

State of Michigan Family Independence Agency



*Using a Data Warehouse and GIS
To Improve Foster Care
for Michigan Children and Their Families*

Executive Summary

Michigan's Family Independence Agency (FIA) is one of the state's largest and most important organizations, managing approximately \$4 billion in funds for many of the state's most critical programs, including food stamps, cash assistance, and child support services. More than 1 million Michigan people – among the State's most vulnerable and many of them children – depend on FIA programs for life's necessities.

Included in this group are Michigan children who require foster care, either because a court has ordered it or because biological parents have decided voluntarily that they can no longer care for their children. FIA has partnered with the renowned Annie E. Casey Foundation's "Family to Family" model to enhance its foster care efforts. The Family to Family initiative has as a goal to place those children who are removed from their birth families with one permanent and stable family in the child's own community – until reunification with birth families can occur, or the child is released for adoption. A Family to Family priority is to reduce the number of children placed in institutional care.

To succeed in this endeavor, "Family to Family" requires community partnerships; recruitment, training and support of foster parents; team decision-making that involves birth and foster parents as well as service workers; and a self-evaluation tool that requires agencies to analyze data to learn who these children are, where they come from, and how best to provide for their care.

FIA relies on an enterprise data warehouse to provide the informational backbone to support and drive this crucial initiative – to help service workers place children in their own neighborhoods and near their schools, evaluate foster parents, and measure their progress in providing for the safety and well-being of Michigan children. *The data warehouse has dramatically transformed the manner in which FIA manages its Foster Care program.*

The data warehouse provides FIA service workers with rapid access to enormous amounts of data that can be analyzed quickly and comprehensively to meet the agency's foster care goals. These include:

- Developing a better understanding of where foster care homes are needed
- Analyzing information from Children's Protective Services (CPS) – which identifies children who cannot be protected from abuse or neglect in their homes – to identify repeat victims and offenders, and determine whether FIA needs to do additional geographic outreach. (CPS, along with the family courts who authorize the removal of children from homes, function as the entry point for the Foster Care Program.)
- Utilizing Geographical Information System (GIS) mapping with the data warehouse for several purposes. These include: graphically analyzing where foster cases are distributed to make better decisions on how to allocate staff resources; and helping to ensure that children are placed in foster homes that are within close proximity to their original neighborhoods and schools, thus maintaining a level of familiarity and normalcy in their lives, and increasing prospects of reunification with birth parents
- Reducing the number of foster care placements for children to one or two, rather than multiple placements which disrupt and destabilize the child's life and well-being
- Reducing age, race, and gender disparities in foster care outcomes
- Conducting in-depth analysis and trending to better understand reasons for child removals, and identify types of foster care placements, with a goal toward reducing institutional care.
- Using the warehouse to provide comprehensive, timely reporting to the Legislature and to meet federal reporting requirements.

In short, the data warehouse has become the critical tool to help FIA service workers to improve the lives and outcomes for Michigan children and their families in the foster care system.

A. Description of Project

BACKGROUND

In November of 2000, the Michigan Family Independence Agency (FIA) partnered with the Annie E. Casey Foundation to roll out the foundation's "Family to Family" model in Michigan's two largest counties – Wayne (including Detroit) and Macomb – with an eye to statewide implementation. The Casey Foundation provided an initial grant to FIA and committed to providing ongoing resources over the next several years.

Family to Family is a child welfare system reform initiative with a goal to place those children who are removed from their families with one permanent and stable family in the child's own community, until reunification with birth families can occur, or until the child is released for adoption. A priority of the program is to reduce the number of children placed in congregate or institutional care – a figure that increased nationally from 250,000 in the 1980s to more than 550,000 by 2000.

The Casey Foundation and state officials across the country have recognized that foster care systems too often place children far from their homes, and that these children usually moved multiple times. Research has indicated that foster children have a higher rate of reunification with their birth families when they have more frequent contact with their birth parents, remain in their schools, and continue their existing friendship and family networks.

The "Family to Family" model has 4 key strategies:

- **Community Partnerships**...building on natural helping networks, neighborhood partners and the belief that there are strengths and resources in every community where children enter the child welfare system.
- **Neighborhood-based recruitment, retention, training and support of foster parents**...so that birth parents can maintain a relationship and keep a visitation schedule with their children placed in their own neighborhood, community, or county. Children are less traumatized by removal from their families if they are not also removed from their schools, neighborhoods, and other familiar support mechanisms.
- **Self-evaluation**...in which data is used to drive decisions, and learn where children come from, where they are placed, and whether outcomes improve as a result of Family to Family.
- **Team decision-making**...in which both birth and foster parents are encouraged regularly as an integral part of the process that impacts the child. Encouraging regular contact between birth and foster parents leads to more successful reunification for many children and their families.

GOALS

Both Wayne and Macomb counties have had significant numbers of families involved with the child welfare system and a high number of removals to out-of-home care. FIA is committed to implementing Family to Family strategies to achieve the following outcomes for these Michigan foster children and their families:

- Reducing the number and rate of children placed away from their birth families
- Increasing the proportion of foster kids who are placed in their own neighborhoods or communities
- Reducing the number of children served in institutional and group care and shifting resources from group and institutional care to kinship care, family foster care, and family-centered services

- Decreasing the length of stay of children in placement
- Increasing the number and rate of children reunified with their birth families
- Decreasing the number and rate of children re-entering placement
- Reducing the number of placement moves for children in the care experience
- Increasing the number and rate of brothers and sisters placed together
- Reducing any disparities associated with race, ethnicity, gender, or age in each of these outcomes

A state-level steering committee monitors the success and sustainability of the Family to Family initiative as it is replicated in other counties. Members meet quarterly and share their collective experiences and are the primary advocates for making the Michigan foster care system more child-centered, neighborhood-based and family-focused. Both Macomb and Wayne counties have local steering committees that are responsible for coordination issues with the targeted areas and for overseeing progress.

To achieve these goals – to monitor progress, to track improvements, to evaluate programs, to improve the quality of life for foster care children – FIA has turned to the data warehouse.

DATA WAREHOUSE AS INFORMATIONAL BACKBONE

Prior to incorporating foster care information on the data warehouse, FIA found it nearly impossible to manage its overall program effectively. Foster care was handled on a case by case basis, with no overall strategy or ability to monitor trends. Without solid information, there was little way for FIA to know:

- the number of foster care placements
- where children were placed in relation to their birth families and schools
- whether and how often siblings were placed together
- how long children remained in foster care
- how many children were placed in institutional settings versus in foster homes or with relatives
- where the foster homes were in relation to the kids who needed services

Now, because the data warehouse contains information on more than 20,000 foster children and 4,000 foster parents, agencies, and charities in Michigan's two largest counties, FIA analysts have created a culture of using data as a way to make programmatic changes.

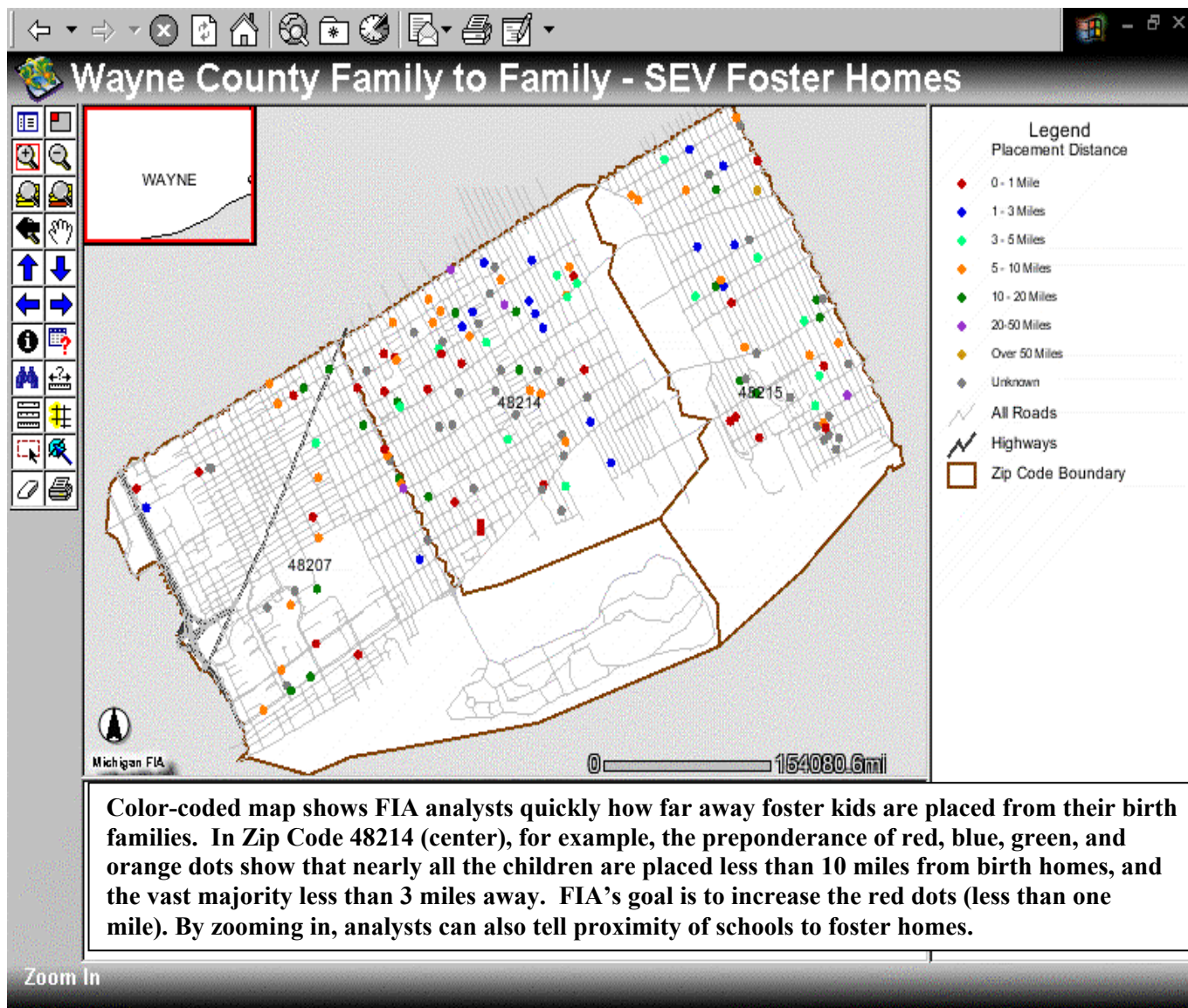
The FIA data warehouse technical environment includes a large data warehouse computer (140GB), a database management system, user query languages, and utilities. In addition, a Geographical Information System (GIS) mapping capability provides FIA staff with an easy-to-analyze view of the data. GIS maps also enable FIA to quickly deploy information from the data warehouse to the county offices.

B. Significance to the Improvement of the Operation of Government

The changes in FIA's ability to better serve and protect foster care children have been profound since this data has been included on the data warehouse. Analysts are now able, through a series of color-coded dots on the GIS mapping system, to quickly ascertain foster care placements, locations of foster care birth families and schools, and complaints from Child Protective Services to determine if more outreach needs to be done in particular locations.

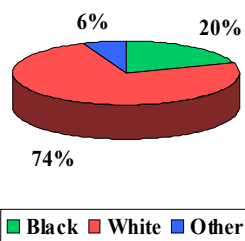
It is often more effective to show a capability like this rather than just describe it. Examples of the data warehouse/GIS capabilities, with accompanying explanations, are shown on the following page.

3 Zip Code Area Showing Foster Care Placements By Removal Distance



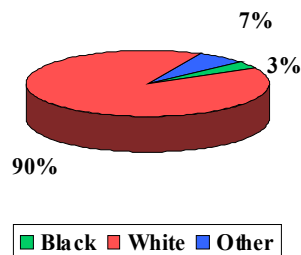
Family to Family Outcomes: Reduce race, gender, or age disparities

Race of Children Entering Care for the First Time: Year 2001



Charts built from data warehouse information enable FIA staffers to determine number of foster children by race to determine disparities. Here, a full 20% of first-time foster care children are black, while only 3% of the children's population in the county (Macomb) is black (2000 Census). Through this kind of statistical analysis, FIA can reduce this disparity with additional programs, intervention, etc.

Total Population of Children by Race Census 2000



(Significance to the Improvement of the Operation of Government – Continued)

In addition to the mapping capabilities, the data warehouse has enabled FIA staff to undertake the following:

- in-depth analysis and trending to better understand the reasons for child removals
- evaluation of foster homes, foster care facilities, and community partners
- provide better support to foster parents
- track foster children to provide more effective services.

For example, the warehouse can very quickly show an FIA analyst how many placements a child has had over a certain period of time. If a 14-year-old has had 15 foster placements in five years, information gleaned from the warehouse can reveal where the placements were (geographically) and what type of placements the child had (foster home or institutional). By doing trending analysis, FIA can determine what programs and interventions work best for similar children to reduce the number of placements.

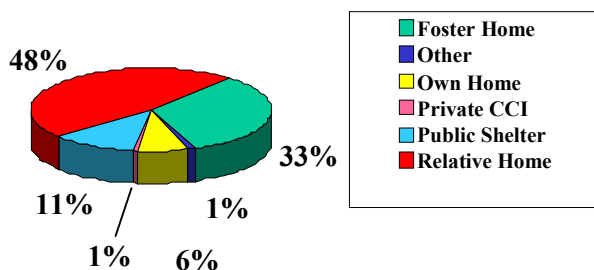
C. Benefits

Since FIA began using the data warehouse to analyze its Family to Family progress and outcomes, FIA professionals have been able to dramatically transform the way they manage Michigan’s Foster Care program, and provide services to foster children and their families.

The warehouse has helped FIA achieve – or begin to achieve – major Family to Family outcomes. These include reducing the number of foster children in institutional care, reducing the number who re-enter foster care, placing children closer to their birth parents and their schools, and finding and providing support for additional foster parents. Perhaps most importantly, the warehouse has provided FIA analysts with the data to make better “front end” decisions about children that need to be removed from their homes – where they go and why – as well as the tools to better allocate resources to serve the foster care population.

Family to Family Outcomes Goal: Reduce the Percentage of Children in Institutional Care

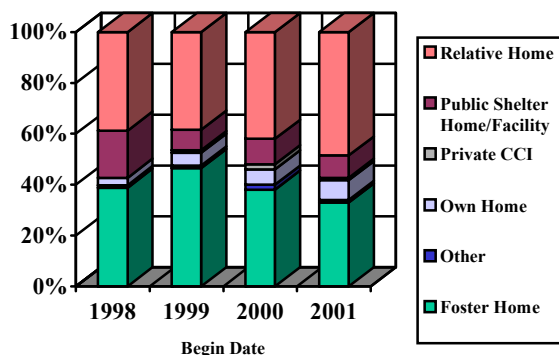
Initial Placement Types for Year 2001



In 2001, for example (**see chart at left**), the vast majority of children were placed either in a relative’s home (48%) or a foster home (33%). This means that more than 80 percent of the foster children in this program were placed in an environment that is much more stable and preferable for foster care children.

Still, a full 11% of the children were placed in public shelters, a figure FIA would like to see reduced. Using the data warehouse, analysts can determine who these children are (age, race, background, etc.), where they are from, and recruit additional foster families from their neighborhoods. Before the data warehouse, this kind of in-depth statistical analysis would have been impossible.

Macomb County - Living Arrangement at Initial Entry to Placement By Year



The data warehouse has also provided FIA with the tools to increase the number of foster children who are placed in relative's homes, a desirable Family to Family outcome.

The **chart at left** shows a marked improvement in the number of children placed in relative's homes between 2000 and 2001, after the Family to Family model was adopted and the data warehouse used to make possible extensive data analysis. There was a small increase in the number of children who were able to remain in their own homes, and a corresponding reduction in those placed in public shelters.

D. Return on Investment

The state's Department of Information Technology (DIT) has worked very closely with FIA on the Family to Family program requirements, to build a user-friendly system that is *easily transferable to other counties in the state*. As the model is rolled out into more than 130 additional district offices statewide, the state can leverage the Family to Family work that has already been done to achieve enormous economies of scale. **For Example:** FIA/DIT anticipate an **initial savings of more than \$5.5 million** thanks to its investment in data warehousing technology. In the first district office to implement Family to Family data collection and modeling, it took 4 people meeting for 12 hours per month a total of 18 months to complete the task for the base year. Based on a fully burdened rate of \$75 per hour, this total is \$64,800. Assuming a similar effort would be required for each office without the data warehouse, the total statewide cost would be \$6.48 million (multiply \$64,800 x 100 rather than 130, since the first office was a large office and represents closer to 1/100 of the total rather than 1/130). However, because of the data warehouse, Michigan has found that that it requires only about *15% of the time* to implement Family to Family, a total potential statewide savings of \$5.5 million (\$275,000 in 5 offices thus far) just for initial implementation. Ongoing data analysis will lead to even greater savings each year).

From a **longer term standpoint**, the state's leading edge efforts in the foster care field are expected to yield benefits and savings that include:

- ◆ **Greater worker productivity** as children are placed in more stable environments, meaning workers will be less compelled to check on them as often, and thus service more children.
- ◆ **Fewer long-term legal problems and costs**, on issues such as drugs and crime, as children are placed in more stable environments that are closer to home and community support structures.
- ◆ **Reduced costs as placements are reduced.** Multiple re-entry placements carry start-up costs, foster parent training costs, and other costs such as counseling.
- ◆ **Reduced transportation costs** as foster children are placed closer to birth homes, schools, and community and extracurricular school activities.

While FIA and Family to Family professionals believe – indeed, *expect* – that all of these long-term savings will be achieved in Michigan, it is important to note that true empirical data will not be available for several years. This will provide the Family to Family model time to take firm hold statewide, and offer analysts an opportunity to assess the behavior and outcomes of foster children as they get older. Preliminary analysis is already underway, and again, FIA expects that the data warehouse will be the primary tool to analyze and measure the long-term results of this breakthrough foster care program.