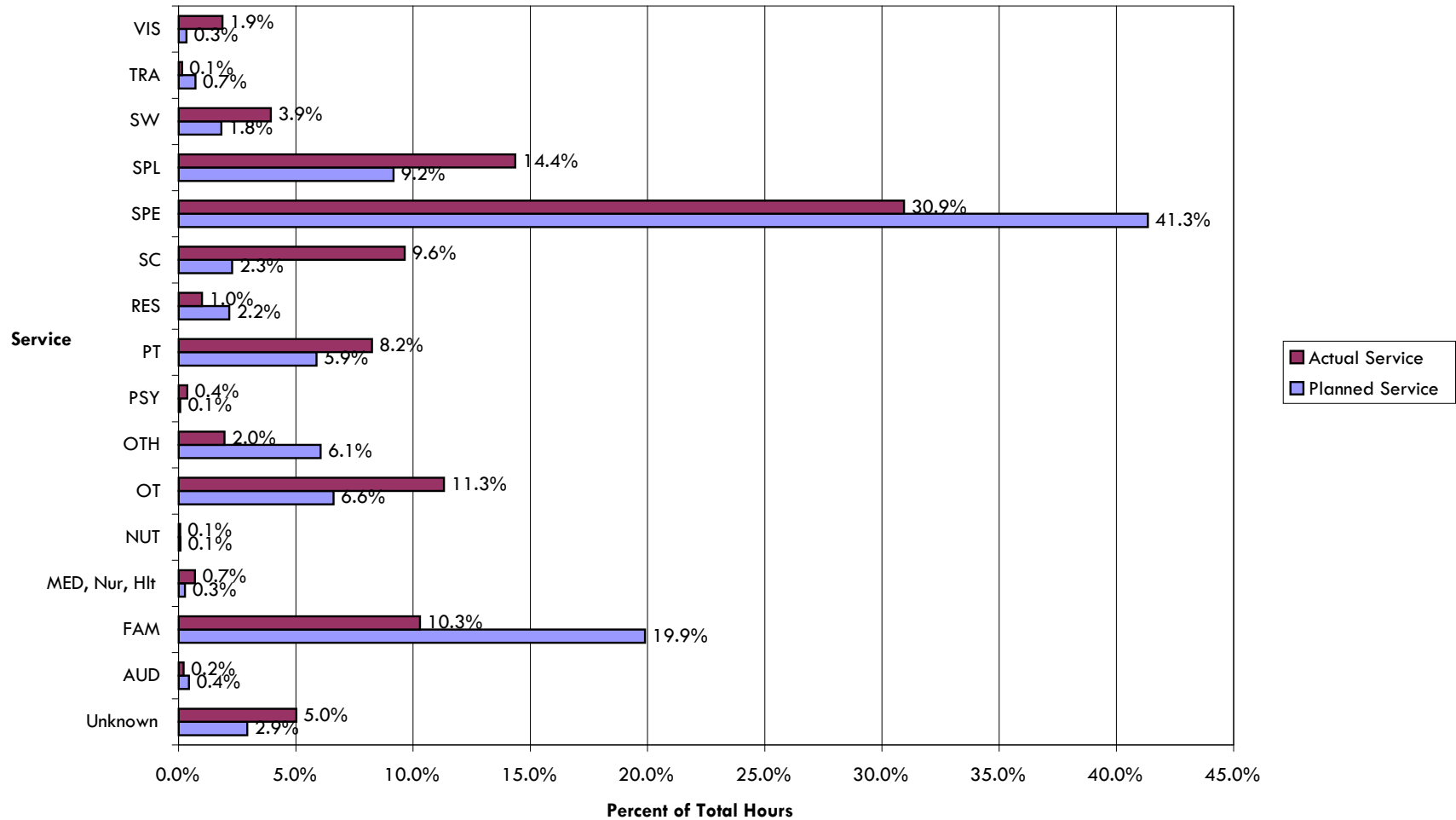


Chart 4: Planned and Actual service by Type

Service Code	Part C only	Meets Special Education Eligibility Criteria
AUD	0.7%	0.4%
EHS	1.3%	
FAM	22.8%	19.2%
HLT	0.1%	
HV	0.1%	
NUR	0.6%	0.1%
NUT	0.3%	
OT	8.5%	6.1%
OTH	7.0%	6.0%
PSY	0.2%	0.0%
PT	6.4%	5.6%
RES	8.9%	
SC	3.5%	2.0%
SPE	21.6%	49.4%
SPL	9.8%	9.2%
SW	5.9%	0.5%
TRA		1.0%
Unknown	1.9%	0.1%
VIS	0.4%	0.3%

Another reason why differences between planned and actual services may exist is the lack of specific definitions for services and clarification about who may provide the service. Based on discussions with a number of practitioners throughout Michigan, the kind of service delivered and classified as family training may very well differ dramatically across the state. Some states have chosen to represent the family training as a modality for each of the different service types rather than isolating it as a distinct service. Regardless of the choice in Michigan, some definition for all services, especially family training, may be necessary to help equalize the kind of services that occur throughout the state. Without a more clear definition of Family Training, the system will be unsure of the kind of service being provided under this designation. Since it does account for 20% of the overall planned services, it is a significant part of today's system. Another 21% of all planned service is for speech and language service, occupational therapy and physical therapy. In contrast, these services account for nearly 40% of actual *Early On* services that children and families receive.

Table 17 shows a comparison of the percentage of total service hours, by service type and across the different eligibility categories. There are striking similarities for most services, with the only notable difference in special instruction, where children meeting the special education eligibility criteria show a significantly higher percentage of planned special instruction services than children eligible with the Part C only designation.

Seventeen of the participating ISDs or 57% (17/30=57%) listed Service Coordination as a separate service on the IFSP/IEP Service Summary form; the remaining 43% did not. It was clear after discussion with the Fiscal Task Force members that many ISDs have been instructed not to include service coordination on the IFSP/IEP while others had been instructed differently. It is a recommendation that all ISDs be instructed to treat service coordination in the same manner. That it is a federal requirement for all eligible children to receive service coordination may support the argument that it need not be written in detail on the IFSP/IEP, however, articulating service coordination on the IFSP or IEP helps to promote the development of outcomes for this service.

The IFSP/IEP review included an indication of whether the planned services would be provided in an individual or group setting. Eighty-one (81%) of all planned services were designated as individual services. Nine (9) of the 30 participating ISDs had no group services reported. Another nine (9) had an overall percentage of 10% or less. Five (5)

Unknown	3%
Group	14%
Individual	81%
Both	1%

reported 25% or more in group services and the remaining seven (7) were between 10% and 25%.

Actual Service Hours

In addition to understanding the full complement of IFSP/IEP services, the Utilization Study examined actual delivered services through the Encounter Survey process. Children selected for participation in the IFSP/IEP Summary also became part of the Encounter Survey process by connecting the practitioner identified on the IFSP/IEP to the encounter log. The encounter log blended the process of capturing delivered services with an abbreviated time survey. Any practitioner associated with a selected child was asked to record a month's worth of service time and detail any service provided to that selected child. The encounter activity was tracked through the month of April 2006. Some ISDs started a little bit earlier, while others started a little bit later, but essentially the same time period was used.

During the designated time period, delivered service was tracked for more than 529 of the total 729 participating children, with direct service hours totaling 2,204. No in-depth analysis was conducted to understand why about 200 children did not participate in the Encounter Survey process. A cursory review showed the most likely scenario was that the practitioners were never contacted to participate in the Encounter Survey data collection activity.

A Comparison of Service: Planned and Actual

The next series of tables examine the planned and actual service hours by region, the size of ISD based on Child Count, the type of plan (IFSP or IEP), child eligibility, race/ethnicity and age. The planned service tables and actual service levels are each structured exactly the same but utilize different criteria for summarization. For the 729 children participating in the IFSP/IEP service summary, there is an average of six (6) hours of service per child, per month, for the fiscal year 2006 planned services. Children actually receive 4.2 hours of services per month. Each table representing planned services is marked with the table number and the letter (P) for planned services. Each comparative table with actual delivered services is marked with the same table number but has the letter (A) for actual delivered services within the one month review window.

The minimum hour, showing zero, indicates a fraction of an hour that is not registering since the numbers are rounded to the nearest whole digit. The maximum monthly hours of service per child, 117 hours for one child within the Upper Peninsula, is an anomaly for the system as a whole but does appear to be valid according to the source documents. The median, or the number in the center, shows a total planning level of three (3) hours per child, per month of service. Each child has an average of 2.2 ($1619/729=2.2$) planned services on the IFSP/IEP. Since service coordination is not universally reported, the IFSP/IEP totals will be slightly understated.

Regional Comparison

Region	Average Service Hours per child per month	Number of Children	Count of Service Lines	Min Service Hours	Max Service Hours	Standard Deviation Service Hours
Central East	3.81	154	354	0	56	6.71
Central West	7.55	180	364	0	69	11.37
North West	3.71	14	29	1	14	3.73
South East	8.16	197	458	0	89	13.33
South West	3.82	134	297	0	27	4.42
Upper Peninsula	5.68	50	117	0	117	16.45
Statewide	6.00	729	1619	0	117	10.70

Table 19 (P): IFSP/IEP Service Summary - Average Services/Region displays the average hours per month of planned service by region. These data range from 3.71 hours in North West to a high of 8.16 hours in the Southeast region. The number of children for the Northwest is simply too small to be reliable; the same may be true for the Upper Peninsula. There is a wide range for the average service hours per month within the participating ISDs. For the Central West, South East and Upper Peninsula, the standard deviation rate is substantially higher than the statewide standard deviation of 10.7 indicating substantial variability within the region. The list below shows the individual ISD average service hours of planned service from the low to the high within each region.

- Central East 1.5, 1.4, 2.9, 3.3, 6.9, 3.5, 7.2, 15.5
- Central West 3.4, 6.7, 8.6
- Northwest 2.6, 4.3
- Southeast 5.0, 5.0, 5.5, 5.7, 10.3, 24.1
- Southwest 2.4, 3.1, 3.7, 3.9, 4.1, 6.7
- Upper Peninsula 1.8, 2.3, 2.6, 5.5, 11.1

Based on this analysis, region alone is not the driver of the average number of planned services. Many of the regions with low monthly average numbers are also the regions with high numbers for monthly planned service hours by child and the range within the region is too varied. While the 11.06 in the Upper Peninsula is driven by a very small number of children, the 10.31 and the 24.14 in the Southeast each has more than 20 children.

Region	Children	Minutes	Hours per Child per Month	Hours	% of Total
Central East	97	24,323	4.2	405	18.4%
Central West	143	32,088	3.7	535	24.3%
North West	13	3,415	4.4	57	2.6%
South East	140	38,969	4.6	650	29.5%
South West	92	20,283	3.7	338	15.4%
Upper Peninsula	44	13,066	5.0	218	9.9%
Statewide	529	132,144	4.2	2,203	100%

Table 20 (A): Encounter Service Actual -Average Services/Region displays the actual quantity of service hours per month by region. The service hours per child per month of 4.2, 3.7, 4.4, 4.6, 3.7, and 5.0 verses the planned contact hours of 3.81, 7.55, 3.71, 8.16, 3.82, 5.68, are far more consistent (less varied) between the regions. In many ways, the actual delivered service results mirror the results found for planned services. From the list below, region is not the driver of the number of service hours delivered for most of the regions. This is a consistent finding across both planned and actual delivered service. The Upper Peninsula appears to be more consistently delivering more services by month for each child. The numbers for actual service delivery show that as a stronger finding with 3.4, 4.4, 4.8, 6.1, 7.1 as the number of monthly service hours by child. The planned monthly service hours by child are 1.8, 2.3, 2.6, 5.5, and 11.1. The bulleted list below shows the individual ISD average delivered service hours from the low to the high within each region.

- Central East 1.9, 2.6, 2.9, 3.4, 4.1, 5.8, 6.9
- Central West 2.7, 3.3, 4.2,
- Northwest 2.8, 5.1
- Southeast 1.2, 2.0, 2.4, 3.4, 7.7, 10.2
- Southwest 2.5, 3.6, 3.9, 3.9, 4.3
- Upper Peninsula 3.4, 4.4, 4.8, 6.1, 7.1

Comparisons by size of the ISD using Child Count

Based on the December 2005 Child Count	Average Service Hours per child per month	Number of Children	Count of Service Lines	Min Service Hours	Max Service Hours	Standard Deviation Service Hours
<50	6.52	71	161	0	117	14.43
50 to 100	6.64	235	532	0	89	12.91
150 to 300	3.35	60	148	0	27	5.06
>300	5.99	363	778	0	69	8.81
Statewide	6.00	729.0	1619.0	0	117	10.70

The results, using the December 2005 child count range, are a little more consistent between the ranges, with only the 150 to 300 range having a lower monthly plan service total per child. The detail below shows the individual ISD average again, with a wide range within each of the size categories. The results are so varied that size is not a driving factor. The standard deviation for the 150 to 300 range has the lowest standard deviation and the most consistent results.

- <50 1.8, 2.6, 3.4, 3.5, 5.5, 6.7, 11.1, 15.5
- 50 to 100 1.4, 2.3, 2.4, 2.6, 2.9, 3.3, 3.9, 4.1, 4.3, 5.0, 6.9, 7.2, 10.3, 24.1
- 150 to 300 3.1, 3.7
- >300 1.5, 5.0, 5.6, 5.8, 6.7, 8.6

Table 21 (A) Encounter Service Actual -Size using Child Count					
Size	Children	Minutes	Hours per Child per Month	Hours	% of Total
<50	60	14,795	4.1	247	11.2%
50 to 100	184	58,817	5.3	980	44.5%
150 to 300	47	10,497	3.7	175	7.9%
>300	238	48,035	3.4	801	36.3%
Statewide	529	132,144	4.16	2,203	100%

Actual services based on size of the organization using Child Count data as the groupings for the also show reasonable consistency across the categories.

Comparisons by Eligibility Type

Table 22 (P): IFSP/IEP Service Summary -Average Services – Eligibility Type						
Eligibility	Average Service Hours per child per month	Number of Children	Count of Service Lines	Min Service Hours	Max Service Hours	Standard Deviation Service Hours
Not Specified	3.81	21	44	0	13	4.18
Part C	2.91	368	750	0	117	7.51
Special Education	9.56	340	825	0	89	12.71
Statewide	6.00	729	1619	0	117	10.70

The difference in the average service hours per child per month using the type of eligibility is significant. The average for a child eligible for Michigan *Early On* with the Part C only criteria is 2.91 versus the 9.56 average hours of service per child when eligible under the special education category. The results detailed below show the different regional averages based upon eligibility category. The results by region for Part C only eligible children are on the lower end of the spectrum as compared to the starting point of 4.6 hours in the lowest region for the special education eligibility criteria.

The type of eligibility does play a part in the quantity of service planned for a child participating in Michigan *Early On*.

- Not Specified 1.0, 1.3, 4.3, 6.2
- Part C 1.0, 1.7, 2.1, 2.5, 4.0, 6.2
- Special Education 4.6, 5.9, 6.0, 7.8, 11.2, 14.4

Table 22 (A): Encounter Service Actual -Average Services by Eligibility					
Part C Eligibility	Children	Minutes	Hours per Child per Month	Hours	% of Total
Blank	12	2,365	3.3	39	1.8%
Part C	226	32,958	2.4	549	24.9%
Special Education	291	96,821	5.5	1,614	73.3%
Statewide	529	132,144	4.16	2202	100%

While the difference between the actual services delivered per month is still high at more than twice as much for children with the special education eligibility criteria, it is less than at the planned levels, which shows three times as much.

Comparisons by Service Plan

Type of Service Plan	Average Service Hours per child per month	Number of Children	Count of Service Lines	Min Service Hours	Max Service Hours	Standard Deviation Service Hours
Not Specified	5.37	98	194	0	78	9.77
B-Both	7.67	15	70	0	18	4.62
C-Combined	9.64	295	696	0	117	13.57
E-IEP	12.00	2	9	11	13	1.41
F-IFSP	2.79	319	650	0	82	6.32
Statewide	6.00	729.0	1619.0	0	117	10.70

This review is quite similar to Table 23 in that children who are eligible under the Part C only category typically have just an IFSP. Children who are eligible for Michigan *Early On* using the special education criteria typically have a combined document or an IEP. This review of information again supports the finding that children eligible under the special education definition have a higher level of planned services.

Type of Service Plan	Children	Minutes	Hours per Child per Month	Hours	% of Total
Not Specified	74	20,251	4.6	338	15.3%
B-Both	5	1,635	5.5	27	1.2%
C-Combined	252	77,065	5.1	1,284	58.3%
E-IEP	1	195	3.3	3	0.1%
F-IFSP	197	32,998	2.8	550	25.0%
Statewide	529	132,144	4.16	2,203	100%

Comparisons by Race Ethnicity

Race/Ethnicity	Average Service Hours per child per month	Number of Children	Count of Service Lines	Min Service Hours	Max Service Hours	Standard Deviation Service Hours
Not Specified	5.99	107	261	0	117	11.91
Asian	5.63	8	18	0	10	3.81
Black	4.36	66	125	0	55	7.84
Hispanic	6.08	40	86	0	69	11.00
Native American	4.31	13	26	0	13	4.37
Unknown	20.67	3	6	2	56	30.62
White	6.23	492	1097	0	89	10.76
Statewide	6.00	729	1619	0	117	10.70

The average service hours by race ethnicity category appear to be reasonably consistent among the differing categories. The only exception is the unknown category with only three children, which makes its number not relevant.

Region	Children	Minutes	Hours per Child per Month	Hours	% of Total
Not Specified	59	11,414	3.2	190	8.6%
Asian	7	1,387	3.3	23	1.0%
Black	46	5,796	2.1	97	4.4%
Hispanic	26	7,431	4.8	124	5.6%
Native American	9	3,280	6.1	55	2.5%
Unknown	3	2,135	11.9	36	1.6%
White	379	100,701	4.4	1,678	76.2%
Statewide	529	132,144	4.16	2,203	100%

When reviewing actual delivered services by race ethnicity, the Native American hours of 6.1 do stand outside of the statewide average of 4.1. However, the number of participants is so low that the results cannot be stated as representing Michigan.

Comparisons by Age of Child

Age	Average Service Hours per child per month	Number of Children	Count of Service Lines	Min Service Hours	Max Service Hours	Standard Deviation Service Hours
Not Specified	3.67	15	30	0	13	4.25
Under 1	2.52	113	219	0	14	3.20
Age 1	3.92	218	495	0	27	4.26
Age 2	8.35	365	827	0	117	14.12
Age 3	8.71	17	44	0	39	9.00
Age 4	9.00	1	4	9	9	
Statewide	6.00	729	1619	9	117	10.70

On the surface, age does seem to matter in terms of average service hours per child per month. Children age one (1) and below have the lowest levels of planned service hours. These age groups also have the lowest standard deviation, meaning less variation from child to child. The age two (2) to age three (3) results, with slightly more than eight hours of planned service per month, does have more volatility from child to child based on the standard deviation of 14.12.

Age	Children	Minutes	Hours per Child per Month	Hours	% of Total
Not Specified	8	1,410	2.9	24	1.1%
Under 1	74	11,867	2.7	198	9.0%
Age 1	147	32,321	3.7	539	24.5%
Age 2	290	84,111	4.8	1,402	63.7%
Age 3	9	2,010	3.7	34	1.5%
Age 4	1	425	7.1	7	0.3%
Statewide	529	132,144	4.16	2,203	100%

Age is also a factor when looking at actual services.

Eligibility	Count	Unknown	Under 1	Age 1	Age 2	Age 3	Age 4
Not Specified	21	14	1	2	3	1	
Part C	368		88	123	154	3	
SpEd	340	1	24	93	208	13	1
Total	729	15	113	218	365	17	1
Eligibility	Percent	Unknown.	Under 1	Age 1	Age 2	Age 3	Age 4
Not Specified	2.9%	93.3%	0.9%	0.9%	0.8%	5.9%	0.0%
Part C	50.5%	0.0%	77.9%	56.4%	42.2%	17.6%	0.0%
SpEd	46.6%	6.7%	21.2%	42.7%	57.0%	76.5%	100.0%
Total	100%	100%	100%	100%	100%	100%	100%

Table 26 provides a deeper look at the age of children by eligibility category. It does show that children are more likely to have the Part C only eligibility when they are younger. Nearly 78% of all children, under age 1, are eligible under the Part C only designation. Conversely, 57% of children between age two and three have the special education eligibility designation.

Section 4: Cost Information

Cost Overview

The outcome for the Cost component of this Fiscal Study is to understand the total cost of the Michigan *Early On* system. Very little cost information has been historically collected, and there are no estimates to help in the development of understanding the total cost picture. Since no baseline information existed prior to the start of the Study, the design was to identify methods that could provide reasonable assurance that total cost had been fairly represented. Detail about the kinds of expenses that make up the cost are not part of the context of this Study, but should be added after the baseline data is developed. It is also intended that the method could be used in subsequent years, with updated information, by state administrators in partnership with local public entities.

Identification of the different “layers” of cost was important for developing methods for collecting relevant information and assimilating into the total cost of the system. Costs, in the Michigan system, are really at three different levels, namely: a) the state; b) the ISDs who service as 57 local public entities; and c) supplementary provider organizations who also serve children and families. Collecting specific Michigan *Early On* system cost information proved to be quite challenging, since most, if not all of the ISDs do not have a distinct cost center identifying *Early On* specifically. In addition, providers outside of the ISDs, using non-ISD revenue sources, appear to report nothing back to the local public entity about services provided to participating children and families.

Cost Information

When pure financial information cannot stand alone as the basis for total system cost, a reasonable alternative is to compute a cost per direct service hour and then to identify how many direct service hours are provided during the year. While this method lacks the precision generally attainable through a pure financial review, it builds the cost totals on very specific verifiable pieces that can be updated over time. It was also important for the data collection methods to extend beyond the ISDs and obtain cost information from the non-ISD providers.

The State level cost information was relatively straightforward in that these cost data are reported annually to the U.S. Department of Education.

Service Cost Computation

Table 27 represents total cost for the Michigan *Early On* system for Fiscal Year 2006, using a model approach built on individual known items.

Section 1 of the Table is information from the Salary Survey and is fully detailed in Section 2 of this Report. The Hourly Admin & Support Cost line

1	Hourly Personnel Costs (weighted with benefits)	\$42.39
2	Hourly Admin & Support Cost	\$14.13
	Total Hourly Costs for All Hours	\$56.52
3	Percentage of Direct Service Time	46%
	Cost per Direct Service Hour	\$122.86
4	Annual Hours Per Child	50.4
	Cost per Child	<u>\$6,192</u>
	Child Count	8455
	Total Service Costs	\$52,353,360
5	State Level Costs	\$2,784,617
	Estimated Costs Fiscal Year 2006	\$55,137,977
	Cost per child w/ Total system costs	\$6,521

is detailed later in this Section of the report. The hourly personnel costs plus the hourly support and administrative costs are totaled for a Total Hourly Cost for all work hours.

Critical to this process was the Time Survey information that helped establish the overall percentage of time that personnel spend in delivering face to face services. That amount of 46% is detailed in the Time Survey Section of this Report. The cost of a face to face direct service hour of \$122.86 ($\$56.52/46\%=\122.86) is obtained by dividing 46% into the Total Hourly Costs. This direct service amount is then multiplied by the number of direct service hours annually per child, which is 50.4, which is detailed in the Utilization Section of this Report. The annual cost per child not including state level costs is \$6,192. That cost, multiplied by the December 2005 Child Count, provides a basis for the statewide service related costs ($\$6,192 \times 8,455 = \$52,353,360$). State level cost information, detailed later in this Report, totals \$2,784,617, creating statewide system costs of just over \$55 million dollars which increases the per child cost to \$6,521.

State Level Costs

State level costs include personnel responsible for the administration of the state's early intervention system as well as other costs such as mandated activity, collaboration contracts and the State Interagency Coordinating Council. More detail for each of these cost categories is displayed in Table 28. The cost of the monitoring functions are absorbed within other parts of the Michigan Department of Education (MDE) budget and cannot be readily isolated for reporting in this Study without undue burden on the State. Through discussion with others within MDE, there is a sense that the traditional cost allocation plan in place may be under representing cost to the *Early On* system. No attempt was made to quantify that possible under-representation.

1	Qualitative Compliance Information	\$363,450	13.1%
2	Public Awareness, Information and Referral	\$253,057	9.1%
3	Parent Support	\$98,500	3.5%
4	Comprehensive System of Personnel Development (CSPD)	\$1,125,043	40.4%
5	Data Collection(Note 1)	\$175,000	6.3%
Statewide Mandated Activities		\$2,015,050	
6	Department of Community Health	\$184,884	6.6%
7	Department of Human Services	\$98,500	3.5%
8	Inter Tribal Council	\$29,500	1.1%
Collaborating Contracts		\$312,884	
9	Administration and the State Interagency Coordinating Council	\$456,683	16.4%
Admin & the SICC		\$456,683	
Total State Level Costs		\$2,784,617	100.0%
Note 1: data collection is an in-kind contribution having a value of approximately \$175,000.			

Ratio of Personnel Costs to All Other

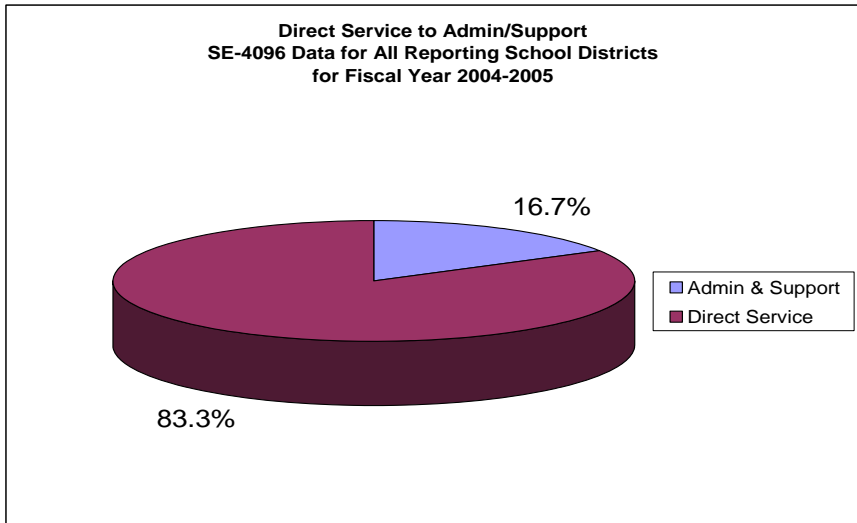
Typically, a specific Cost Survey instrument is administered which helps us to understand all aspects of cost. This instrument would identify the exact relationship between the cost of direct service personnel

and the cost of support and other administrative functions. It would also include specific line items of cost. As this instrument was reviewed for use, there was significant concern expressed by key stakeholders about the ability of the ISDs to produce isolated Part C costs that extended beyond the Part C Federal Funding distributed discretely through the MDE. Most of the other funding supporting services is part of the overall ISD funding for Special Education Services and is accounted for following that specific guidance.

The MDE requires submission of the SE-4096, which is the “Local and Intermediate District Special Education Actual Cost Report” and Supplemental Schedules. It is a summary of total allowable expenditures. The annual report is to be submitted by every school district operating a special education program. Some instructions are specific to Section 52 and Section 53A programs. The data available through the SE-4096 was considered as a possible alternative to the cost survey process. The caution from MDE personnel was that the information was likely to underestimate the administrative and support components of cost. To that end, the relationship between Administrative/Support Costs to Total Costs was viewed for each school district, ISD and the State as a whole. In order to verify that this presents as a reasonable proxy, and to assess how skewed that data might be, three (3) local ISDs, who are also members of the stakeholder process, would have the opportunity to review the computations to see if the relationship process was reasonable. The MDE provided the data for all school districts for Fiscal Year 2004-2005 and each district was analyzed using the method detailed in Figure 3.

**Figure 3: Computations using the SE-4096 Data for all Districts
Fiscal Year 04-05
Section 52 and Section 53a**

1. Total Cost
 - Line 46, the Total Cost number
2. Admin & Support items are identified as follows:
 - Total Column: Line 45
 - Total Column: Lines 33, 34, 35, & 36
 - Supplies & Materials Column and Other Expenditures Column amounts from Lines 17 through 32.
 - Supplies & Materials and Other Expenditures amounts for line 16.
3. The Admin & Support Ratio is computed by dividing the Total in item 2 with the Total from item 1.



The Statewide total was slightly more than \$2.24 billion with \$.37 billion as administrative and support, and \$1.87 billion as direct service personnel costs. The range is from a low of 11.8% to a high of 21.6%, with a standard deviation of 2.8%. This relatively low standard deviation does provide some evidence that there are similarities in the way the reporting is occurring across the

ISDs. Subsequent discussions with some of the three (3) test ISDs confirmed that the information is very likely under-reporting the administrative and support costs.

Table 29 represents Fiscal Study information from other similar projects - all of which were statewide studies of the Early Intervention systems. The results are in date order with Connecticut being the most recently completed Study. While not a perfect correlation, there is a strong link between higher salaries and a

State	Direct Service Costs as a Percentage of Total Costs	Support & Admin Costs as a percentage of Total Costs	Average hourly personnel costs
Connecticut	73.5%	26.5%	\$27.29
New Mexico	66.4%	33.6%	\$19.67
Virginia	66.3%	33.7%	\$27.16
Louisiana	67.8%	32.2%	\$24.89
New Jersey	72.0%	28.0%	\$30.29
Michigan			\$42.39

lower percentage of admin and support costs to total costs. West Virginia and Kentucky, with higher admin and support percentages, had relatively low hourly wage amounts.

It is the recommendation of the Principal Investigator to this Study to use an administrative and support percentage of 25% against the hourly personnel cost. That recommendation is based on the review of the SE-4096 data, past history for similar projects, and the unusually high hourly wage amount paid to direct service providers in Michigan. This means that the total cost for a direct service hour is \$56.52 ($\$42.39 / .75 = \56.52 alternately $\$56.52 \times .25 = \14.13 and $\$42.39 + \$14.13 = \$56.52$).

An additional recommendation is for MDE personnel to work together on assessing and implementing needed changes to the SE-4096 data collection process, with the outcome to identify costs funded with dollars beyond the Federal Part C dollars. The Principal Investigator for this Study remains convinced that the effort to make the SE-4096 -- this long standing, required cost reporting tool -- serve as a viable tool for providing cost information for the *Early On* system will be important. The information provided could be significant and would not create a new administrative process. The extent to which ISD funding supports the Michigan *Early On* system is somewhat buried in this process. It is significant and should not go un-noticed or unaccounted for. Without conscious recognition of its significance, decisions to change the system could be materially affected.

Section 5: Revenue Study

Revenue Survey Overview

The Revenue Study, different from other parts of the Study, includes both a retrospective and prospective review. The first part of the review process consists of an in-depth analysis of what exists in today's system by analyzing the funding sources identified on IFSPs and IEPs. This initial process is then further supported with data reviews from identified payors. The second review process attempts to examine, prospectively, the different kinds of revenue that might be used to support early intervention services through the use of a child questionnaire. Strengthening the use of all available resources was certainly identified as one of the key outcomes for the Fiscal Study and is intended as a foundation for the overall Redesign effort.

To help set the stage for the discussion, it is important to contrast two key terms, namely: cost and revenue. There is a fundamental difference that exists between the two terms. Cost is generally defined to include both cash and non-cash outlays (such as depreciation) and must always include a descriptor of what the cost represents. Examples might include "cost of the Part C system for Fiscal Year 2006" or "cost of Part C personnel for the first quarter of calendar year 2006," etc.

Revenue is the sum of payments received for the services provided. It is distinctly different from cost, requiring management of both cost and revenue for an operation to be successful. If costs exceed revenue, the loss is generally funded in some other manner or the business ultimately goes bankrupt. If revenue exceeds costs, that money may be directed back into the program designated as program income or may offset some other system contribution. In the case of a for-profit business, this difference is often called profit. For nonprofit organizations, this difference helps to fund reserve balances. On that premise and based on the work of this Study, there was at least \$55 million dollars in revenue during fiscal year 2006 since that is the estimated cost of today's *Early On* system.

Revenue Survey Information

Very little revenue information stands readily available for Michigan's *Early On* system. The only known amount is the Federal Part C allocation, which totals \$13,245,161 for Fiscal Year 2005 and slightly less for Fiscal Year 2006 at \$13,048,084. Of the approximately \$13 million in federal dollars, about \$10.5 million is distributed to the local level to support Michigan's *Early On* system. There is no designated state general fund appropriation for Part C services through the State of Michigan budgeting process. Funding does exist through the formula process for children eligible for Michigan *Early On* who meet the special education eligibility criteria and who receive certain threshold levels of service.

In addition, the State's Medicaid Agency, within the Department of Community Health, through its school-based services program, does provide partial reimbursement to Intermediate School Districts, the Detroit Public Schools and the Michigan Schools for the Deaf and Blind, for some of the direct care and "outreach" services delivered within and on behalf of Michigan's early intervention system. Medicaid dollars paid to the above-named entities, are considered "revenue" for purposes of this

analysis, but the services are being provided as required by the IDEA statute and regulations, whether the Medicaid Program provides reimbursement or not.

While not substantial in terms of overall dollars from a statewide perspective, a variety of other funding partnerships exist at the local level that do play a vital role in the support of young children and their families within Michigan's *Early On* system. Also, a number of services not captured on the IFSP or IEP contribute in an important way to the overall support of young children and their families and are not captured as part of the Study.

The overall design of the revenue component of the Fiscal Study relied on three (3) comprehensive reviews; namely:

- a review of the funding source on the IFSP/IEP as part of the utilization Study;
- identification of other contributing funding sources through parent completion of the child questionnaire; and
- a data exchange with the Michigan Department of Community Health regarding Fiscal Year 2005 Medicaid services.

Service Summary Logs

The Service Summary logs used for the IFSP/IEP portion of the Study also served as the starting point for collecting revenue information. The service summary log was designed to capture the detail on the service summary page of the IFSP or IEP. This document was used in place of the actual service summary page of the IFSP/IEP for administrative ease and to ensure consistency for data entry. Federal regulations require the identification of a funding source for each line of service planned on an IFSP or IEP. Using the same process of quantifying the relevant service amounts for Fiscal Year 2006 that was described in the utilization portion of the Study, it was possible to quantify the services by planned funding source as well.

Some challenges to using the data existed, in that there was little consistency in what was written as a funding source on the Service Summary form. Several passes were made to improve the information and to bring more consistency to the data. First, minor changes were made to the list to make common things reflect the same nomenclature. For example, Intermediate School District was changed to ISD as was Allegan ISD. The same was true with many of the other identified funding sources. Next, the Fiscal Task Force members reviewed the list on two different occasions to elevate the integrity of the funding sources specified on the list. Following that activity, verifications were sent out to each ISD. That process asked them to further identify the type of funding utilized. If they responded, the funding source was updated to include the more specific type of funding for those ISDs. For those ISDs that did not respond, the payor was left either as ISD, *Early On*, District or Unknown. Chart 5 shows the overall planned funding by broad category.

Funding through the Intermediate School District (ISD) is clearly identified as the primary funding source at more than 63% for Fiscal Year 2006 services. Part C dollars are identified as funding 17.9% of all planned services, which is about 9.85 million dollars when comparing the percentage against the

estimated cost of the system. There is another category, representing about 4.5% of the total, which appears to represent both Part C and Special Education funding. While these results are somewhat consistent with the fact that about \$10.5 million dollars is distributed or direct services, this investigator is unsure if the link between planned payment sources and actual funding is tightly linked. This specific relationship was not part of the overall Study.

Planned services identified as “Not Specified” (N=258 of a total of 1618 service lines) do include some reference on the IFSP/IEP that could not be identified and could not be confirmed with the Local Lead Agency. Many of the service line items look like they may be referencing the acronym of the ISD.

The most informing part of this review may be the very limited number of differing funding streams and the relatively low dollars that are accounted for, even when identified through the planning process. Medicaid dollars, at 1.1% of all identified funding for Fiscal Year 2006 services, were planned to support only 35 different services for 17 children within five different ISDs.

IFSP/IEP Payor by Identified Source - FY 2006

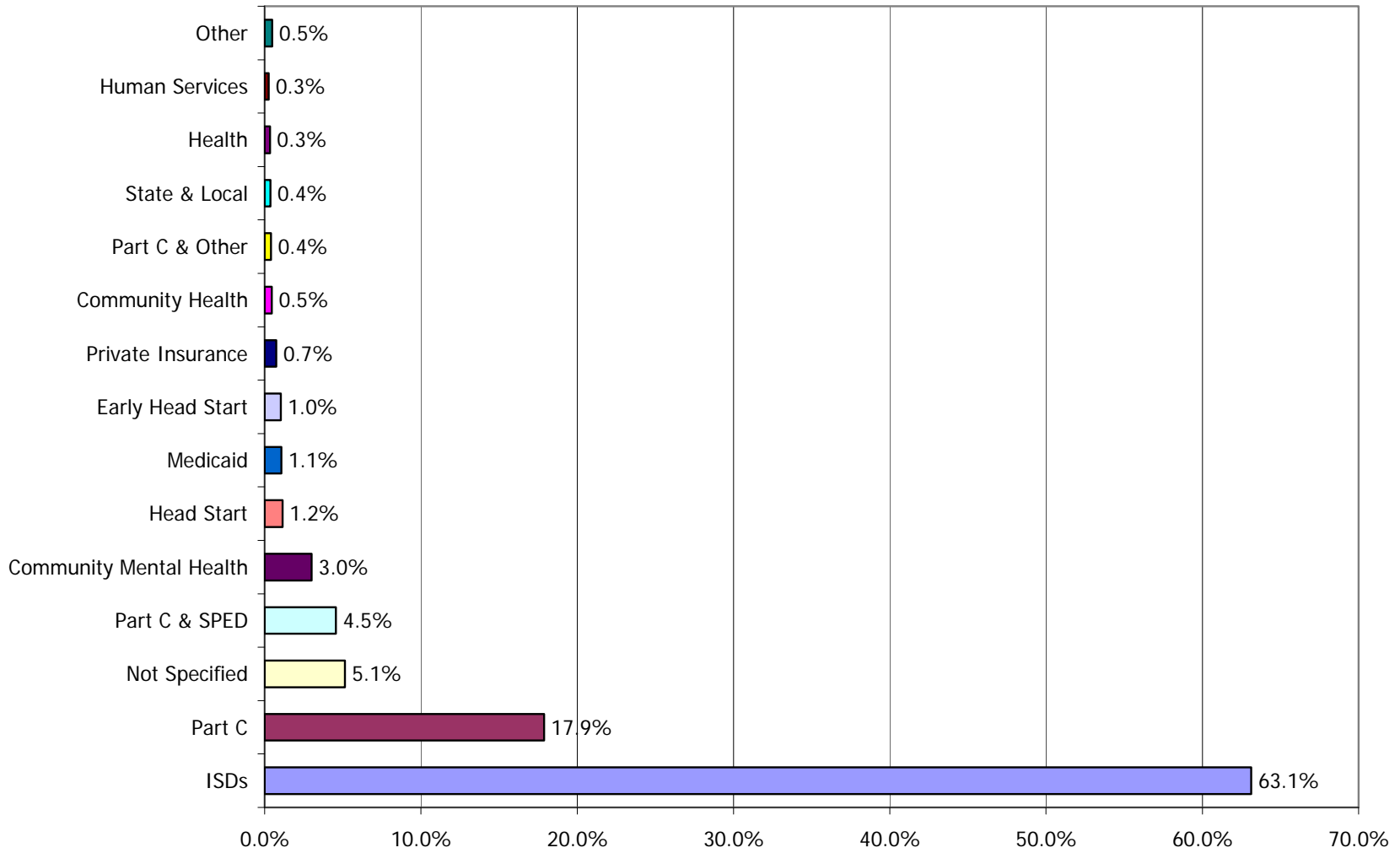


Chart 5: IFSP/IEP Payor Source Information

Medicaid School Based Services (SBS) Program

The Michigan Department of Community Health (MDCH) provides partial reimbursement for medical services provided to individuals eligible under provisions of the Individuals with Disabilities Education Act (IDEA), and to those enrolled in programs that require an Individualized Education Program (IEP) or Individualized Family Service Program (IFSP). Providers who are eligible to bill under this section include Intermediate School Districts (ISDs), Detroit Public Schools (DPS) and the Michigan Schools for the Deaf and Blind (MSDB). For discussion purposes, these providers will collectively be called the ISDs. Through the Salary Survey process, these “provider types” account for about 84% of all service delivery within the *Early On* system.

Characteristics of services under the SBS Program are as follows:

- **Coordination of Benefits:** A service may not be billed to Medicaid under the SBS initiative if the participant is covered under another health insurance policy and that policy is not billed as required by the Coordination of Benefits requirements.
- **Covered Services:** Special Instruction and Service Coordination, which account for about 41% of all services that are planned and actually received by children within Michigan’s system, are not covered services under SBS. About 59% of all services are covered.
- **Reimbursement:** The paid amount is limited to the lesser of the billed amount or the fee schedule. ISDs are eligible for partial reimbursement at 60% of that total with the actual reimbursement limited to the federal financial participation amount (FFP) which is 56.59%¹ for Federal Fiscal Year 2007. The reimbursement funds at about 34% of the amount approved for payment are then available for general use by the ISD Board.
- It is a Medicaid requirement that the non-FFP portion of the reimbursement would be costs supported by the required match contribution. Michigan General Revenue or state special education funds may be used to support the match requirement.
- The maximum potential revenue for *Early On* is about \$11 million dollars or 20% of service costs ($\$55,000,000 \times .5659 \times .60 \times .59 = \$11,018,073$).

Medicaid Revenue Impact for School Based Services

- ISDs are partially reimbursed for services at 60% of the approved payment amount.
- Michigan receives 56.59% in FFP for the federal portion of billed services,
- ISDs, who certify the matching funds receive this FFP amount on the approved 60% and get back approximately 34% of their original cost ($56.59\% \times 60\% = 33.95\%$).

For example, if a service was billed for reimbursement by an ISD at \$100, Michigan would get \$56.59 back from the Federal Government in FFP. The State Medicaid agency would reimburse or send 60% of that, or around \$33.95 to the ISD. Medicaid keeps the other \$22.64 to offset their costs for running the SBS portion of Medicaid reimbursement.

¹ <http://aspe.hhs.gov/health/fmap07.htm>

Medicaid School Based Services Administrative Outreach Program (Admin Outreach)

- In addition to the child specific services, the MDCH uses the federal EPSDT regulations that provide a second opportunity for partial reimbursement for services delivered, called the School Based Services Administrative Outreach Program. Although this Study did not examine the extent to which Medicaid was billed for this kind of activity, it is a component of the SBS program that reimburses ISDs for informing families about the Medicaid Program and services it covers, referring families to county offices to apply for Medicaid, and similar activities, such as:
 - Facilitating Medicaid Eligibility Determination
 - Medicaid-Related Training for school staff
 - Health-Related Referral Activities that assist families access Medicaid
 - Medical Service Program Planning, Policy Development, and Interagency Coordination
 - Programmatic Monitoring and Coordination of Medical Services
 - Arranging for Medicaid-Related Transportation and Provision of Medicaid-Related Translation.

Medicaid Data Exchange

A data exchange was conducted with MDCH in order to further isolate the actual Medicaid reimbursement that contributed to Michigan's *Early On* system. Parental consent to a Medicaid data exchange was requested for all Study participants. Consent was received for 172 of the 682, or 25% of the Study participants. Of the group granting consent for the data exchange, 115 were Medicaid enrolled. The MDCH personnel reviewed the list and provided specific Medicaid eligibility information when possible. All of the paid services with service dates between July 1, 2004 and June 30, 2005 were selected for the data extraction. This period was chosen because it should have a fairly complete record of the transactions for the year, since providers have one year from the date of service to bill. All procedure codes were included in the extract process regardless of whether the service was related to Michigan *Early On* or some other service that Medicaid might pay for.

Ultimately data extract information was matched with certain billing procedure codes used for the School Based Services Program. The paid amount for the services was totaled. So, in summary:

- 172 children where consent was granted to look up Medicaid services,
- 115 for whom there were Medicaid numbers,
- 42 of which were actually Medicaid eligible between 7/1/2004 and 6/30/2005, and
- 7 for whom there was school based services billing during that same time period, totaling about \$9,537,
- For children with combination IEP/IFSP plans the total was \$7,170,
- For children with an IFSP only the total was \$2,366.

This amount was surprisingly small and implied that a remarkably low number of services were billed to Medicaid through the SBS Program for this sampled group of children. Some of the demographics

for the 172 children show that we had proportionately more Special Education eligible children participating in this exchange than Part C only eligible children. We are hesitant to extrapolate these results to the entire State because of the small sample size of 115 and ultimately seeing information for only seven (7) children.

In addition to conducting this snapshot of potential reimbursement for *Early On* through the Medicaid school based services program, the PI did a comparison of any (non SBS) procedure code that might be related to the 16 required Part C services that may have been billed by non ISD providers outside of the School Based Services Program. Of the more than 650 procedure code / revenue codes that were billed for the 114 children in the FY 2005 services, only 48 are likely to be identified as Part C services. Table 30 represents the total dollar value of the 48 codes grouped by *Early On Service* Category. Another 47 codes are some kind of office visit that might remotely be an *Early On* service. For the 48 service codes that appeared to be possible reimbursable Michigan *Early On* services, a crosswalk was developed to their respective Part C service and the sum of charges by service type was aggregated and is shown in Table 30. The school FY 2005 maximum potential Part C services billed to Medicaid outside of the school-based services initiative is less than \$100,000.

Table 30: FY 2005 Medicaid Expense Non School Based Services		
Possible <i>Early On</i> Charges (N=42 Children)		
Count of Lines Billed	Sum of Charges	<i>Early On</i> Service
52	\$12,194.46	Audiology
13	\$1,197.14	Developmental
1	\$102.90	Group Therapy
3	\$810.74	Mental Health
1	\$362.71	Nursing
5	\$885.00	Nutrition
17	\$5,962.97	Occupational Therapy
32	\$11,903.19	Physical Therapy
1	\$122.80	Psychological
92	\$22,178.40	Speech-Language Pathology
6	\$6,101.28	Targeted case management
3	\$202.92	Teaming
34	\$35,245.49	Therapeutic activities
12	\$322.60	Vision
272	\$97,592.60	Total for All Services

Two additional important considerations must be stated about the limitations inherent in this number. First this total represents all services to all providers for these 42 children, not necessarily only those identified on a child's IFSP or IEP. For example, if a child has a broken leg and the child receives PT, that PT is included in the totals but is NOT an *Early On* service. Secondly, the monetary total for all services is based on providers charged, rather than the paid amount from Medicaid. There is typically a difference between these two numbers and no effort was made in this Study to quantify that difference.

Some of the demographics for the Medicaid Data Exchange are as follows:

- The 172 children for whom parental consent to access the information was provided spanned across 29 ISDs.
- Gender
 - M=115 or 66%

- F = 58 or 34%
- Medicaid Eligibility (only Medicaid eligible children were included in the exchange)
 - Yes= 115 or 68% (50% for Study sample)
- Eligibility
 - Part C = 66 or 38% (58.5% 06/2006 child count)
 - Special Education² = 103 or 60% (41.5% 06/2006 child count)
 - Unknown=3 or 2%

Child Questionnaire

The Child Questionnaire was designed to look at information in a more prospective format. In other words, it was specifically designed to capture things not known about children currently in service in two primary areas. First, a deeper review about the child's Michigan *Early On* eligibility was requested. Secondly, the questionnaire included a more thorough review about “other” programs for which these children may be eligible and resources a child might have which are “outside” the Michigan *Early On* system. This portion of the questionnaire also included questions about private insurance resources and annual family income. The intent of the questionnaire was to collect information for leadership considerations for Michigan's *Early On* redesign as the state considers changes to the overall System of Payments as required by federal law. The Child Questionnaire was completed for 682 of the 8,547 enrolled children, or 8% of the overall population.

² Special Education or Part B, IDEA eligible

**State of Michigan Early On
Fiscal Study Findings
Utilization Study - Child Questionnaire-Other Eligibilities**

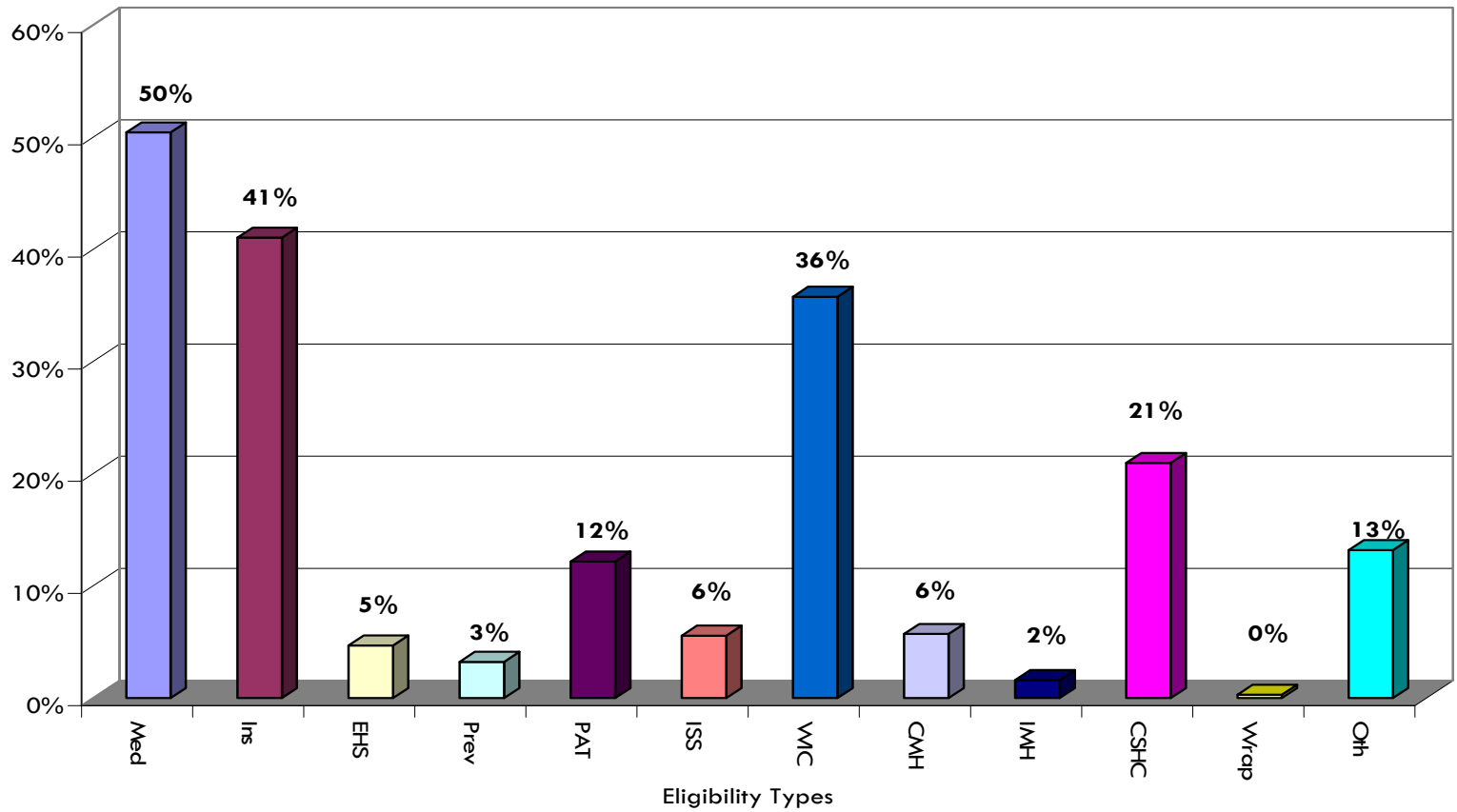


Chart 6: Other Eligibilities

**State of Michigan Early On
Fiscal Study Findings
Child Questionnaire-Income Level**

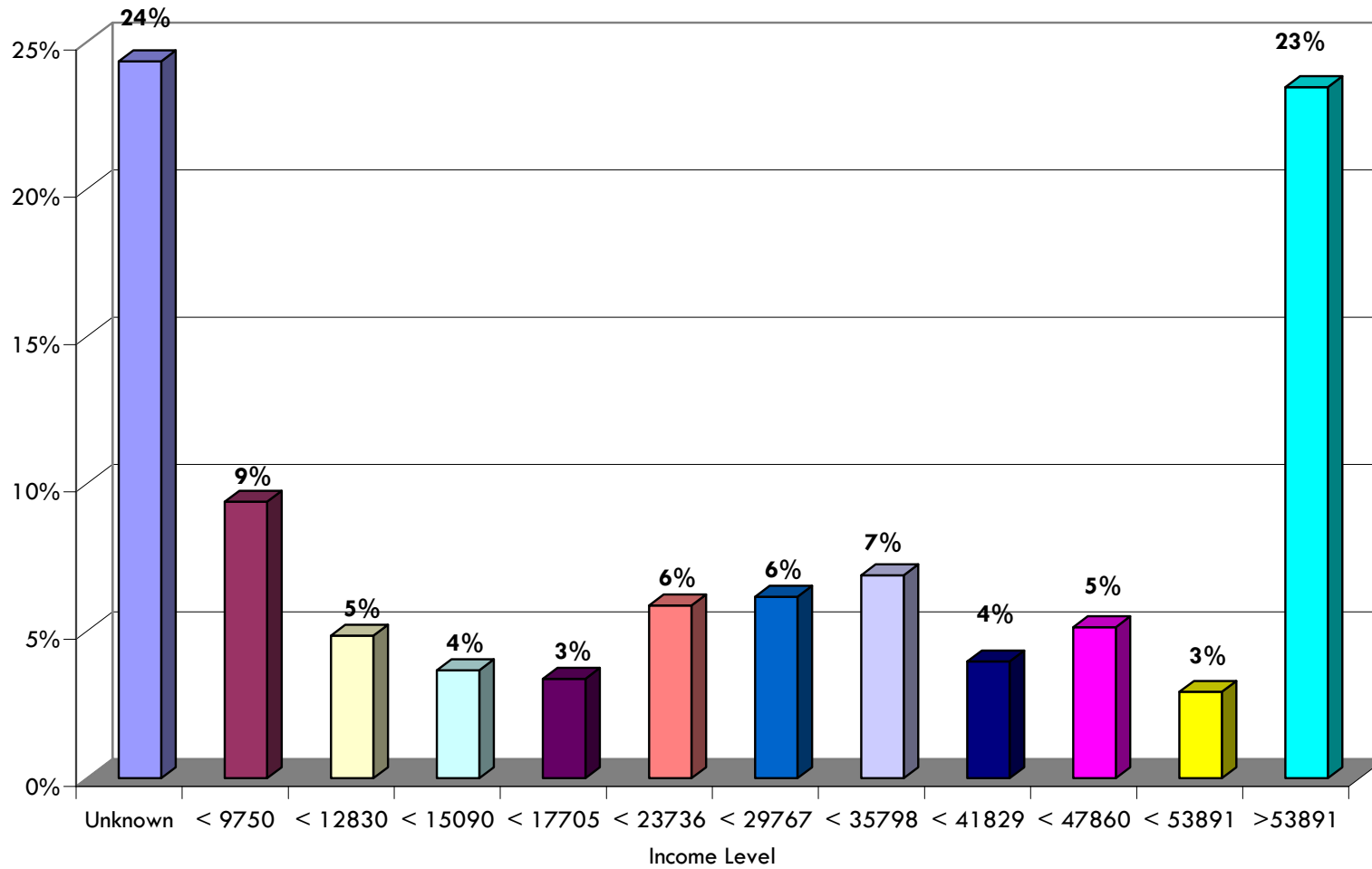


Chart 7: Family Income Information

The information in Chart 6 illustrates information about “Other Eligibilities with Medicaid, Private Insurance, Women Infant & Children (WIC), Childrens Special Health Care (CSHC)” emerging as viable considerations for review. Comparisons of Chart 6 with the information in Chart 5 suggests that there are some resource opportunities that should be explored to determine whether or not the resource is or should be a part of the Part C System of Payments. For example, while Medicaid is a payment option, it is essentially unused.

Another review for the System of Payment should include the use of family cost participation including private insurance and/or family fees. More than 40 states are currently using one or both forms of family cost participation and more are currently reviewing this as a new revenue option. Chart 3 shows that at least 23% of all families have more than \$53,891 of annualized income.

System of Payments

Federal Part C regulations speak more broadly than simply fees; they address the requirement of each state to develop a “System of Payments” which may include sliding fees based on income. This “System of Payments” represents the diversity of funding resources that exist at the federal, state and local level. Children and families come to Part C with multiple and concurrent eligibility for other programs, services and supports which are often used to implement the IFSP for a Part C eligible child. As “payors of first resort,” these resources must be accessed before Federal Part C funds are utilized. A review should be undertaken to assess why Medicaid is not being billed and ultimately to determine whether or not the lack of Medicaid billing violates this federal requirement.

There is a declining order or hierarchy for identifying and tapping into the myriad of third party resources; these resources however begin with the eligibilities of the child and/or family and include their personal resources such as private insurance and cash payments, as well as the expectation that they will support their IFSP/IEP by making application for other resources for which they might be eligible (such as Medicaid, Title V/CSHC). Further, it is required that other Federal or state resources, such as Head Start, child welfare, etc., where a child would be eligible for “other” considerations, are “payors of first resort” to the degree they provide or fund an IFSP or IEP service.

The “System of Payments” includes a variety of federal requirements, as follows:

- Requirement of the Lead Agency
- Defining the Minimal Role of the SICC **20 U.S.C. 1441(a)**
- Establishing the Requirement for Interagency Agreements **(20 U.S.C. 1435(a)(10)(F))**
- Ensuring that there is a Dispute Resolution Process for intra- and inter-state disputes **(20 U.S.C. 1435(a)(10)(D))**
- Assignment of Financial Responsibility in writing **20 U.S.C. 1440(b)**

- Assurance of the Payor of Last Resort **20 U.S.C. 1437 (b)(1)**
- Assurance of the Provision of Services to children and families in a timely manner **U.S.C. 1432(4)(b), (20 U.S.C. 1435(a)(10))**
- Requirement for Arrangements with Providers including contracts, timely reimbursement **20 U.S.C. 1440(a), (20 U.S.C. 1435(a)(12))**
- Description of the Use(s) of Federal Funds (budget) **20 U.S.C. 1437(a)(3) and (a)(5)**
- Lead Agency Assurances, Reporting Requirements
- Compliance with a variety of federal regulations
- Federal Requirement re: Non supplanting **20 U.S.C. 1437(b)(5) (B)**
- Federal Requirement re: No commingling **20 U.S.C. 1437(b)(5) (A)**
- Federal Requirement re: Equitable distribution of resources statewide **20 U.S.C. 1437(a)(6)**
- Payments by parents reflecting consideration of their “inability to pay” **20 U.S.C. 1432(4)(b), (20 U.S.C. 1435(a)(10))**

A state’s System of Payments under Part C of the Individuals with Disabilities Act (IDEA) is far more broad than family cost participation. It includes the utilization of resources at the federal, state and local levels and how resources, supports and services come together to ensure equity, parity and accessibility. Careful review of the findings put forward in this study should be reviewed against the federal requirements.

Section 6: Encounter Survey

Encounter Survey Overview

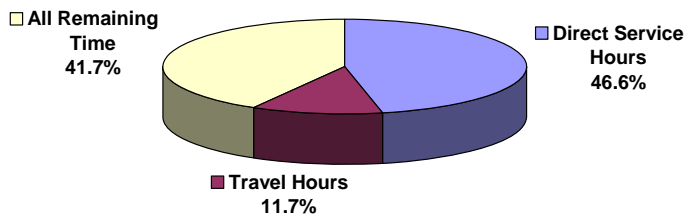
The Encounter Survey process was designed for two distinct but related purposes. First, it was the tool designed to capture the entire range of services delivered to selected children and families in the Study. The service-related results are more fully described in the Utilization Section of this Report. Secondly, the intent was to understand the relationship between total work time for practitioners as compared to the amount of time they spend in direct services with children and families. This second purpose is the focus of this section of the Report.

Important to the Study design was the link between the randomly selected children whose IFSPs or IEPs were selected and the practitioners who serve those selected children. Four hundred thirty three (433) practitioners were identified through the IFSPs/IEPs for the selected children, with 413 practitioners participating through the Encounter Survey process. This exceeds a 95% participation rate ($413/433=95.3\%$), which substantially demonstrates the overall representation of the Survey results. The random nature of the IFSP/IEP selection process means that this random characteristic also applies to the practitioner selection process. While we do not know the full total number of practitioners serving children in the *Early On* system, we do know that the number of actual participants at 413 allows us to have a 95% confidence level even if the number of practitioners is more than 10,000. Since that number is more than the number of children served on any one day (8,455 on 12/1/2005), we can have some confidence that the sample is large enough to be representative of the entire state system.

Encounter Survey Information

For the majority of participants, the Encounter Log was completed for each work day, capturing the data for three (3) to four (4) weeks or about 15-20 work days for all work time, for all children served. Some participants extended the time for an additional week, while others may have reported for a two-week time frame. One additional accommodation was made for practitioners who served very few children participating in Michigan *Early On*. The agreement was that they would report on total work hours on days when they served one or more children participating in *Early On* and would simply leave out the remaining time as non-reporting days. Care was taken to look at the level of administrative activity for practitioners within this category to make a judgment about any additional apportionment. There is some risk that there could be under reporting of overall administrative time. The risk is limited since the number of participants that this applied to was small.

Chart 8: Encounter Survey Results-Practitioner Work Time



The intent of the survey was to understand the relationship between “direct service” defined as a face-to-face encounter with a child and or family, and all other work time necessary to do the job. Travel time was an additional component of time that was tracked by practitioners through the Encounter Survey process. Chart 1 depicts the results of the Encounter Survey with 46.6% of all time

spent in direct face to face contact with children and families. Travel time accounts for 11.7% of all time and the remaining 41.7% represents all other activities: sick leave, vacation time, paperwork, telephone calls, report writing and other administrative obligations. The overall number of reported work hours during the recording period was 32,700 hours. This means that the average number of work hours during the reporting period was about 79 ($32,700 / 413=79.2$).

Table 31 shows the results from Encounter Survey information between the different regions in Michigan.

- Total Work Hours is the sum of the hours and minutes that each practitioner reported as work time for each day.
- The Count of Lines represents the number of lines used to report the service minutes.
- Direct Service Hours were computed by summing the number of service minutes reported on each line of the Encounter log and dividing by 60 to compute the number of work hours.
- Percentage of Work Time is the Direct Service Hours divided into the Total Work Hours.
- Travel Hours is the number of travel minutes reported on each line divided by 60.
- Percentage Travel Time is the Travel Hours divided by the Total Work Hours.

Table 31: State of Michigan Early On								
Fiscal Study Findings								
Encounter Log-Average Face to Face Time by Region								
Count of Practitioners	Region	Total Work Hours	Count of Lines	Service Minutes	Direct Service Face to Face Hours	% Work Time	Travel Hours	% Travel Time
78	Central East	6478.55	3694	197075	3284.58	50.7%	778.1	12.0%
59	Central West	4979.40	2609	159265	2654.42	53.3%	754.1	15.1%
11	North West	756.58	335	19236	320.60	42.4%	143.3	18.9%
145	South East	9047.82	4279	240761	4012.68	44.3%	772.5	8.5%
83	South West	8479.03	4543	197961	3299.35	38.9%	1095.9	12.9%
37	Upper Peninsula	2957.92	2069	99305	1655.08	56.0%	282.4	9.5%
413	Total	32699.30	17529.	913603	15226.72	46.6%	3826.3	11.7%

This represents 413 practitioners and a little more than 32,699 hours of total work time. The percentage of work time devoted to direct service averages 46.6% statewide. This ranges from a low of 38.9% in the Southwest region to a high of 56% in the Upper Peninsula. The average travel time is 11.7% with a low of 8.5% in the South East and a high of 18.9% in the North West.

In an effort to make the comparisons more equal, it is important to remove variables that might be different across the regions – such as travel. Table 32 is essentially the same information reported in Table 31, with total work hours adjusted downward to remove travel hours from total work hours. The same direct service hours are then divided into that adjusted total. This creates a new view of direct service as a percentage of total work time. The assumption in this process is that all other work related activity should be no different from region to region. The result of this analysis does show some regional variations. The Central West and the Upper Peninsula data display a fairly high relationship between direct service time and total work time. Conversely, the Southwest shows 44.7 which is just below the statewide average, and quite a bit below the two highest regions. While these distinctions can be made by looking at the numbers, it is important to say that no one should automatically assume that the higher productivity amount is a good thing or that the lower level needs to improve. Further probing or coupling this information with other data may be a very good exercise.

Table 32: Direct Service as a Percentage of Work Hours (No Travel Consideration)					
Region	Total Work Hours	Travel Hours	Adjusted Work Time without Travel Hours	Direct Service Hours	Direct Service (Face to Face) as a % Work Time
Central East	6478.55	778.1	5700.5	3284.58	57.6%
Central West	4979.40	754.1	4225.3	2654.42	62.8%
North West	756.58	143.3	613.3	320.60	52.3%
South East	9047.82	772.5	8275.3	4012.68	48.5%
South West	8479.03	1095.9	7383.2	3299.35	44.7%
Upper Peninsula	2957.92	282.4	2675.5	1655.08	61.9%
Total	32699.30	3826.30	28873.0	15226.72	52.7%

Listed below you can see the range of direct service (face to face) time as a percentage of work time for each individual service area within the regions. The two (2) at the lowest levels are both very small and have very few hours reported. The low percentage is most likely related to the person splitting their time between supervisory/administrative activity and direct service. Excluding those two (2) Districts the Regional difference is evident.

- Central East: 73.1%, 68.0%, 64.4%, 57.7%, 54.0%, 46.6%, 44.2%
- Central West: 65.9%, 52.4%, 46.0%
- Northwest: 52.6%, 45.0%
- Southeast: 60.4%, 53.0%, 50.4%, 50.2%, 47.7%, 20.9%
- Southwest: 47.9%, 45.9%, 44.8%, 42.1%, 40.1%, 15.4%
- Upper Peninsula: 75.4%, 72.9%, 58.2%, 51.1%, 44.8%

It is important to consider where services are delivered, since services in any EI classroom or special-purpose center don't require any travel by the practitioner. All of the services in the Northwest region are delivered in a home and community setting with a correspondingly higher percentage of total travel time. The sample size for that region is somewhat small and should not be relied upon as representing the entire region. Conversely, the Southeast region with the lowest percentage of travel to total work hours has a relatively high level of service delivered in the EI classroom setting.

An adjustment was made to the percentage of travel time to accommodate for the location of service delivery. Since travel hours don't relate to services delivered in the EI classroom setting, those hours worked were removed from the total work

Region	EI Classroom (Special Purpose)	% Travel of Total Work Hours	Adjusted % Travel of Total Work Hours
Central East	12%	12.0%	13.7%
Central West	43%	15.1%	26.5%
North West	0%	18.9%	18.9%
South East	36%	8.5%	13.2%
South West	15%	12.9%	15.2%
Upper Peninsula	1%	9.5%	9.6%

hour column. Travel time was then divided into that adjusted total work hours without classroom time. In other words, travel time was applied only to home and community based services. With this adjustment, travel time is heaviest in the Central West region at more than 25% of total time. The travel issue may be limiting the amount of home and community-based services delivered in this region. The Central West region is less densely populated and has large geographic areas. This region may benefit by a careful review of the travel related issues to include consideration of dispersing some of the personnel to out-stationed locations.

Periodic review of how practitioners spend their time is often a valuable exercise in understanding some of the resource stressors within the system. It can also be helpful in identifying good practices that could be models for other parts of the state. This Time Survey

review, while limited in its scope, does provide a baseline of data that could be expanded upon in future surveys.

Section 7: Conclusions

The Conclusion Section of this report will focus on the original Fiscal Study questions and will provide a direct response to each of the original questions developed during the initial on-site meeting with stakeholders.

Question # 1: What is the total *Early On* system revenue?

Revenue is the sum of payments received for the services provided. It is distinctly different from cost, requiring management of both cost and revenue for an operation to be successful. If costs exceed revenue, the loss is generally funded in some other manner or the business ultimately goes bankrupt. If revenue exceeds costs, that money may be directed back into the program and designated as program income or it may offset some other system expense. In the case of a for-profit business, this difference is often called profit. For nonprofit organizations, this difference helps to fund reserve balances. On that premise, and based on the work of this Study, there is at least \$55 million dollars worth of revenue as this is the estimated cost of today's early intervention system. About 63% of all revenue is money identified as ISD funding, making this the single largest contributor to the system by far. Next, in the funding hierarchy are the Part C funds at 17.9%, as shown in Table 34.

Payor	Funds	% of Total
ISDs	\$34,716,414	63.1%
Part C	\$9,831,155	17.9%
Not Specified	\$2,827,595	5.1%
Part C & SPED	\$2,501,455	4.5%
Community Mental Health	\$1,650,343	3.0%
Head Start	\$634,674	1.2%
Medicaid	\$588,012	1.1%
Early Head Start	\$566,710	1.0%
Private Insurance	\$411,788	0.7%
Community Health	\$249,861	0.5%
Part C & Other	\$220,812	0.4%
State & Local	\$204,081	0.4%
Health	\$185,088	0.3%
Human Services	\$145,414	0.3%
Other	\$266,597	0.5%
Revenue Total	\$55,000,000	

Question # 2: What is the current level of funding from Temporary Assistance for Needy Families (TANF) and Child Care Development Funds (CCDF) and how do we preserve Maintenance Effort (MOE) responsibility?.

A review of Table 1 shows that neither funding source registers as a direct contributor to the system through the IFSP/IEP process. If this is a requirement, it may be important to add this to the IFSP/IEP training that is recommended in Section 4 of this Study report.

Question # 3: What is total *Early On* system cost?

The Fiscal Study was designed to capture the cost of the *Early On* system at all levels of operation to include the cost of: a) service provision b) enrollment of children and families into the system c) system components and d) state level administration. Table 35 illustrates a method used to construct cost information for Michigan's early intervention system.

Personnel costs are the most significant component of cost. The Salary Survey efforts for this Study, and comparisons to other external sources, help us to establish the average hourly personnel cost at \$42.39 including benefits.

1	Hourly Personnel Costs	\$42.39
2	Hourly Admin & Support Cost	\$14.13
	Total Hourly Costs for All Hours	\$56.52
3	Percentage of Direct Service Time	46%
	Cost per Direct Service Hour	\$122.86
4	Annual Hours Per Child	50.4
	Cost per Child	\$6,192
	Child Count	8455
	Total Service Costs	\$52,353,360
5	State Level Costs	\$2,784,617
	Estimated Costs Fiscal Year 2006	\$55,137,977
	Cost per child w/ Total system costs	\$6,521

From the Cost Section of this Report, "All other" represents the costs to support an individual in his/her position and is the additional \$14.13 per hour, making each hour for a direct service person cost \$56.52. All other is non-personnel cost for everything that supports a direct service person in getting the job done. It includes the cost of supervisors, schedulers, insurance, building, travel, supplies, administration, etc. The time survey helped us to learn that the average percentage of direct service time for a practitioner is 46%. This means that a direct service hour costs \$122.86 ($56.52 / .46 = \122.86), or

slightly more than two times \$56.52 per hour since only approximately half of the time is in face to face activity. The utilization review showed that children receive, on average, 50.4 hours of service per year when they participate for an entire year. With that, the average annual cost per child is \$6,192 ($50.4 \times \$122.86 = \6192). Given that there were 8,455 children served on 12/12005, the cost of serving children and families is \$52,353,360. To that figure, system level costs and state level administrative costs of \$2.78 million must be added, for total system cost of \$55,137,977. For the purposes of this Report, the cost of the system will be reported as approximately \$55 million and the hourly direct service cost is \$129.39 ($\$6,521 / 50.4$).

Question # 4: How much Part C money goes to various state level departments – i.e. the top of the pyramid?

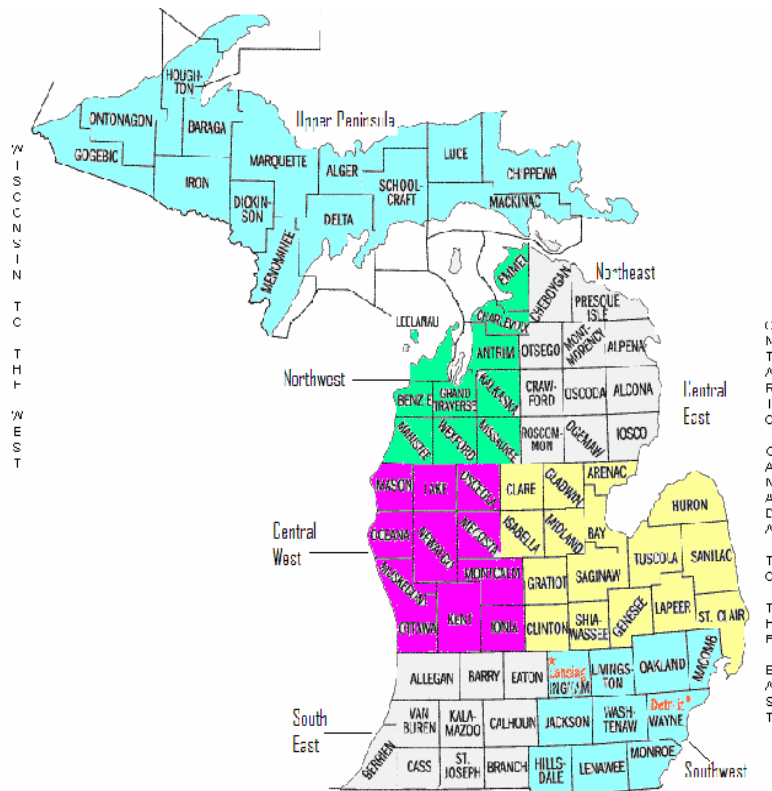
1	Qualitative Compliance Information	\$363,450	\$2,015,050	13.1%
2	Public Awareness, Information and Referral	\$253,057		9.1%
3	Parent Support	\$98,500		3.5%
4	Comprehensive System of Personnel Development (CSPD)	\$1,125,043		40.4%
5	Data Collection(Note 1)	\$175,000		6.3%
	Statewide Mandated Activities		\$2,015,050	
6	Department of Community Health	\$184,884		6.6%

7	Department of Human Services	\$98,500		3.5%
8	Inter Tribal Council	\$29,500		1.1%
Collaborating Contracts				
9	Administration and the State Interagency Coordinating Council	\$456,683	\$456,683	16.4%
Admin & the SICC				
Total State Level Costs			\$2,784,617	100.0%

Note 1: data collection is an in-kind contribution having a value of approximately \$175,000.

Question # 5: What are the Regional differences for all Study findings?

Each issue was reviewed with two (2) geographic considerations; namely the 57 ISDs and also grouped by seven (7) Regions as displayed to the right. The 83 counties in Michigan are combined to form 57 ISDs with most ISDs using the county name or names as their identifying name. The overall regional differences found through the Study are summarized as follows:



- Overall, there are limited regional differences.
- Within regions, there are more notable differences between the ISDs especially in the area of the quantity of service children are receiving.
- There are no notable differences in salaries based on regions; longevity is the driver for higher amounts paid to individuals.
- Children are more likely to receive more services in the Upper Peninsula.
- Personnel in the Southeast and Southwest have a lower percentage of direct service time as it relates to total work hours.

Question # 6: What is the average # of service hours per month for Part C only eligible children vs. Part C/Special Education eligible children?

Table 37: Number of Hours of Service with Differing Eligibility		
Part C Eligibility Designation	Average Monthly Service Hours	
	Planned	Actual
Meets Part C Only Criteria	2.9	2.4
Meets Special Education Eligibility Criteria	9.6	5.5

Service levels were reviewed for both planned levels of service through the IFSP/IEP process, as well as services that were actually delivered. In both circumstances, there is at least twice as much service for children meeting the more restrictive Special Education criteria. Planned services are as much as three times the rate of service when comparing the two populations. It is important to say that no review was done to understand what is driving this practice and there is no data through the Fiscal Study to assess whether one is more appropriate than the other.

Question # 7: How many children are being served and what is the annual average cost per child (Part C only and Part C/Special Education)?

Question # 8: What is the cost per child?

There are a number of different methods that may be used to count children in service. The two most common are the “point in time” count (Child Count) and an “over the period” count (aggregate count). Both of these counts represent children eligible and enrolled for *Early On* service. Children referred to the system but ultimately found not eligible, or those who exit prior to moving into service, are not routinely reported in either of these counts.

The “point in time” count is for a specified date which is performed twice annually in Michigan; first in June and then again in December. The December Child Count is federally required and is the reporting date for all jurisdictions. The aggregate count, sometimes called the period count, is usually an annualized count from December to the following December and is optionally reported to the Federal government. It is not uncommon in other states for the annual Child Count to be 60% of the aggregate count, depending on average age of referral and length of stay in the program. The Period Count for school fiscal year 2005/2006 was approximately 16,445 children with the Child Count being about 53% of the Period Count.

Child Count

- 12/1/2005 8,554 children in service (Point in Time)
- 6/30/2006 8,779 children in service (Point in Time) or a 2.6% growth from 12/1/2005

Cost per Child

The average cost per child, for an entire year of service, during the period of the Fiscal Study was \$6,521 and is illustrated in Table 31 in this Section of the Report. That amount includes consideration of all direct service, support and administrative cost at both the state and local levels. On average, children receive 4.2 hours of service per month or 50.4 hours for a full year of service. The service hours by type of eligibility are delineated in Table 3 and are multiplied by the hourly direct service cost amount.

- Cost Per child depicted by the type of *Early On* Eligibility:
 - Part C Only = $\$129.39 \times 2.4 \times 12 = \$3,774$
 - Special Education = $\$129.39 \times 5.5 \times 12 = \$8,610$

Question # 9: What services are provided, by whom, and the frequency/ amount?

Special Instruction and Family Training are the two most dominant services delivered within Michigan's system, with combined total of 41.2 % (30.9% + 10.3%=41.2%) based on actual service levels and an even more strident 61.2% (41.3% + 19.9%=61.2%) when looking at planned services levels. Therapy services of occupational, physical and speech/language account for 33.9% of planned service and 21.7% of delivered services.

The employer for each individual practitioner listed on the IFSP/IEP was identified as an ISD or Non-ISD (Other). The count and percentage of total by Employer Type is listed in Table 38 with 74% of all personnel being employed by the ISD.

Table 38: Employer Types		
Employer Type	IFSP/IEP counts	% of counts
ISD	339	74%
Other	122	26%
Total	461	100%

The most common intensity for service is 60 minutes, which occurs for 55.6% of all service lines reported ($907/1620=55.6\%$).

- The next three most common are :
 - 90 minutes for 9%
 - 30 minutes at 8%
 - 45 minutes at 7%

Question #'s 10 & 11: What are the average direct service and admin/support costs? What is the ratio of direct services to indirect (admin/support) costs?

The traditional Cost Survey could not be administered in Michigan due to the lack of isolated *Early On* costs and the integrated nature of reporting costs for all children participating in Special Education. Alternate methods were used for this Study and recommendations were made for reviewing and changing the current financial reporting processes between MDE and the ISDs.

It is the recommendation of the Principal Investigator to this Study to use an administrative and support percentage of 25% against the hourly personnel costs, since computation of that number could not be done. The recommendation is based on the review of the SE-4096 data, past history for similar projects, and the unusually high hourly wage amount paid to direct service providers in Michigan. The MDE requires submission of the SE-4096, which is the "Local and Intermediate District Special Education Actual Cost Report", and Supplemental Schedules. It is to be a summary of total allowable expenditures. The annual report is to be submitted by every school district operating a special education program.

Without considering state level costs, and without consideration for how a direct service person spends his/her time, the cost for every hour of a direct service person is \$56.52 ($\$42.39/.75=\56.52 alternately $\$56.52 \times .25=\14.13 and $\$42.39+\$14.13=\$56.52$) to include administrative and support cost.

- Average Hourly Personnel costs – \$56.52
 - Direct Service Personnel– \$42.39 at 75%
 - Administrative and Support Costs – \$14.13 at 25%

Question # 12: What is the current formula that is used for distribution of Federal /state Part C funds?

The Federal Part C allocation was \$13,245,161 for Fiscal Year 2005 and slightly less for Fiscal Year 2006 at \$13,048,084. Of the approximately \$13 million in federal dollars, about \$10.5 million (or about 80%) is distributed to the local level to support Michigan's *Early On* system. There is no designated state general fund appropriation for Part C services through the Michigan State budgeting process. The funding is distributed as follows:

- \$2.85 million at a base of \$50,000 for each of 57 ISDs.
- \$1.2 million (approximate) based on \$100 for each child at 2.2% of the 0 to 3 population base for that ISD.
- \$7 million (approximate) is distributed evenly based on the average of the June and December period count.

Question # 13: How is the Part C Federal allocation being used across service areas? What does it purchase?

\$13.2 million dollars is the total amount of money that is directed by the state Lead Agency and is used for the following broad categories of activity:

1. State Infrastructure including mandated activity at \$2.6 million
 - a. State Office Support within MDE
 - b. System Support (Training, Data, Personnel Preparation, Parent Support and Public Awareness)
 - c. State Interagency Coordinating Council (SICC)

- d. Collaboration with other entities including other governmental Departments
- 2. *Early On* Coordinators at the local level
- 3. Services to Children and Families primarily for children meeting the Part C only eligibility criteria. The FY 2006 costs for Part C only eligible children can be estimated at \$19.4 million dollars (5,136 x \$3,774 = \$19,383,264).

Question # 14: How does an open ended service system (# of visits per child) work within a finite grant system?

The funding partnership with the ISDs is an extremely important component of Michigan’s system, since those dollars are the primary funding for children meeting the Special Education eligibility criteria. In addition, the ISD funds are significantly contributing to the cost of services for children meeting the Part C criteria only. The finite dollars are paying for only a small fraction of the system. It is for this reason that there should be no consideration in change of Lead Agency, or other operational structures without understanding the impact to these significant dollars supporting Michigan *Early On*.

Question # 15: How do the cost results break out by racial/ethnic group – and how does that comparatively profile with state and local demographics?

There is a notable difference within the Race/Ethnicity strand of analysis. The difference is driven by both the number of children and the quantity of service being delivered. The most significant differences include the over-representation of the white population and the under-representation for the black population as shown in Table 39. The overall population of white children is at 73.2% versus the survey participation level at 81.2% and the percentage of service at 84.9%. The opposite is true for black children where they represent 17.4% of the overall population, 9.9% of the survey participants and 4.9% of the service hours. Information for the Hispanic population looks properly aligned. The remaining populations have relatively small numbers, so users should be cautious of the statewide applicability of the numbers.

Table 39: Encounter Service Actual -Average Services by Race								
Race/ Ethnicity	Table C-6 Estimated Resident population ages birth through 2, by race/ethnicity: 2005		Survey Children % of Total		Minutes	Hours per Child per Month	Hours	% of Total
	Count	% of Total	Count	% of Total				
	Not Specified			59				
Unknown			3		2,135	11.9	36	
Asian	11,242	2.90%	7	1.5%	1,387	3.3	23	1.2%
Black	67,635	17.40%	46	9.9%	5,796	2.1	97	4.9%
Hispanic	23,893	6.20%	26	5.6%	7,431	4.8	124	6.3%

Native American	1,294	0.30%	9	1.9%	3,280	6.1	55	2.8%
White	283,940	73.20%	379	81.2%	100,701	4.4	1,678	84.9%
Statewide	388,004	100.00%	529		132,144	4.16	2,203	
Statewide without not specified or Unknown	388,004	100.00%	467	100.00%	118595		1,977	100.00%

Question # 16: Can we incorporate/analyze levels of risk and/or levels of need in this Study?

The overall Study design included the use of random sampling techniques with levels of participation to satisfy a 95% confidence level with respect to the Study results. Table 40 includes the actual participation levels against known or estimated population sizes. The total number of practitioners is not a known number and is estimated at 2,000 which we believe is significantly higher than average. The Salary Survey participation, while lower than what we would have liked, had results which were relatively consistent, thus making a smaller sample size more reliable.

Survey Type	Total Population	Participation	% of Population
IFSP/IEP	8,547	736	9%
Child Questionnaire	8,547	682	8%
Service Encounter Logs*	2,000	421	21%
Salary Survey*	2,000	219	11%

* Approximate Number for the Population

Overall, there are two additional risks of the sampling process. First, is the risk that the costs are understated, primarily because of the vulnerability of the average hours of service per child. The basis of this information was the Encounter Survey. The risk of over reporting really could not occur since the reporting was child specific, with a known practitioner. The reasons for under-reporting of services are much more likely since practitioners may have forgotten to write something on the time sheet, we could not match the child's name, services were not delivered within the survey time period, etc. The second known vulnerability is with the costs of direct service personnel, support and administration. Since a traditional Cost Survey was not administered, the alternate process is simply more vulnerable and has less precision.

Question # 17: How do numbers of families/children connect to funding amounts?

Question # 18: How many children are receiving services or service coordination paid out of the Part C Federal allocation and also receiving same/similar service paid by a different funding source?

Service Coordinators are responsible for completion of the IFSP/IEP which includes the designation of funding for each specified service. A small number of service records (under 10) are marked as Medicaid and something else that did not register during the revenue review. These records had at least one missing element, thus preventing the computation of planned hours of service.

Payor	Planned Hours	% of Total	Revenue Total
Part C & SPED	1,507.69	4.5%	\$2,501,454.67
Part C & Other	133.09	0.4%	\$220,812.27
State & Local	123.01	0.4%	\$204,081.12
	1,763.79	5.3%	\$2,926,348.06

The number of children who have services paid from the Part C allocation is somewhat challenging to precisely measure due to the inconsistencies observed in listing the funding source on the IFSP/IEPs. Of the 731 children in the *Early On* database, at least 171 children identified as Part C only and at least 42 identified as Special Ed eligible have *Early On* or some other Part C proxy identified as the funding source. As shown in Table 7, about 5% of all services have multiple funding sources identified -- most of which is Part C and Special Education funding.

In Conclusion

This report represents the culmination of nearly two (2) years of extensive review, fact finding, data gathering and analysis. It is intended to represent information about Michigan's *Early On* system in a factual way and to help facilitate decisions around the state's effort to redesign the current system. It was the intent of the writer to provide sufficient technical detail such that the content of the document could stand alone in the weeks and months to come. The intent of this conclusion section is to respond to the particular questions asked by the Fiscal Task Force and should not be reviewed as the complete summary of findings for the Study. A more thorough review with additional findings and recommendations can be found within each section of the Study report.

Next Steps

Hopefully, this Fiscal Study, together with the meetings that occurred throughout 2006 has provoked some interesting discussion regarding cost and revenue within Michigan's *Early On* system. It will be important to continue the work to the next level and to ensure that the needed data is part of the ongoing, routine data collection and reporting system. Since there are very few routine and systemic data reporting processes currently in place for Michigan's *Early On* system, leaders in the system will have to take action to initiate that effort. Recommendations for strengthening many of the processes are included throughout this Study report. The information will become even more powerful with review over time and should be critically important to key planners at the state and local level in terms of appropriately "redesigning" the *Early On* system, ensuring that the resources directed to the system are being used wisely at all levels, and in demonstrating accountability and good stewardship to children and families as well as the general citizenry in Michigan.