Nurturing Families Network 2014 Annual Report

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Nurturing Families Network: 2014 Annual Report

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Executive Summary

The Nurturing Families Network (NFN) home visiting program is a statewide system of continuous care designed to promote positive parenting and reduce incidences of abuse and neglect. The program focuses on high-risk, first-time mothers. Home Visiting initiates services at or before the child's birth, and continue through five years of age. Home visiting services for fathers, incorporated in 2009, also provide direct, individual parenting education, and encourage father engagement. We divide the 2014 Annual report is into four sections: NFN Program Overview, 1995-2013; NFN Statewide Annual Evaluation, 2013; NFN Program to Scale in Hartford and New Haven; and Home Visitation for Fathers, 2013.

Nurturing Families Network Screenings

Screened through the Nurturing Connections program, 6,205 families were eligible for telephone and referral support services or home visitation services during 2013. The report summarizes information on enrollment and screening data, participation rates, and outcome information for 2,184 active home visiting participants during the 2013 calendar year.

Since 1999, NFN staff have screened over 74,000 first-time families. One third, or 25,044 of these families, have screened at high-risk for maltreating their children, of which 9,598 families enrolled in home visiting services in 42 sites across the state. NFN staff screened, on average, 6,227 parents in the previous three years: 6,205 families in 2013, 6,058 families in 2012, and 6,414 families in 2011. In addition, an average of 2,164 families actively participated in home visiting program: 2,184 families in 2013, 2,273 families in 2012, and 2,034 families in 2011. These rates are higher than the former three year period, 2008 to 2010, in which turnover for home visitors and threats to the state budget likely impacted participant retention rates. With the rebound in the recession, there has been reported improvement in program stability, thus current retention rates have improved.

Retention Averages

Over the past ten years retention rates show that on average, 67% of families remained in the program for at least six months, over 48% of families have remained in the program at least one year, and 31% stay at least two years. Furthermore, since 1995, 602 families participated in NFN home visiting the full five years. All families who enrolled from 2003 through 2008 to determine if they were retained after six months, one year, and each consecutive year through five years. Of those families who had the opportunity to be in the program for five years (N=3328), the average length of involvement was 20.6 months.

In 2013, six month and one year retention rates increased steadily statewide and in Hartford. Across the state, 66% of 2012 entry families remained in the program for at least six months (compared to 64% of the 2011 cohort), 49% of the 2012 cohort remained in the program for at least one year (compared to 48% of the 2011 cohort). Of the 2011 cohort 30% participants remained for at least two years (compared to 29% of the 2010 cohort). Conversely, six-month and one-year retention rates decreased in the 2012 cohort New Haven sites. Two-year retention rates for NFN statewide sites, New Haven sites, and Hartford sites, were

relatively constant. Rates in New Haven NFN sites increased to 31% of the 2011 cohort as compared to the 2010 cohort (23%).

Social Determinants

A large percentage of first-time mothers entering the program in 2013 were struggling financially (73%) and over a fifth (22%) of mothers were considered socially isolated. Thirty-three percent of statewide participants were teenage mothers and over 71% of younger mothers (18 years and younger) had not yet completed high school when they entered the program in 2013.

Program Outcomes

Outcomes for NFN families statewide in 2013 are consistent with other years (Damboise & Hughes, 2011). After one and two years, education and employment rates increased for participating mothers, as did mothers' use of public assistance. Additionally, mothers are living independent of families, including their parents and extended families, after two years of program participation. Home visitors provide support for access to resources, such as employment and government assistance during family's involvement. Although mothers are making strides in education and employment, they continue to struggle financially, as evidenced by the increased usage of government assistance over time. Participants showed increases in their knowledge and use of resources in their community after one and two years of program participation. Analyses indicate that NFN participants classified as High-Risk at program entry, and completed six months, significantly decreased their rigid parenting attitudes in Hartford and New Haven NFN sites. Additionally, for mothers that completed one and two years of the NFN program, there were significantly decreases of rigid parenting attitudes across statewide, Hartford, and New Haven NFN areas.

Birth Rates

Participants in statewide birth outcomes for the past three years (2011 to 2013) have varied in terms of rates of low birth weight, prematurity, and other serious medical problems. Statewide rates of low birth for NFN mothers increased from 12% in 2011 to 16% in 2013, as compared to 8.1% for the State of Connecticut in general. Rates of premature births have increased from 11% in 2011 to 14% in 2013. Reported rates of NFN children born with serious medical problems have decreased from 13% in 2012 to 11% in the 2013 program year.

Father Home Visiting

With regard to Father Home Visiting, 12 site staff across 11 sites provided services to 244 fathers across Connecticut as of the end of 2013, with 58 fathers entering in 2013. Twenty-one percent of the fathers that enrolled in 2013 were teen fathers and 41% not yet earned a high school degree or GED. Forty-four percent of fathers reported they were currently employed and 87% reported they were struggling financially. Participating fathers came into the program with positive attitudes of fathering yet, scored high in rigid parenting. While outcomes for participating fathers are preliminary, they do indicate less rigid parenting attitudes after one year and more community involvement after the first six months of program participation.

Introduction

Overview of Report

    We divide the 2014 NFN Annual Report into four sections. The first section, **NFN Program Overview, 1995-2013**, gives a brief description of the evolution and components of the program including Nurturing Connections and Home Visitation, and reports on *aggregate* data for all families who participated in NFN since program inception.

• We compare data across program years on the number of mothers who were screened for services and present the number of families who received home visitation by program site.

• Participation and retention rates are also compared across program years.

• Analyses of outcome data, specifically change in parents' attitudes and use of community resources over time, is presented for all families who participated in the program since program inception.

    The second and third sections report on *NFN's 2013 annual data*. Section two, **NFN State-wide Annual Evaluation, 2013**, reports on data across all program sites statewide. Screening and enrollment for both low-risk and high-risk families are examined.

• Family profiles, including risk factors, social demographic characteristics, household data, education and employment information are described for families receiving home visitation ser vices.

• Data on home visiting program participation, rates of retention, and parent outcomes are analyzed.

    Section three, **NFN Program to Scale in Hartford & New Haven**, presents on the progress of the ten program sites in Hartford, the first city to go to scale in 2005, and the six program sites in New Haven, the second city to go to scale in 2007. In these sections, enrollment, descriptive, and outcome data for families who received home visitation. We also compare urban data with statewide data on a variety of measures. This is to highlight differences in demographics to explain variation in family participation or outcomes.

    The fourth section, **Home Visitation for Fathers**, describes the fatherhood initiative project that began in 2009 in which home visitation for fathers expanded to eleven NFN sites. We present demographic characteristics and risk profiles for fathers participating in home visitation in eleven NFN sites, in addition to program participation rates and outcomes of father participation.

Data Analyses

    Where applicable, we compare family profiles, program participation rates, and outcome data across several calendar years showing trends over time. By charting program performance in the same areas over time, the performance history serves as a basis for judgment; that is, prior performance serves as a benchmark for current performance.

    In addition, a pre-post design are used to analyze change in the areas where the NFN program is attempting to impact families, by testing mean scores at different points in time for statistical significance using repeated measures analysis of variance tests.

    The report includes summaries of key findings from analyses for the following sections: statewide aggregate data since program inception, statewide annual data, Hartford annual data, New Haven annual data, and data from sites providing father home visiting.

NFN Statewide System of Care
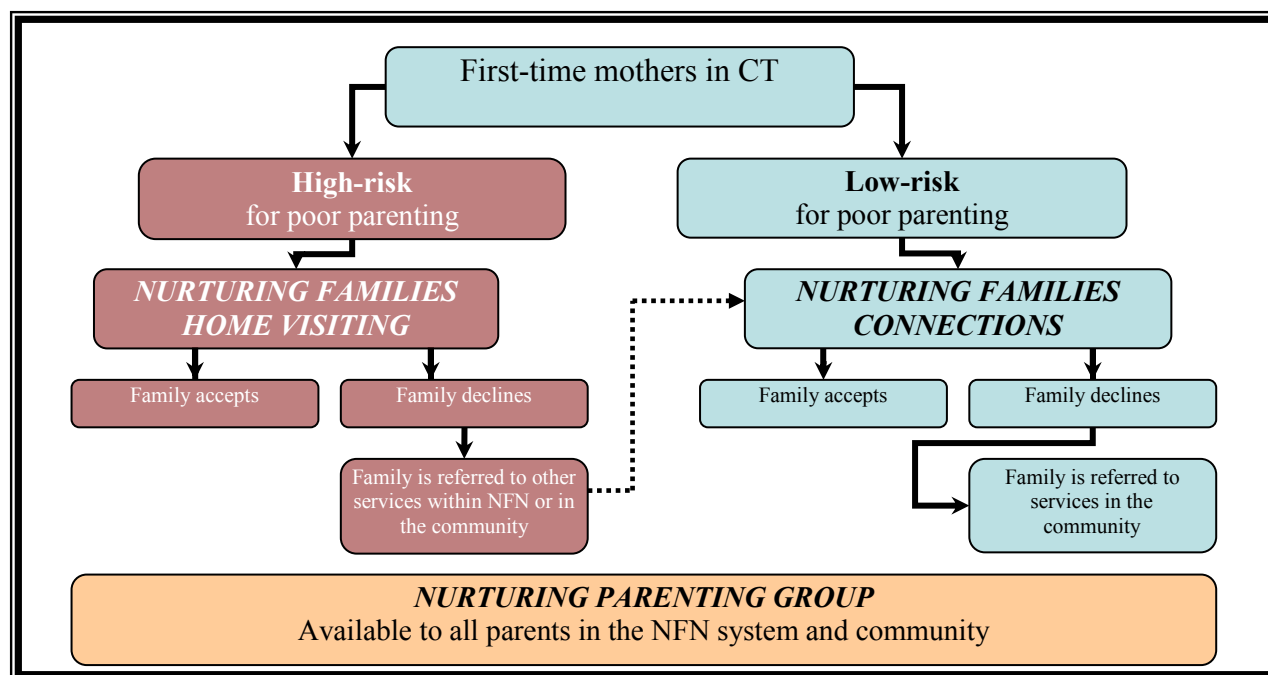
Figure 1. NFN System of Care

The Nurturing Families Network is designed to provide a continuum of services for families in the state. The flowchart illustrates how families enter the NFN system and the various paths they may follow. All NFN services are voluntary; thus there are many steps at which families can either refuse services and/ or be referred to other community services.

NFN Program Components

NFN's mission is to work in partnership with first-time parents to enhance strengths, provide information and education, and connect them to services in the community when needed. It is made up of three components:

- *Nurturing Connections* Nurturing Connections staff aim to screen all first-time mothers, identifying parents as low-risk or high-risk for poor parenting and child maltreatment. Nurturing Connections staff also provide telephone support and referral services for low-risk mothers.
- *Nurturing Home Visiting* High-risk families are referred to Nurturing Home Visiting for intensive parent education and support in the home, and home visitors help link families with needed resources and assistance for up to five years. The Support for Pregnant and Parenting Teens (SPPT) program, an NFN partnered service with the Connecticut State Department of Education, began in April 2011 and continued through the end of 2012 program year, which incorporated school and family support. Outcome information of the SPPT program is not contained in this annual report.
- *Nurturing Parenting Groups* Community-based parenting education and support groups are offered to all families at various risk levels, including parents who enter the NFN system as well as other interested parents in the community. This component of the program is not included in this report.

Program Overview, Summary of Key Findings, 1995-2013

Screening/enrollment, demographic characteristics, risk profiles, participation and retention rates, and program outcomes for NFN statewide since program inception are reported in this section. Below is a summary of highlights. (Note: Different N size for each time point is due to missing/unknown data.)

Screenings and Enrollment

The Nurturing Families Network, a system of care that provides a continuum of services to first-time mothers, has expanded its service across the state over the past 17 years, including offering program services to fathers since 2009. With this expansion, there has been a comparative increase in screenings and program participation.

The Revised Early Identification (REID) screen, used to determine eligibility and risks for child maltreatment, consists of 17 items that research has shown increases the probability of child maltreatment.

- Since 1999, a total of 74,608 first-time mothers have been screened for services. Across these years, 1999 to 2013, 33.6% or 25,044 of the first-time mothers screened were characterized as high-risk of poor parenting.
- A total of 9,598 families identified as high-risk have received home visitation services since 1995.
- In the past three years, on average 6,226 parents were screened for NFN home visiting services, ranging from 6,414 screens in 2011, to 6,058 screens in 2012, to 6,205 screens in 2013.

Program Participation

- The average number of participating families in NFN home visiting is 2,164 families, from total participating families during 2011, 2012, and 2013 program years. During 2013 program year, 2,184 families received home visiting services, a slight decrease from 2012 (2,356 families) and a slight increase from 2011 (2,034 families) program year received home visiting services.
- At the end of the 2013 program year, there were 1,381 active home visiting participants.

Retention Rates

Families participating in Home Visitation services may receive intensive services in the home for up to five years from the birth of their first child.

- On average, 66% of families participated in the NFN program at least six months, 48% for one year, and 30% for two years since 1995, a total of 602 families have participated the full five years..
- For those families who have had the opportunity to be in the program for five years (1995–2007), the average involvement in the program is approximately 21 months.

Outcome Data

- Compared to NFN program entry, families who complete 1, 2, 3, 4, and 5 years of NFN home visiting, show significant change on measures of rigid parenting (CAPI-R) and utilization of community resources (CLS instrument).

Nurturing Connections: Screening First-Time Mothers 1999-2013

The Nurturing Connections component was first established in 1999 as an initial step in providing universal screening of all first-time mothers in Connecticut. It is currently operating out of all 29 birthing hospitals in the state. Screenings are also conducted in clinics and community agencies. One of the goals for NFN is to reach as many families as possible at the prenatal stage. The Revised Early Identification (REID) screen, used to determine the level of risk for child maltreatment eligibility for NFN home visiting services, consists of 17 items that research has shown increases the probability of child maltreatment. In order to screen positive (i.e., high-risk) on the REID, a person must have either (a) three or more true items, or (b) two or more characteristics if one of them is item number 8, 11, 14, or 15, or (c) have eight or more "unknown" items (i.e., information on at least 8 items is not available). See Appendix for items on the REID screen.

The percentages of first-time mothers that scored as High-Risk by year are as shown in Table 1. Across the years 1999 to 2012, 33%, or 22,564, of mothers who were screened were identified as high-risk for poor parenting and thus, eligible for home visiting services. In 2013, 6,205 first-time parents were screened; 3,725 families were identified as low-risk, and 2,480 (40%) families were identified as high-risk, higher than the overall average, and the highest annual rate of High-Risk families since 1999. Since 1999, a total of 68,403 first-time mothers have been screened for services.

Table 1. Percentage of First-Time Mothers that Scored at High-Risk by Year	
Year	Percentage screened high-risk
1999	30%
2000	36%
2001	24%
2002	26%
2003	24%
2004	29%
2005	33%
2006	34%
2007	36%
2008	34%
2009	36%
2010	34%
2011	36%
2012	39%
2013	40%

Figure 2 shows that as the program sites expanded across the state, there has been a comparative increase in screenings. The biggest increases occurred with the expansion in Hartford in 2005, and a similar expansion in New Haven which started late 2007 and into 2008. Despite the increase with sites, in 2009, 2010, and 2011, there were decreases in the number of completed screens. In terms of program volume, this is reasonable because the programs were operating near capacity and refining enrollment process at the screening stage. Formal information regarding enrollment disposition, please refer to Table 8, Disposition of NFN Families Identified as High-Risk, Statewide Data, 2009-2013. The majority of program sites do not screen if spaces are unavailable for families.

Figure 2. Number of First Time Families Screened, 1999-2013
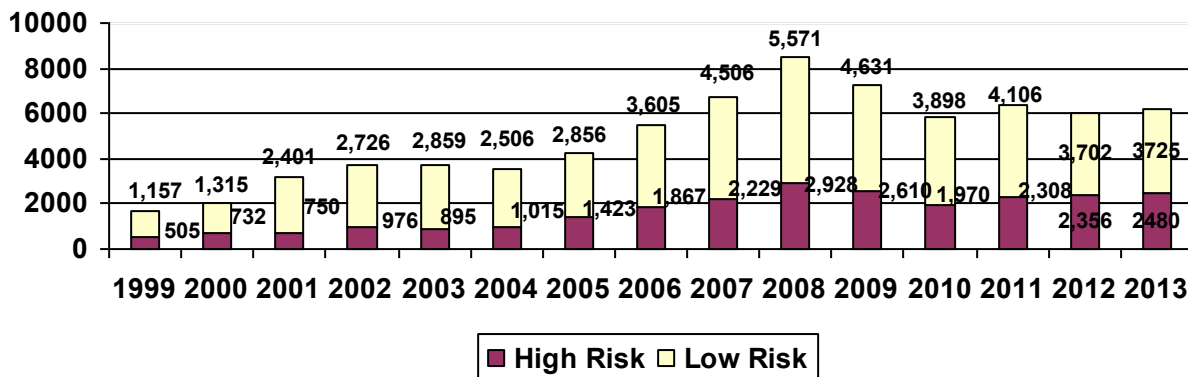
Program Sites and Families Served, 1995-2013

Table 2 shows that by the end of 2013, a total of 9,599 families received home visiting services at 42 sites since NFN program inception in 1995. Note that the total number of families served at NFN sites includes 135 families who received services at more than one site and 369 families who exited and re-entered the NFN program. In the Hartford region, 5 of the 10 sites are Family Resource Centers. There are also 7 NFN program sites in New Haven. In 2011, for the first time, one site closed and in 2012 Yale –New Haven acquired Saint Raphael's Hospital in New Haven. On December 31, 2013, there were 1,381 families participating in the program; in other words, there were 1,381 open cases at the end of the calendar year; lower than the total number of families at the end of the 2012 calendar year (1,505 families), but higher than the total number of families at the end of the 2011 calendar year (1,267 families).

Table 2.   Number of Families Served at Each Program Site Statewide

Program Sites	First Year Offered Services	Total Served Since Program Inception	Families Active as of end of 2013
Hartford VNA**	1995	671	61
WellPath (Waterbury)**	1995	697	85
So. Central VNA (New Haven)*	1996	552	59
Bridgeport Child Guidance Center*	1996	632	75
ECHN (Manchester)*	1996	569	34
Lawrence & Memorial Hospital (New London)	1998	274	21
Yale/New Haven Hospital**	1998	518	53
Families Network of Western CT (Danbury)	1998	316	37
Family Strides (Torrington)*	1999	367	41
Generations, Inc. (Willimantic)	1999	309	22
Hartford Hospital	1999	Connections & Group services only	
Family & Children's Agency (Norwalk)	2000	258	47
Madonna Place (Norwich)	2000	324	41
Hospital of Central Connecticut (New Britain)	2000	213	24
Family Centers (Stamford& Greenwich)	2000 & 2006	314	68
St. Francis Hospital**	2000	270	42
Community Health Center (Meriden)	2002	208	34
Middlesex Hospital	2002	170	28
StayWell Health Center (Waterbury)	2002	236	48
Day Kimball Hospital (Putnam)	2005	159	26
Bristol Hospital	2006	128	30
Family Centered Services of CT (New Haven)	2006	233	40
Asylum Hill (Hartford)	2005	178	30
El Centro (Hartford)	2005	108	21
Hispanic Health Council (Hartford)	2005	107	26
MIOP (Hartford)	2005	200	29
Parkville (Hartford)	2005	187	40
Village for Families & Children (Hartford)	2005	181	37
Southside (Hartford)	2005	191	23
Families in Crises (Hartford)	2005	127	19
New Milford VNA	2007	59	23
UCONN Health Center (Farmington)	2007	92	24
Community Health Resources (Enfield, Somers)	2007	104	33
City of New Haven Health Department	2007	137	37
Children's Community Programs (New Haven)	2007	115	45
Fair Haven (New Haven)	2007	144	60
Hill Health (New Haven)*	2007	133	Closed 6/11
St. Raphael's Hospital (New Haven)	2008	118	Merged w. Yale 9/12
TOTAL		9,599	1,381

* These sites cover two hospitals/service areas
** These site have more home visitors than other sites

Engaging Families
NFN Home Visitation, 1995-2013

Home Visiting Participation by Year Since 2002

Presented in Figure 3 are families that started each program during the year from 2002 through 2013, as well as families active during each calendar year. As the program expanded across the state with the addition of sites, there has been a comparative increase in participation in the home visiting program. Additionally, there was increased enrollment in Home Visiting with the expansion in Hartford in 2005 and a similar expansion in New Haven in 2007/2008. However, for the first time, there was a decrease in both families initiating Home Visiting and screening families in 2010 (as shown on page 4); and a decrease in the total number of families who received services in 2010. This is likely related to the impact of the economic downturn on program development and functioning. The number of families increased again in 2011 and the largest family involvement in home visiting services was during 2012.

Figure 3. Home Visiting Participation Rates by Year Since 2002
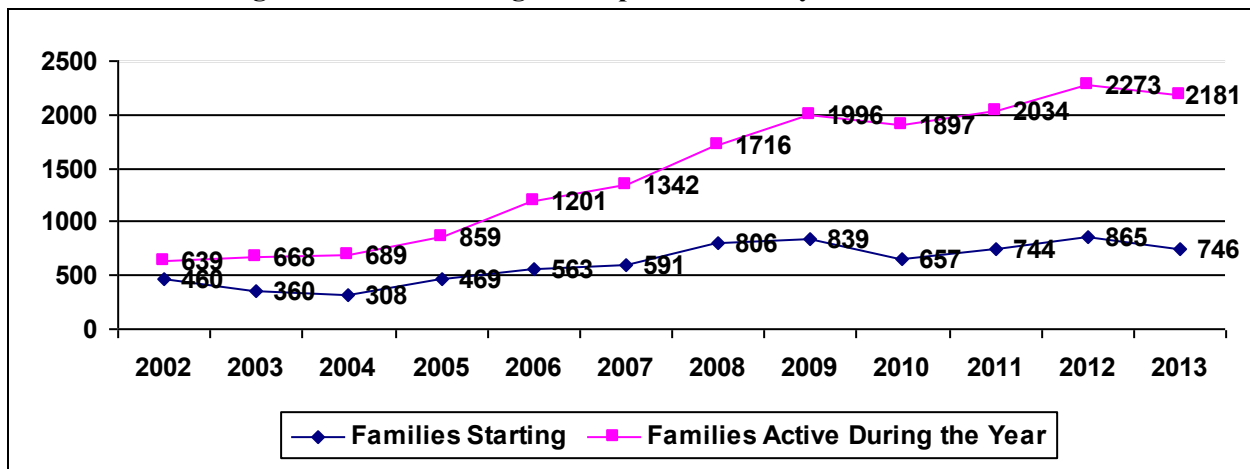
Program Retention Rates: 6 Months, 1 Year, 2 Years

Families participating in home visiting services can receive intensive services in the home for up to five years. Figure 4 shows 6-month, 1-year and 2-year retention rates for each cohort for every program year since program inception in 1995. Over the past ten years, over 60% of families have remained in the program for at least six months, slightly over 41% of families have remained in the program at least one year, and just over a quarter of families (26%) have remained in the program for at least two years. As of 2011, a total of 447 families participated in the 5-year graduation ceremony. Six-month and 1-year retention rates have increased this past year (2011 cohort) as did the 2-year retention rate (for 2010 cohort); these rates are the highest since 2004. This has been related to a rebound from the recession and reported improvement in program stability.

Figure 4. Program Retention Rates by Year of Program Entry

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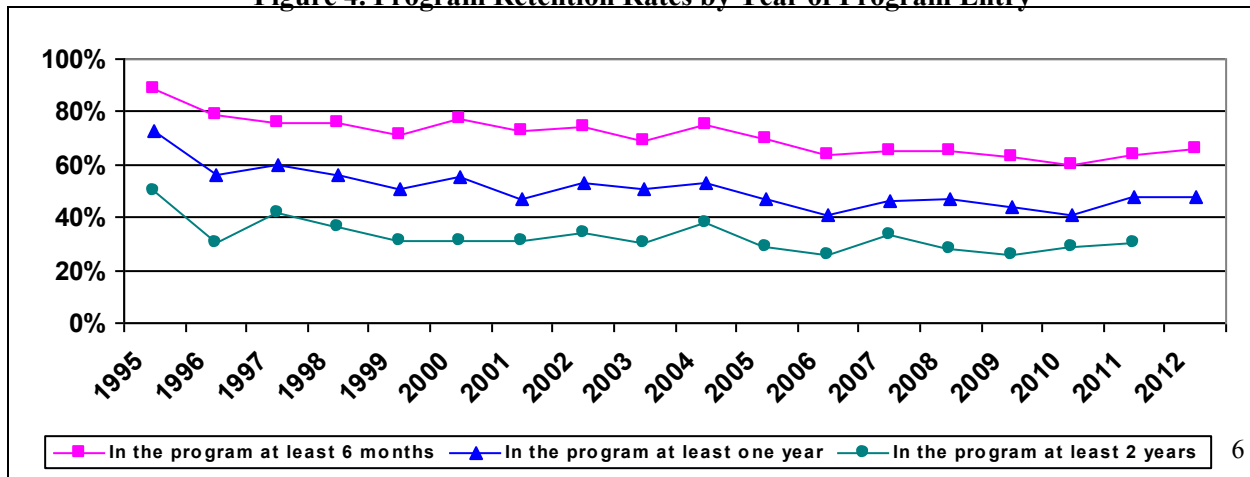
Retention Rates of NFN Family Cohorts by Entry Year and "Snapshot" of Families Served during 2013

Table 3. Retention Rates of NFN Home Visitation Families, Yearly Cohorts 2003 - 2008

All Parents	2003	2004	2005	2006	2007	2008
Cohort Total (N)	N = 362	N = 315	N = 477	N = 623	N = 691	N = 860
At least 6 Months	253	224	332	403	444	571
At least 1 Year	188	170	228	273	327	421
At least 2 Years	117	109	140	178	221	259
At least 3 Years	87	78	101	120	151	192
At least 4 Years	67	57	71	95	110	149
At least 5 Years	42	29	40	49	52	99
At least 6 Months	70%	71%	70%	65%	64%	66%
At least 1 Year	52%	54%	48%	44%	47%	49%
At least 2 Years	32%	35%	29%	29%	32%	30%
At least 3 Years	24%	25%	21%	19%	22%	22%
At least 4 Years	19%	18%	15%	15%	16%	17%
At least 5 Years	12%	9%	8%	8%	8%	12%

Retention rates are measured from calendar year to calendar year of program entry in NFN SPSS database.

Home Visiting services provide intensive parent education and support for up to five years. Yearly cohorts were determined annually by calendar year shown in Table 3. All families who enrolled from 2003 through 2008 were followed to determine if they were retained after six months, one year, and each consecutive year through five years. Retention rates were defined by the number of parents in each cohort who were still enrolled each following year, divided by the total number of parents in the cohort. Of these families (N=3,328) who had the opportunity to be in the program for five years, the average length of involvement was 20.6 months (SD = 20.7).

Table 4 displays a snapshot of the active participants during the 2013 calendar year (N = 2,181). Twenty - five percent of parents were active from one month through six months (the largest active group) and 17% were active from six months through 12 months throughout the program year. Twenty-four percent of families were active from 12 months through two years. Thirteen percent of parents were active for just over two years through three years, and 7% were active from three years through four year, in 2013. Seven percent of parents were active just over four years through five years, while 4% of parents were active over five years and graduated or were close to graduation. Sixty- eight parents graduated the NFN program in 2013 (see Table 17).

Table 4. Length of Involvement for Families Active during 2013	N=2181
Active thru 6 months	25%
Active 6 months to 12 months	17%
Active 12 months to 2 years	24%
Active 2 years to 3 years	13%
Active 3 years to 4 years	7%
Active 4 years to 5 years	7%
Active at least 5 years	4%

Note: 3% of families served during 2013 are not shown.

Change in Parenting Attitudes and Utilization of Community Resources Over Time, 2005-2013

In Table 5 we present outcome data on the Child Abuse Potential Inventory– Rigidity subscale (CAPI-R), a standardized self-report instrument which has been used to measure rigid parenting beliefs for all families who participated in NFN since 2005. Data on the CAPI-R were analyzed separately to compare entry scores for all mothers who completed one, two, three, four, and five years of program services and who had completed the CAPI-R for each year that they participated. Consistent with past reports (Damboise & Hughes, 2011) the scores indicate that families showed significant reductions in their risk for abuse/neglect in each annual analysis.

Table 5. Change in Rigid Parenting Attitudes for 1, 2 3, 4 and 5 Year Participants, 2005-2013

1 Year Capi-R (N=1328)	**Entry**	**1 Year**			
Rigidity	27.7	21.8			
2 Year Capi-R (N=560)	**Entry**	**1 Year**	**2 Year**		
Rigidity	27.1	21.8	19.5***		
3 Year Capi-R (N=240)	**Entry**	**1 Year**	**2 Year**	**3 Year**	
Rigidity	29.0	23.1	20.5	19.0***	
4 Year Capi-R (N=109)	**Entry**	**1 Year**	**2 Year**	**3 Year**	**4 Year**
Rigidity	31.5	27.3	24.8	20.7	22.8***
5 Year Capi-R (N=59)	**Entry**	**1 Year**	**2 Year**	**3 Year**	**4 Year**	**5 Year**
Rigidity	32.6	28.9	26.7	22.5	24.4	24.3**

* Significant at p<0.05, ** Significant at p<0.01, *** Significant at p<0.001 (repeated measures).

In Table 6, we present outcome data on the Community Life Skills (CLS) scale, an instrument that measures knowledge and use of community resources, for all families who have participated in NFN since 2004 (when the CLS was first introduced). The CLS is broken down into several subscales; transportation, budgeting, support services, support/involvement, interests/hobbies, and regularity/ organization/routines. Data on the total CLS were analyzed separately to compare entry scores for all mothers who participated in program services for one, two, three, four, and five years and who had completed the CLS for each year that they participated. Significant, positive changes on the CLS at each annual administration indicate families have increased knowledge and use of community resources.

Table 6. Change in Utilization of Community Resources for 1, 2 3, 4, and 5 Year Participants, 2005-2013

1 Year CLS (N=1962)	**Entry**	**1 Year**			
Total Score	24.0	26.0***			
2 Year CLS (N=909)	**Entry**	**1 Year**	**2 Year**		
Total Score	24.1	26.1	26.8***		
3 Year CLS (N=501)	**Entry**	**1 Year**	**2 Year**	**3 Year**	
Total Score	24.2	26.1	26.7	27.2***	
4 Year CLS (N=283)	**Entry**	**1 Year**	**2 Year**	**3 Year**	**4 Year**
Total Score	23.7	25.9	26.5	27.0	27.3***
5 Year CLS (N=137)	**Entry**	**1 Year**	**2 Year**	**3 Year**	**4 Year**	**5 Year**
Total Score	23.8	25.9	26.1	26.8	27.2	28.6***

* Significant at p<0.05, ** Significant at p<0.01, *** Significant at p<0.001 (repeated measures).

Section 2
Statewide NFN Annual Evaluation

Screening/enrollment, demographic characteristics, risk profiles, participation and retention rates, and program outcomes for NFN statewide (i.e., 38 program sites) are reported in Section 2. Note: Different N size for each time point is due to missing/unknown data.

Below is a summary of highlights:

Screening and Enrollment
- The total number of families screened for NFN services are 6,414 in 2011 to 6,058 in 2012 to 6,205 in 2013.
- Of the 3,725 families who screened at low-risk in 2013, 55% were offered Nurturing Connections phone support and referral services, and 42% of those offered, accepted services (N=866).
- Home visiting enrollment data in 2013 show that 86% of High-Risk mothers were offered services, 54% of those who were offered, accepted. Of those that accepted, 64% (N=739) followed through with the Kempe Family Stress Inventory and 94% of these families (N=695) families then went on to initiate home visiting services.

Demographic and Risk Profiles of Entering Families
- Data from the Kempe Family Stress Inventory indicate that NFN mothers are dealing with multiple and significant stressors in their lives, such as financial strains, relationship issues, poor mental health, substance abuse, and domestic violence.
- Data gathered by the home visitors at mothers' 2013 program entry showed that the majority (84%) of mothers are single, or never married when they enter the program. Thirty-eight percent of NFN mothers experienced severe maltreatment as children. Further, 33% of mothers are teenage mothers, 73% experience financial difficulties, 22% are socially isolated, and 17% of mothers have an arrest history.
- There has been an upward trend statewide in the rates of prematurity and low birth weight for NFN children over the past 3 years.

Participation and Retention Rates
- Similar to previous years, families received an average of two home visits per month.
- There was an increase in the rates of 6-month, 1-year, and 2-year retention of 2012 and 2011 cohorts in comparison with 2008, 2009, and 2010 cohorts .

Program Outcomes
- We report separate analyses for those who completed one year of services and for those who completed two years of services.
- Data on the Community Life Skills scale indicate families improve in connecting to others in the community and accessing both financial and social resources.
- Similarly, NFN mothers made statistically significant gains in life course outcomes during the course of their participation in the program. For those participating for two years, 84% of mothers had graduated from high school, 48% were employed full-time, and 65% were living independently of other family members.
- Mothers who participated in the program who initially averaged at or above the CAPI-R cut-off score (see formal explanation of cut-off scores on page 18), significantly reduced their rigid parenting attitudes after one and two years.

NFN Program Enrollment, Statewide Data, 2013

In this section, we provide enrollment data for those who screened at low-risk and those who screened at high-risk; as well as the percentage of each level of efforts for enrollment. Percentages are calculated based on the previous subscale.

Table 7. Disposition of NFN Families Identified as Low-Risk, Statewide Data, 2009-2013

	2009 N=4631	2010 N=3898	2011 N=4106	2012 N=3702	2013 N=3725
Offered Nurturing Connections	3095 (67%)	2740 (70%)	2689 (65%)	2329 (63%)	2044 (55%)
Accepted Nurturing Connections	1743 (56%)	1508 (55%)	1469 (55%)	1063 (46%)	866 (42%)

NFN staff offer the program to families during a face-to-face meeting (generally at the hospital or prenatal clinic), where they describe NFN services and voluntary parent involvement.

Disposition of Low-Risk Screens in 2013

In 2013, 3,725 (60%) parents out of 6,205 parents were identified at low-risk on the REID screen. Approximately 55% of those mothers were offered Nurturing Connections telephone support and referral services; of those offered, a total of 866 (42%) parents accepted services.

As shown in Table 7, Nurturing Connections acceptance rates have decreased by 13 percentage points from 2011 to 2013 (from 55% to 42%).

Disposition of High-Risk Screens in 2013

Table 8 provides the enrollment data for the past five years for families who screened at high-risk. The total number of families accepting Home Visiting has increased 3% from 2009 to 2013. Starting in 2009, the program enrollment strategy changed. This led to an increase in percentage of mothers initiated a first home visit; however, rates of mothers completing the Kempe Family Stress Inventory assessment decreased from 71% in 2009 to 64% in 2013.

In 2013, 2,480 parents were identified at high-risk on the REID screen, of whom 86% were offered home visiting services. Fifty-four percent of mothers who were offered home visiting services accepted services and slightly under two-thirds (64%) of those who accepted services were assessed using the Kempe. Ninety-four percent, or 695 parents, of those who were interviewed and assessed, began participation in the home visiting services.

Table 8 Disposition of NFN Families Identified as High-Risk, Statewide Data, 2009-2013					
	2009	**2010**	**2011**	**2012**	**2013**
Number Identified	**N=2610**	**N=1970**	**N=2308**	**N=2356**	**N=2480**
↳ Offered Home Visiting	2105 (81%)	1572 (81%)	2030 (88%)	2023 (86%)	2133 (86%)
↳ Accepted Home Visiting	1126 (54%)	938 (60%)	1144 (56%)	1214 (60%)	1157 (54%)
↳ Received Kempe Assessment	805 (71%)	645 (69%)	758 (66%)	824 (68%)	739 (64%)
↳ Initiated Home Visiting	747 (93%)	592 (92%)	743 (98%)	780 (95%)	695 (94%)
Offered Nurturing Connections	779 (30%)	562 (29%)	525 (23%)	529 (22%)	524 (21%)
Accepted Nurturing Connections	390 (50%)	312 (56%)	249 (47%)	248 (47%)	217 (41%)

Barriers to NFN Program Enrollment, Statewide Data, 2013

There are various reasons why families who are eligible for home visiting services are not offered services, such as:

- Programs are at capacity
- Unable to screen/have face-to-face contact with mothers in hospital
- Families have an open DCF case
- Families live outside of the catchment area
- Families speak a different language than NFN staff.

As shown in Table 9, the capacity of the home visiting program was full in slightly less than one third of the cases where home visiting was not offered to a high-risk family (32%). In these cases, home visitors were already conducting between 12-15 home visits per week and could not take any new families. Further, NFN staff could not get face-to-face contact with 26% of families. Either the mother was not available at time of screening and/or mothers give birth on the weekend when the NFN programs do not screen. An additional 16% of families were involved with DCF, and therefore not eligible for program services, and 8% of families lived in an area not covered by NFN services. Lastly, in 5% of cases, the family spoke a different language than the NFN staff. Of the families not offered home visiting, 34% were offered Nurturing Connections services, and 53% of those parents who were offered, accepted Nurturing Connections.

In 2013, 917 families were offered home visiting services but declined. As shown in Table 10, 35% of these families reported that they had enough support and another 32% were not sure if they wanted home visiting. Other reasons for which families did not accept home visiting services included families moving, not enough time for home visiting, and other household members not approving of services. Of the families who declined home visiting services, 45% were offered Nurturing Connections services, and 38% of parents offered Nurturing Connections also accepted services.

Table 9. High-risk Families Not Offered Home Visiting, 2013	N=347
Home visiting was full	28%
Unable to get face to face contact/family discharged from Hospital	23%
DCF involved	14%
Out of catchment area	7%
Language barrier	4%
Other	12%
Unknown	12%
High-risk families not offered HV but offered Nurturing Connections	83 (34%)
# families accepted NC	49 (53%)

Table 10. High-risk Families Offered Home Visiting But Did Not Accept, 2013	N=976
Family has enough support	33%
Family not sure if they wanted home visiting	30%
Other member of household does not approve	7%
No time for home visits	4%
Other	23%
Unknown	6%
High-risk families offered HV, did not accept, and as a result, offered Nurturing Connections	441 (45%)
# families accepted NC	168 (38%)

Risk Profiles: Mothers' Kempe Scores, Statewide Data, 2013

The Revised Early Identification (REID) screen is used to determine eligibility for home visiting services. The Kempe Family Stress Inventory (Kempe) (administered after family accepts services and before home visiting begins) provides a more nuanced profile of participating families.

Total Kempe scores (low, moderate, high, severe risk) are provided by year in Table 11 for the past 4 years. These data show a slight decreased in the overall level of stress from year to year, with the   highest stress shown in 2010 mothers.

As shown in Table 12, the highest rates of stressors for incoming mothers in 2013 were indicated on items of exposure to Childhood History of Abuse/ Neglect (38%) and Multiple Stresses (35%). Items included in the high and severe range on the Childhood History of Abuse/ Neglect subscale include responses such as having been severely beaten, sexually abused, or raised by more than two families. Scoring in the high and severe range on the Multiple Stresses subscale indicates having experienced financial stressors, interpersonal relationship stressors, and significant life changes.

Slightly less than a fifth of mothers scored in the severe range on the Low Self-Esteem/Social Isolation/Depression subscale (19%) and on the History of Crime, Substance Abuse, Mental Illness subscale (18%).

Table 11. Mothers' Total Scores on the Kempe Family Stress Inventory, Statewide Data, 2010– 2013	2010 N=645	2011 N=669	2012 N=680	2013 N=526
Low Risk (0-20)	34%	35%	41%	45%
Moderate Risk (25-35)	36%	37%	33%	33%
High-risk (40-60)	28%	25%	23%	21%
Severe Risk (65-100)	3%	3%	2%	1%

Table 12. Mothers' Scores on the Kempe Family Stress Inventory Statewide Data, 2013	0 Low	5 Moderate	10 High/ Severe
Multiple Stresses (N=524)	25%	40%	35%
Childhood History of Abuse/Neglect (N=524)	45%	17%	38%
Low Self-esteem/ Social Isolation/ Depression (N=525)	32%	49%	19%
History of Crime, Substance Abuse, Mental Illness (N=523)	57%	25%	18%
Potential for Violence (N=516)	83%	7%	10%
Child Unwanted/ Poor Bonding (N=521)	24%	71%	5%
Unrealistic Expectation of Child (N=519)	65%	33%	2%
CPS History (N=520)	92%	4%	4%
Harsh Punishment (N=502)	91%	8%	1%
Negative Perception of Child (N=473)	89%	9%	2%
Mean total score (N=526)	26.3		

Families at Acute Risk

Within the NFN population of high-risk families, there is a subgroup of participants who are experiencing particularly acute levels of risk. NFN policy defines a family facing acute stress as one that is experiencing an mental health problem, substance abuse, or interpersonal violence. When a family is experiencing acute stress, the NFN clinical supervisor and home visitor attempt to link the family with appropriate services and, based on the family's responsiveness with those additional services, decide if the family is still appropriate for NFN home visiting services. In 2013, 8% of families were experiencing acute stress when they entered home visiting (data not shown here). This is relatively similar to rates of acute stress in 2012 (7%) and in 2011 (7%). At program entry, families experiencing acute mental health problems was noted most often, followed by substance abuse, then interpersonal violence. Further, 8.3% of active NFN families (N=2181) were experiencing acute stress at some point in the 2013 year.

Home Visitation Families at Program Entry
Statewide Data, 2013

Home visitors document families' demographic, household, and social characteristics within the first month of program services. For each characteristic, the total number of mothers for whom this information is recorded is provided in parentheses, and the percentage of mothers in each category are out of the N for each item (not total enrolled). This also applies to Hartford and New Haven reported characteristics.

Mothers' Household and Demographic Information (Table 13)
- 41% of enrolled NFN mothers (N=746) were screened prenatally in 2013, similar to 2012.
- As in former years (Damboise & Hughes 2011), NFN families are racially diverse with Hispanic families representing the largest racial/ethnic group (47%), followed by whites (23%), black (21%), and multiracial or other (9%) such as West Indian or Asian.
- 30% of participants were living with their mothers.
- Fathers/partners were living in 44% of the households.
- As reported by the mothers at program entry, 67% of fathers (residing with mother of the baby or not) were very involved with their NFN child and another 11% were somewhat involved.

Mothers' Social/Risk Factors (Table 14)
- Home visitors considered 73% of mothers to have financial difficulties and 22% to be socially isolated at time of program entry.
- 17% of mothers in the Home Visiting program had an arrest history.
- 10% of households received Temporary Assistance for Needy Families (TANF) at program entry.
- 32% of mothers received Food Stamps at program entry.

Mothers' Pregnancy & Birth Information (Table 15)
- Health data indicate that 7% of the mothers smoked cigarettes during pregnancy, a slight decrease from the 2011 cohort (10%).
- 11% of NFN children were born with serious medical problems in 2013, a slightly lower percentage to the 2011 cohort entering the NFN program (13%).
- 14% of NFN children were born premature, which is higher than the rate of 11% in 2011 and the CT State rate of 10.5% (*Connecticut Vital Statistics Report,* 2007) .
- 16% of NFN children had a low birth weight, which is nearly twice the state rate of 8.0% (*Connecticut Office of Vital Statistics*, 2008-2010), and represents an increase from 2011 (12%).

Table 13. Household, Statewide Data, 2013

Enrolled Families (N=746)	
Prenatal Screens	41%
Mother's Marital Status (N=638)	
Single, never married	84%
Married	14%
Divorced, separated, widowed	2%
Mother's Race/Ethnicity (N=579)	
White	23%
Black	21%
Hispanic	47%
Other/ Multiracial	9%
Mother Age at Baby's Birth (N=555)	
Under 16 years	4%
16-19 years	29%
20-22 years	27%
23-25 years	15%
26 years and older	26%
Median Age	21 years
Living in Household (N=667)	
Maternal Grandmother	30%
Father	44%
Father's Involvement With Child (N=405)	
Very involved	67%
Somewhat involved	11%
Sees child occasionally	6%
Very rarely involved	1%
Does not see baby at all	15%

Table 14. Mothers' Social Problems/Risk Factors, 2013

Mother's Social Isolation, Arrest Histories, and Financial Difficulties	
Mothers socially isolated (N=577)	22%
Mothers with arrest history (N=593)	17%
Mothers with financial difficulties (N=599)	73%
Households receiving TANF (N=645)	10%
Mothers receiving food stamps (N=645)	32%

Table 15. Mothers' Pregnancy & Birth Information, 2011 - 2013

	2011 N= 632	2012 N=626	2013 N=525
Mother smoked cigarettes during pregnancy	10%	8%	7%
Mother drank alcohol during pregnancy	2%	4%	2%
Mother used illicit drugs during pregnancy	5%	5%	4%
Child born with serious medical problems	13%	13%	11%
Born Prematurely (before 37 weeks gestation)	11%	13%	14%
Born Low Birth weight (under 5 lbs 8 oz)	12%	14%	16%
Child has a pediatrician	98%	97%	96%

Education and Employment Rates at Program Entry
Statewide Data, 2013

Table 16. Mothers' Life Course, Statewide, 2013	18 years and younger	19 years and older
Mother Education	(N=115)	(N=367)
Eighth grade or less	4%	4%
More than 8th grade, < high school	67%	16%
High school degree or GED	23%	35%
Vocational training or some college	4%	34%
College degree or graduate work	2%	11%
Mother Enrolled in School	(N=114)	(N=380)
Yes	54%	12%
Employment Status at program entry	(N=113)	(N=368)
Mother employed	13%	35%
Full-time	3%	14%
Part-time/ occasional work/ working more than one job	9%	15%
Employed Prior to Pregnancy	(N=110)	(N=343)
Yes	28%	64%

Mothers' Life Course Information

Mothers' education and employment data are presented in Table 16, separating mothers who were 18 years or younger when they had their child from those who were age 19 years and older. These data were separated due to different expectations in employment and education based on mother's age.

- 71% of the younger cohort of mothers had less than a high school education at program entry, and a total of 54% of young mothers were currently enrolled in school. Specifically, of the 82 young mothers who had not completed high school, over two thirds or 68% were enrolled in middle school, high school, or a GED program. In comparison, 20% of mothers in the older cohort had not completed high school and of those mothers older than 19, 12% were enrolled in school at program entry.
- 28% of the younger cohort of mothers were employed prior to pregnancy, and 13% of these mothers were employed when they entered NFN. For the older cohort, 64% were employed prior to pregnancy and only 35% of these older mothers were employed at program entry.

Home Visitation Participation, Statewide Data, 2013

Table 17. Program Participation Rates, 2009-2013

Frequency of Home Visits & Program Participation	2009 N=1997	2010 N=1897	2011 N=2034	2012 N=2275	2013 N=2181
Average # of attempted home visits	2.8	2.9	2.9	2.9	2.8
Average # of completed home visits	2.1	2.2	2.2	2.3	2.2
Average # of office/out of home visits	0.1	0.1	0.1	0.1	0.1
Average # of NFN social events attended	0.1	0.1	0.1	0.1	0.1
Total # of visits completed	2.3	2.4	2.4	2.5	2.4

Fig 5. Six-month, 1-year, and 2-year Program Retention Rates by Year of Program Entry
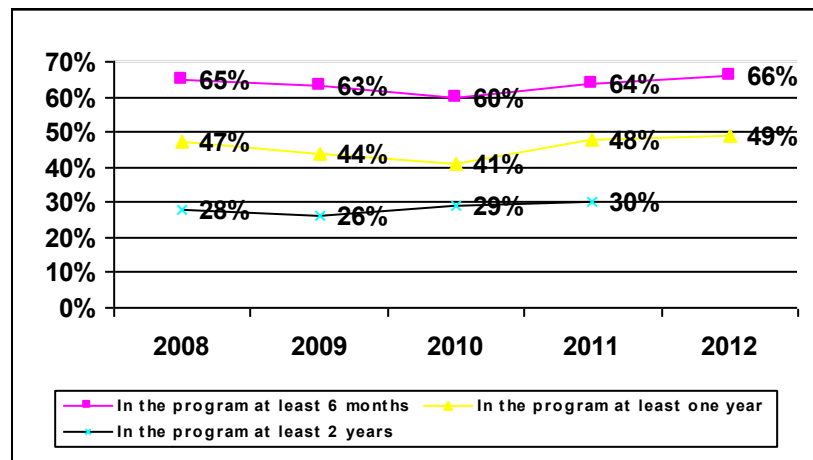
Table 18. Reasons Families Leave the Program, 2009-2013

Reasons Families Left NFN Home Visiting	2009 N=846	2010 N=779	2011 N=784	2012 N=653	2013 N=906
Family moved out of service area	17%	19%	16%	16%	14%
Unable to locate mother	37%	34%	33%	32%	30%
Family decided to discontinue services	15%	13%	13%	16%	19%
Working or in school full-time, no time for home visits	13%	14%	14%	14%	11%
Goals were met/family graduated	7%	8%	10%	10%	13%
Baby removed from home by DCF	2%	2%	2%	2%	1%
Discharged, family was not appropriate for the program	1%	2%	<1%	1%	2%
Other family member did not approve of services	1%	<1%	<1%	<1%	1%
Home visitor left the program	3%	4%	4%	0%	0%
Other	5%	3%	8%	8%	9%

Program Participation Rates

The majority of services take place in the home and, on average, families receive 2 home visits per month out of an attempted 3, as shown in Table 17. Rates of program participation have remained stable over the past five years.

Program Retention Rates

Six-month, one-year, and two-year retention rates are shown in Figure 5 by the year families enter the program. For families who entered the program in 2012, 66% remained in the program for at least six months, and 49% remained in the program at least one year, an overall increase from the previous 5 year cohorts. Regarding the two-year retention rate beginning with the 2011 cohort, 30% of families entering the program participated for two years, a slight increase from the 2008 cohort. Of significance, there were on average 225 more active families between 2012 and 2013 than in 2011. With the rebound in the recession, there has been reported improvement in program stability and, in turn, this has been related to an increase in retention rates. Finally, of all the families who had the opportunity to be in the program for five years, the average length of involvement is approximately 21 months.

Reasons Families Leave NFN

As shown in Table 18, the reasons why families ended services in 2013 were:

- Over two-fifths of families (44%) moved out of the service area or the staff were unable to locate the families at their known address.
- 19% of families made a decision to leave the program for unspecified reasons.
- 11% of families were no longer available for services because they were working or in school.
- 13% of families met their personal goals or the family graduated from the program. Of those 118 families, 68 families (58%) graduated from home visiting services after five years.

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Outcomes: Change in Mothers' Utilization of Community Resources, Statewide Data, 2013

The Community Life Skills (CLS) scale is a standardized self-report instrument that measures knowledge and use of resources in the community. The CLS produces an overall score as well as scores on six subscales: Transportation, Budgeting, Support Services, Support Involvement, Interests/Hobbies, and Regularity/Organization/Routines. The overall (total) score on the CLS ranges from 0-33, with higher scores indicating more effective use of community resources.

- As shown in Table 19, entry scores on the Total CLS scale and each of the subscales were analyzed separately for mothers who participated for a total of one year (N = 281) and two years (N = 127).
- Analyses for both one and two year participants showed statistically significant changes on the Total scale and on all of the subscales after one and two years of program participation, respectively.
- Statewide NFN mothers have become more knowledgeable on available resources and how to access them and are more stable in terms of daily routine. This, in turn, should result in a reduction in the levels of personal/ familial stress.

Table 19. Change in Mean Scores on the Community Life Skills Scale for 1 & 2 Year Participants			
Community Life Skills Scale 2012-2013	**Program Entry**	**1 Year**	
Total (N = 281)	25.1	27.0***	
Transportation	3.3	3.5***	
Budgeting	3.6	4.0***	
Support services	4.4	4.7***	
Support/Involvement	4.7	5.1***	
Interests/Hobbies	2.8	2.9**	
Regularity/Organization/ Routines	6.8	7.1***	
Community Life Skills Scale 2011-2013	**Program Entry**	**1 Year**	**2 Year**
Total (N = 127)	25.0	27.1	28.2***
Transportation	3.3	3.5	3.6***
Budgeting	3.8	4.1	4.4***
Support services	4.5	4.6	4.8***
Support/Involvement	4.6	5.3	5.4***
Interests/Hobbies	2.8	2.9	3.1**
Regularity/Organization/ Routines	6.7	7.2	7.3***
*p<.05 **p<.01 ***p<.001			

Change in Mothers' Life Course Outcomes, Statewide Data, 2013

Home visitors complete a questionnaire measuring mother's life course outcomes at entry and then once per year (up to 5 years) for each family active in the program. As shown in Table 20, change in each of the life course outcomes was analyzed separately for one year (2012-2013) and two years (2011-2013) (in a nonparametric Cochran Q Test) for mothers who completed the questionnaire each year they participated.

Education, Employment, Independent Living
- Mothers who received one year of NFN services made significant gains in education, with 70% earning at least a high school degree at 1-year compared to 63% at entry, and in obtaining employment (25% at entry to 42% at one year). For those who completed two years of NFN services, employment, education, and independent living significantly increased: 48% were employed compared to 24% at program entry and 15% (were employed full-time compared to 9% at entry), 84% obtained a least a high school education compared to 71%, and 65% were living independently of family compared to 39%.

Social Isolation
- Home visitors' assessed significantly fewer mothers as socially isolated after two years (8%) as compared to program entry (28%). The decrease for those completing one year was also significant.

Financial Difficulties
- Use of Food Stamps increased significantly for 1 and 2-year participants and use of TANF increased for families for 1-year participation, while the percentage experiencing financial difficulty remained unchanged for those participating for one year and decreased somewhat for those participating for two years (from 73% to 58%)

These data indicate that although mothers are receiving more education and are better employed, they continue to struggle financially. However, this is not surprising given the focus of NFN program is on socially and economically marginalized populations and families are connected to financial resources as needed.

Table 20. Change in Mothers' Life Course Outcomes for 1 & 2 Year Participants, Statewide Data			
Mothers' Living Circumstances: 2012-2013	**N**	**Entry**	**1 Year**
Mothers with at least a high school education	259	63%	70%**
Mothers employed	251	25%	42%***
Mothers employed full-time	282	9%	15%**
Mothers enrolled in school	268	25%	25%
Mothers experiencing financial difficulties	238	66%	66%
Mothers socially isolated	240	25%	15%**
Mothers living independently of family	259	40%	58%
Mothers receiving TANF	268	8%	13%*
Mothers receiving Food Stamps	263	28%	4%***
Mothers receiving WIC	263	76%	80%

Mothers' Living Circumstances: 2011-2013	N	Entry	1 Yr	2 Yr
Mothers with at least a high school education	113	71%	79%	84***
Mothers employed	115	24%	38%	48%***
Mothers employed full-time	140	11%	17%	29%***
Mothers enrolled in school	123	28%	25%	27%
Mothers experiencing financial difficulties	115	73%	65%	58%*
Mothers socially isolated	109	28%	14%	8%***
Mothers living independently of family	114	39%	58%	65%***
Mothers receiving TANF	119	10%	12%	13%
Mothers receiving Food Stamps	114	28%	40%	43%**
Mothers receiving WIC	114	76%	79%	78%
*p<.05 **p<.01 ***p<.001				

Change in Mothers' Attitudes & Potential for Abuse, Statewide Data, 2013

Child Abuse Potential Rigidity Subscale

   The Child Abuse Potential Inventory (CAPI) is a standardized self-report instrument designed to measure someone's potential to abuse or neglect a child. We use the Rigidity Subscale of the CAPI (CAPI-R) to assess changes in rigid parenting attitudes over time. Mothers who have less rigid expectations of their children are less likely to treat their children forcefully. The average score for a normative population on the CAPI-R is 10.1 with a standard deviation of 12.5. The cut-off score on the Capi-R is 30, which indicates extreme risk for child maltreatment and poor parenting. Only 5% of the general population scoring at or above this score. A significant decrease on the Rigidity subscale reveals that a mother is less likely to feel that her children should, for example, *always* be neat, orderly, and obedient

• In 2013, NFN mothers came into the program with an average score of 27.8 (N=617), more than one standard deviation above the normative mean, indicating high-risk for child maltreatment.

• As shown in Table 21, mothers who participated in the program for one and two years made statistically significant improvements on the Rigidity subscale indicating meaningful reductions of risk for children maltreatment.

• While only 5% of the general population scores at or above the cut-off of 30, 45% of the 2013 NFN cohort (N=727) did at program entry.

   We report separate analyses for mothers who completed one year of services and those who completed two years of services on each subgroup, those who scored at or above the cut-off score, and for those who scored below the cut-off score at program entry.

• As shown in Table 22, there were significant decreases in CAPI-R scores for mothers who completed one year of services and those who completed two years of services. Scores also dropped below the cut the cut-off score. Conversely, there were no significant decreases in 2-year change scores for those who were below the cut-off at program entry.

Table 21. Change in Means Scores on the Child Abuse Potential Inventory Rigidity Subscale for 1 and 2 Year participants, Statewide Data, 2013

CAPI Rigidity Scores 2012-2013 (N=280)	Entry	1 Year	
Rigidity	27.8	19.5***	
CAPI Rigidity Scores 2011-2013 (N=139)	Entry	1 Year	2 Year
Rigidity	21.9	17.1	18.9***

* p<.05   ** p<.01   *** p<.001

Table 22. Change in Means Scores on the Child Abuse Potential Inventory Rigidity Subscale for 1 and 2 Year Participants by Entry CAPI-R Score, Statewide Data, 2013

CAPI Rigidity 2012-2013	Scored Below Cut-Off at Entry (N=162)		Scored At or Above Cut-Off at Entry (N=118)	
Rigidity	Entry	1 Year	Entry	1 Year
Mean Score	15.4	12.8**	44.7	28.7***

CAPI Rigidity Scores 2011-2013	Scored Below Cut-Off at Entry (N=101)			Scored At or Above Cut-Off at Entry (N=37)		
Rigidity	Entry	1 Year	2 Year	Entry	1 Year	2 Year
Mean Score	14.8	13.0	12.1	41.9	28.5	26.5***

* p<.05   ** p<.01   *** p<.001

Section 3
NFN Program to Scale in Hartford & New Haven

In 2005, Hartford was targeted as the first city in Connecticut to "go to scale"- that is, to screen all first-time mothers for home visitation services in the city. Accordingly, the NFN home visitation program was expanded from two to ten program sites within Hartford. At the end of 2007, New Haven was the second city to go to scale, from three to eight program sites (now seven sites, see Table 1). Taking the program to scale in urban communities is an attempt to target parenting practices among vulnerable families who often reside in resource-deprived neighborhoods. This section reports on the progress of the ten program sites in Hartford and the seven program sites in New Haven. In these sections, enrollment, descriptive, and outcome data are examined for high-risk families who received home visitation. Where relevant, data from these two urban areas are compared with statewide data on measures. This is done to high-light differences in demographics which may explain differences in family participation or out-comes.

Figure 6. Enhanced Program Services in Hartford and New Haven
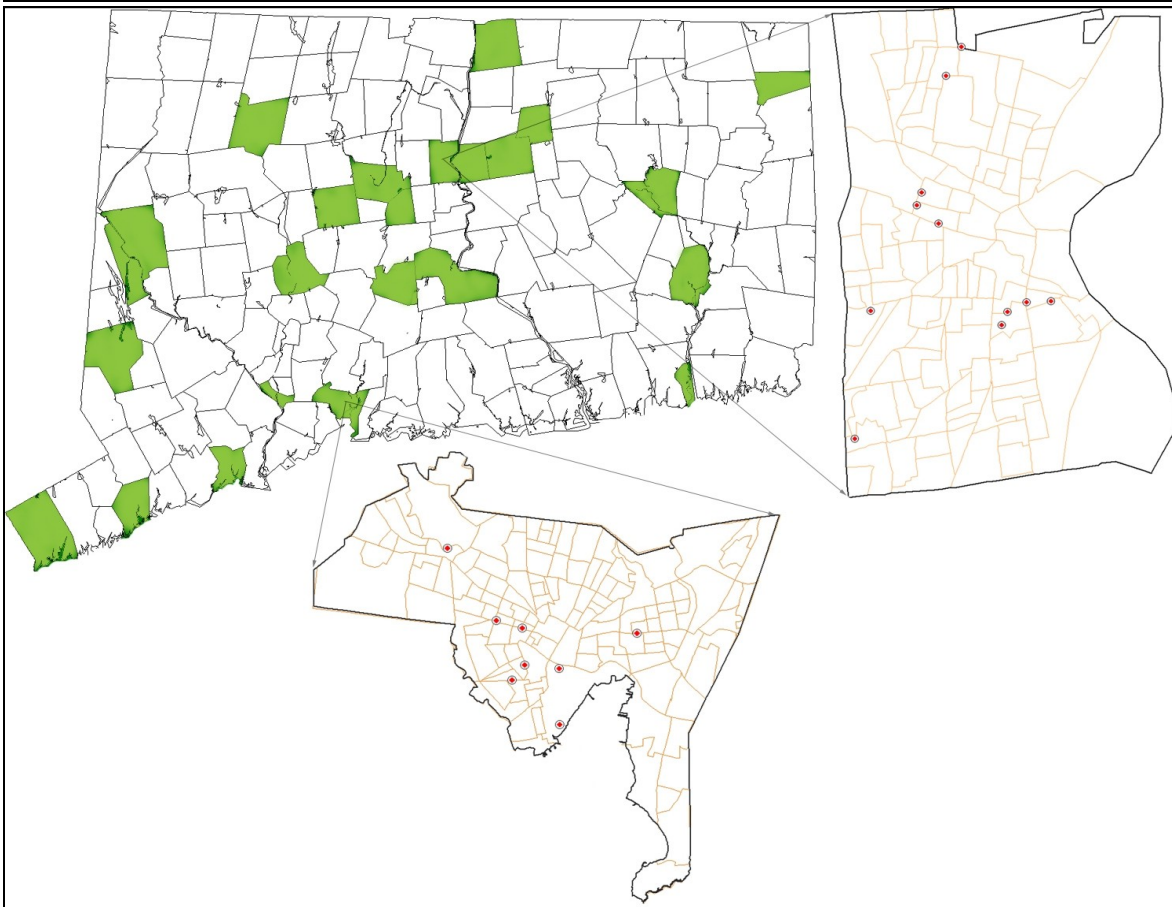
2013 Hartford Data Analysis: Summary of Key Findings

In this next section, enrollment, demographic and risk characteristics, participation and retention rates, and outcome data are examined for families who received home visitation in NFN sites of Hartford, CT. Note: Different N size at each time point is due to missing/ unknown data.

Below is a summary of highlights:

Program Capacity and Enrollment of Families
- In 2013, 1,970 first-time mothers were screened for risk in Hartford and 1,143 (58%) of these first-time mothers were identified at low-risk for poor parenting. Thirty-six percent of these mothers were offered Nurturing Connections phone support and referral services.
- Of the 1,970 first-time mothers screened in 2013, 827 (or 42%) were identified at high-risk for poor parenting. Of these mothers, 642 were offered home visiting and 190 (30%) initiated services.

Demographic and Risk Profiles of Entering Families
- In 2013, as measured by the Kempe Family Stress Inventory, Hartford mothers rated highest on stress factors related to their previous histories of abuse/ neglect and multiple stresses related to finances and relationships.
- Reported race and ethnicity of mothers entering the NFN Hartford sites in 2013 (pp. 23) are disproportionate to the statewide NFN population (pp. 13).
- Rate of fathers who live in participating households in Hartford are comparable to statewide rates (48% in Hartford compared to 44% statewide), as are rates of fathers at least somewhat involved with their children (76% in Hartford versus 78% statewide).
- The rates of premature births (below 37 weeks of gestation) for enrolling mothers in Hartford (20%) was over the statewide birth outcomes (14%).

Participation and Retention Rates
- Similar to previous years, Hartford families received an average of 2.3 home visits per month out of an attempted 2.8 in 2013.
- In 2013, 67% of families remained in the program for at least six months, 48% remained in the program for at least one year, and 28% remained for at least two years. These data show a gradual increase in the 6-month and 1-year retention rates since 2009, and a steady 2-year retention rate.

Hartford NFN Program Outcomes
- Consistent with NFN participants statewide, Hartford mothers showed significant increases in their use of community resources after six months, one year, and two years. In addition, after six months and after one year of enrollment, significant change was seen in the specific subscales of support/ involvement, support/ services, and regularity/ organization/ routine. After two years of program participation, significant improvement was seen in the areas of budgeting and accessing support/ involvement subscales.
- Mothers who scored at or above the CAPI-R cutoff showed significant decreases in rigid parenting beliefs after six months and one year. This is comparable to the statewide NFN decreases. Although scores decreased after two years, the difference in scores were not significant in Hartford NFN, which may be attributed to lower rates in measure completion (i.e., more missing data with the Hartford subgroup).

High-Risk Families and Enrollment in NFN, Hartford 2013

In this section, we provide enrollment data for those who screened at low-risk (and participated in Nurturing Connections) and those who screened at high-risk (and participated in home visiting services) at the Hartford sites in 2013.

Screening

As shown in Table 23, there were a total of 1,970 screens completed at the Hartford sites in 2013, which represents 32% of all screens completed statewide. In Hartford, 58% or 1,143 families screened at low-risk; of these, 36% or 415 families were offered Nurturing Connections phone support and referral services, and of those 166 (40%) families accepted. Of the instances in which Nurturing Connections services were not offered in 2013, approximately 39% of the time the program was at capacity, 25% of the time, nurturing connections coordinators couldn't reach mom, and 20% of the time the family lived outside the catchment area (data not shown here).

As shown in Table 24, of the 1,970 screens completed in Hartford in 2013, 827 (42%) were identified as high-risk. Of these high-risk families, 78% or 642 families were offered home visiting services, and of those offered, 30% or 190 families accepted and initiated services. With higher rates of families identified as High-Risk in 2013 (827 families) compared to 2012 (515 families) and 2011 (587 families), more families initiated services in Hartford in 2013 (190 families) as compared to 2012 (163 families), but fewer than in 2011 (216 families).

Table 23. Screening in Hartford, 2013	
Total # of screens	1,970
# Low Risk	1,143
Offered Nurturing Connections	415 (36%)
Accepted Nurturing Connections	166 (40%)
# High-risk	827
Offered Home Visiting	642 (78%)
Accepted Home Visiting	341 (53%)
Received Kempe Assessment	284 (83%)
Initiated services	190 (67%)

Table 24. Disposition of Families Identified as High-risk, Hartford Data, 2011-2013			
	2011 (N=1772)	**2012 (N=1391)**	**2013 (N=1970)**
# of Positive Screens	587	515	827
Offered HV	469 (80%)	463 (90%)	642 (78%)
Initiated services	216 (46%)	163 (47%)	190 (30%)

Risk Profiles: Hartford Mothers' Scores
on the Kempe Inventory, 2013

2013 Hartford Mothers' Kempe Scores on Individual Items

The Kempe Family Stress Inventory (Kempe) is scored across 10 items, with each item scored either 0 (no/low risk), 5 (moderate risk), or 10 (severe risk), to indicate the presence and severity of past and current stressors. Each of these items includes a larger set of criteria from which judgments are made, and these criteria provide a much better description of stress; we report on these data for families in Hartford who scored in the severe range focusing on items with the highest rates of severe stress:

- *Multiple Stresses:* 38%percent of mothers completing this subscale scored in the severe range . Of these mothers, 61% (20) reported financial concerns as a source of major stress, 58% (20) reported their living situation as stressful, while 46% (15) experienced frequent moves and 24% (8) experienced multiple separations and/or threats of divorce.

- *Childhood History of Abuse/Neglect:* 33% of mothers scored in the severe range on this subscale. Of these mothers, 46% (18) were removed from their home or were abandoned as children, 46% (18) were raised by more than two families, 33% (13) were raised in a family with at least one alcoholic or drug addicted parent, while 28% (11) were raised by one or more families but with no nurturing parent model and 21% (8) of mothers have histories of running away from home.

- A sizeable percentage of mothers scored as moderate on other Kempe subscales (Low Self-esteem/ Social Isolation/ Depression, Child Unwanted/ Poor Bonding, and Multiple Stresses), which indicate additional concerning scores of family stress and risk for child maltreatment and/ or parenting difficulties.

Families at Acute Risk

As described earlier, according to NFN policy, a family that is experiencing acute stress is one that is facing an mental health problem, substance abuse, or interpersonal violence. In Hartford in 2013, 9% of incoming mothers were classified as experiencing acute stress, which is proportionate to the enrolling mothers reported statewide. Further, in 2013, 6.6% of participating active mothers in Hartford (N=519) were identified by program staff as experiencing acute stress at some point during the year. This rate is slightly lower than the 8.3% reported for all active mothers statewide this year.

Table 25. Hartford Mothers' Kempe Scores, 2013 (N=179)	0 Low	5 Moderate	10 Severe
Multiple Stresses (N=117)	25%	47%	28%
Childhood History of Abuse/Neglect (N=117)	60%	8%	33%
History of Crime, Substance Abuse, Mental Illness (N=116)	63%	28%	10%
Low Self-esteem/ Social Isolation/ Depression (N=117)	21%	61%	18%
CPS History (N=117)	87%	4%	9%
Potential for Violence (N=114)	83%	9%	9%
Child Unwanted/ Poor Bonding (N=115)	37%	59%	4%
Unrealistic Expectation of Child (N=115)	69%	28%	4%
Harsh Punishment (N=117)	96%	3%	1%
Negative Perception of Child (N=113)	95%	5%	0%

Home Visitation Families at Program Entry
Hartford Data, 2013

Family and Household Data (Table 26)

The reported race/ ethnicity of mothers enrolled in 2013 in Hartford NFN sites is disproportionate to the distribution of race/ethnicity in both NFN statewide and Hartford (Census Bureau, 2010).

• Hispanic mothers are overrepresented in Hartford NFN sites (64%) compared to 47% in statewide NFN and 43% in Hartford. 22% of mothers in Hartford NFN are black compared to 21% ins NFN state-wide, but this is disproportionate to city of Hartford (39%). White mothers (6%) in Hartford NFN sites are underrepresented compared to NFN (23%), and in Hartford (16%) (Census Bureau, 2010).

• 42% of participating Hartford mothers were screened prenatally, compared to 41% NFN mothers statewide.

• 87% of Hartford NFN mothers were single/never married, compared to 84% NFN mothers statewide.

• Median age at child's birth was 20 years, one year less than NFN mothers statewide median age (21 years old).

• 31% percent of participating mothers were living with their mother in Hartford NFN households compared to 32% of NFN mothers statewide and slightly less fathers were living in Hartford NFN households (25%) compared to NFN mothers statewide (30%).

• Rates of father involvement in Hartford NFN sites were slightly lower than statewide NFN sites (76% vs. 81% at least somewhat involved, respectively).

Financial and Social Risk Factors (Table 27)

• 78% of mothers had financial difficulties as reported by the home visitor (higher than 71% statewide).

• Home visitors perceived 18% of Hartford mothers to be socially isolated, comparable to 22% statewide.

• 16% of Hartford mothers had an arrest history, a comparable rate to NFN mothers statewide (17%).

• More mothers were receiving food stamps in Hartford (46%) compared to statewide (32%).

Table 26. Household Information, Hartford Data, 2013

Enrolled Families (N=193)	
Prenatal Screens	42%
Mother's Marital Status (N=156)	
Single, never married	87%
Married	11%
Divorced, separated, widow	2%
Mother's Race/Ethnicity (N=126)	
White	6%
Black	22%
Hispanic	64%
Other (includes multi-racial)	8%
Mother age at Baby's Birth (N=125)	
Under 16 years	8%
16-19 years	33%
20-22 years	30%
23-25 years	14%
26 years and older	16%
Median Age	20 y.o.
Living in Household (N=158)	
Maternal Grandmother	25%
Father	48%
Father's Involvement with Child (N=89)	
Very involved	58%
Somewhat involved	18%
Sees child occasionally	9%
Very rarely involved	1%
Does not see baby at all	14%

Health Related Risk Factors (Table 28)

• 17% of NFN children were born with serious medical problems, 20% were born premature, and 13% with low birth weight. These rates have uniquely increased from previous years.

• Of significance, the rate of premature births in Hartford in 2013 (20%) is lower than the NFN statewide percentage (14%).

• The rate of children born with low birth-weight (13%) is comparable to the state NFN rate of 16%.

Table 27. Hartford Mothers' Social Isolation, Arrest Histories & Financial Difficulties, 2013

Socially isolated (N=143)	18%
Arrest history (N=158)	16%
Financial difficulties (N=146)	78%
Receiving TANF (N=158)	16%
Receiving food Stamps (N=158)	46%

Table 28. Pregnancy & Birth Information, Hartford Data, 2011-2013

Health Related Risk Factors	2011 N=130	2012 N=116	2013 N=97
Mother smoked cigarettes during pregnancy	4%	3%	3%
Mother drank alcohol during pregnancy	3%	2%	1%
Mother used illicit drugs during pregnancy	5%	3%	3%
Child born with serious medical problems	14%	6%	17%
Premature Birth (before 37 weeks gestation)	10%	9%	20%
Born Low Birth Weight (under 5 lbs 8 oz)	9%	8%	13%
Child has a pediatrician	98%	89%	88%

Education and Employment Rates at Program Entry
Hartford Data, 2013

Table 29. Mothers' Life Course, Hartford Data, 2013		
Mother Life Course Indicators	**18 and younger**	**19 and older**
Education	(N=31)	(N=80)
Eighth grade or less	10%	4%
More than 8th grade, < high school	68%	24%
High school degree or GED	23%	38%
Some vocational training/college	0%	29%
College degree or graduate work	0%	0%
Enrolled in School	(N=31)	(N=81)
Yes	52%	19%
Employment Status	(N=30)	(N=80)
Mother employed	10%	31%
Full-time	0%	13%
Part-time job or occasional work	10%	12%
Employed Prior to Pregnancy	(N=29)	(N=80)
Yes	24%%	56%

Hartford NFN 2013:
Mothers' Life Course Information

Mothers' education and employment data are presented in Table 29, separating mothers who were 18 years or younger when they had their child from those who were 19 and older, due to different expectations of employment and education based on mother's age.

• 78% percent of the younger cohort of mothers had less than a high school education at program entry. Of the 24 mothers who had not finished high school at program entry, 15 mothers were currently enrolled in school.

• The education level of the older cohort in Hartford differs from the level of education the older cohort had statewide: 28% had less than a high school degree versus 20% statewide; and 38% had some post secondary education in Hartford, similar to statewide population (35%).

• Rates of employment for the younger cohort of Hartford mothers (10%) was lower than employment rates for the younger cohort of statewide mothers (31%).

• Between Hartford NFN and NFN statewide, rates for employment of the older cohort were similar, 31% and 35% respectively.

Home Visitation Participation, Hartford Data, 2013

Table 30. Hartford Program Participation, 2011 - 2013			
Frequency of Home Visits	2011 N=498	2012 N=533	2013 N=518
Average # of attempted home visits	2.9	2.9	2.8
Average # of completed home visits	2.1	2.3	2.3
Average # of office/out of home visits	0.1	0.1	0.1
Average # of NFN social events attended	0.1	0.1	0.1
Total # of visits completed	2.3	2.5	2.5

Figure 7.
Six-Month, 1-Year, and 2-Year Program Retention Rates by Year of Program Entry, Hartford Data
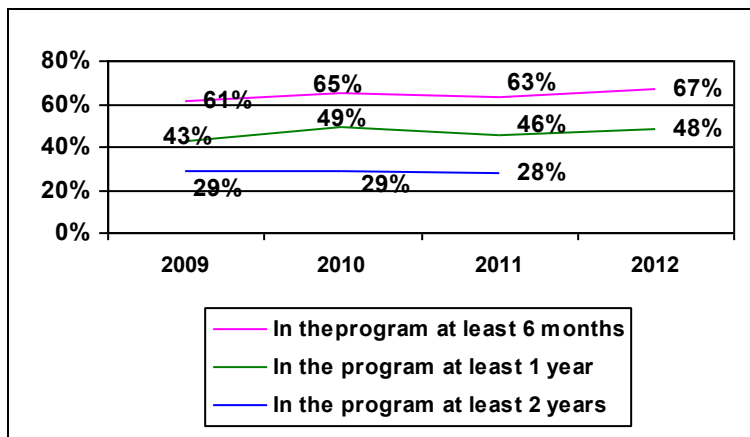
Table 31. Reasons Hartford Families Leave Home Visiting, 2011- 2013			
Reasons Hartford Families Left the Program	2011 N=147	2012 N=194	2013 N=228
Family moved out of service area	13%	13%	11%
Unable to locate mother	48%	34%	35%
Discharged, family was noncompliant	0%	0%	0%
Family decided to discontinue services	10%	15%	17%
Working or in school full-time, no time for home visits	17%	15%	9%
Goals were met/family graduated	2%	11%	14%
Baby removed from home by DCF	3%	1%	1%
Discharged, family was not appropriate for the program	0%	2%	2%
Other family member did not approve of services	1%	0%	1%
Home visitor left the program	0%	0%	0%
Other	6%	5%	10%

Participation Rates

- Similar to the statewide population, families in Hartford, on average, completed slightly more than 2 home visits per month (see Table 30) out of an average of nearly 3 attempts. These data have remained consistent over the past three years.

Program Retention Rates

- Six-month, one-year, and two-year retention rates for Hartford are shown in Figure 7. For families who entered the program in 2012, 67% remained in the program for at least six months, and 48% remained in the program at least one year, a slight increase from 2009, but an overall stable rate among the past 3 cohorts. Of parents who enrolled in NFN in 2011, 28% participated for two years; 2-year retention rates have remained stable for the past three years. These trends are comparable to the trends in retention rates statewide, both showing a slight increase in retention rate over the course of the past five years.

Reasons Families Leave the Program

As shown in Table 31, Hartford families ended NFN home visiting services in 2013 because:

- 52% of families moved out of service area or the staff was unable to locate family at their known address. This rate is higher than the 44% statewide percentage.
- 17% of families made a decision to leave the program for unspecified reasons.
- 9% of families were no longer available for services, as a result of working or being enrolled in school.
- 14% of families who left the program graduated or met their goals, a higher percentage than the previous two years.
- "Other" was reported as a reason more than in previous years, with nearly 5% of families exiting as a result of the SPPT program ending.

Outcomes: Change in Utilization of Community Resources, Hartford Data, 2013

Community Life Skills Scale (CLS):

The Community Life Skills (CLS) scale is a standardized self-report instrument that measures someone's knowledge and use of resources in his/her community. The CLS produces an overall score as well as scores on six subscales: Transportation, Budgeting, Support Services, Support Involvement, Interests/Hobbies, and Regularity/Organization/Routines. The overall (total) score on the CLS ranges from 0-33, with higher scores indicating more effective use of community resources.

Table 32 shows that statistically significant changes in CLS subscales scores were documented among mothers completing six months (N=67), one year (N=51), and two years (N= 29) of program services.

- The total CLS scores significantly increased for those completing six months, one year, and two years of program participation. Specifically, for participants completing six months of NFN services, significant improvements were seen in the areas of support services, support/ involvement, and regularity/ organization/ routines. Following one year of enrollment, significant change was seen in the areas of support services, support/ involvement, and regularity/ organization/ routines. Among two year program participants, significant improvement was seen on the subscales of budget management and support/ involvement.

- Tthese data indicate that parents are increasing their knowledge of community resources and how to access them, and are developing more stability in terms of daily living.

Table 32. Change in Mean Scores on the Community Life Skills Scale 6 Month, 1 and 2 Year Participants, Hartford, 2013			
Community Life Skills	**Entry (N=67)**	**6 Months**	
Total	24.4	26.4***	
Transportation	3.4	3.4	
Budgeting	3.5	3.7	
Support services	4.2	4.5**	
Support/Involvement	4.4	5.1**	
Interests/Hobbies	2.8	3.0	
Regularity/Organization/Routines	6.5	7.0**	
Community Life Skills	**Entry (N=51)**	**1 Year**	
Total	24.5	26.5**	
Transportation	3.3	3.5	
Budgeting	3.6	3.9	
Support services	4.1	4.5*	
Support/Involvement	4.5	5.2*	
Interests/Hobbies	2.9	2.9	
Regularity/Organization/Routines	6.6	7.2**	
Community Life Skills	**Entry (N=29)**	**1 Year**	**2 Year**
Total	25.6	27.5	28.2***
Transportation	3.4	3.7	3.7
Budgeting	3.6	4.0	4.3**
Support services	4.4	4.4	4.6
Support/Involvement	4.4	5.4	5.5***
Interests/Hobbies	3.0	3.1	3.4
Regularity/Organization/Routines	6.8	7.2	7.0
*p<.05 **p<.01 ***p<.001			

Change in Mothers' Life Course Outcomes, Hartford Data, 2013

As shown in Table 33, change in each of the life course outcomes for families living in Hartford were analyzed separately (in a nonparametric Cochran's Q Test) for mothers who completed the questionnaire at entry in the program in 2012 or 2011 and then at six months, one year, and two years .

Education, Employment, Independent Living

- Mothers who received services for one year and two years increased in obtaining a high school education with 78% earning at least a high school education at two years as compared to 57% at entry. Rate of employment significantly increased for participants who completed two years, with 52% at two years compared to 22% at program entry. Additionally, the percentage of mothers living independently significantly increased following one year (58%) and two years of participation (71% after two years).

Financial Difficulties and Support

- Fewer mothers reported experiencing financial difficulties for those who completed two years; change in rate is not significant.

Table 33. Change in Mothers' Life Course Outcomes for 6 Month, 1 & 2 Year Participants, Hartford Data				
Mothers' Living Circumstances: 2012-2013	**N**	**Entry**	**6 Month**	
Mothers with at least a high school education	64	64%	67%	
Mothers employed	65	26%	32%	
Mothers employed full-time	72	8%	14%	
Mothers enrolled in school	67	27%	34%	
Mothers experiencing financial difficulties	61	80%	72%	
Mothers socially isolated	58	26%	19%	
Mothers living independently of family	58	66%	67%	
Mothers receiving TANF	68	9%	15%	
Mothers receiving Food Stamps	65	37%	45%	
Mothers receiving WIC	65	85%	89%	
Mothers' Living Circumstances: 2012-2013	**N**	**Entry**	**1 Year**	
Mothers with at least a high school education	34	50%	62%*	
Mothers employed	33	24%	42%	
Mothers employed full-time	39	8%	15%	
Mothers enrolled in school	33	27%	24%	
Mothers experiencing financial difficulties	33	79%	70%	
Mothers socially isolated	33	24%	21%*	
Mothers living independently of family	33	30%	58%***	
Mothers receiving TANF	32	13%	25%	
Mothers receiving Food Stamps	31	45%	52%	
Mothers receiving WIC	31	81%	90%	
Mothers' Living Circumstances: 2011-2013	**N**	**Entry**	**1 Year**	**2 Year**
Mothers with at least a high school education	23	57%	70%	78%*
Mothers employed	23	22%	43%	52%**
Mothers employed full-time	27	11%	11%	22%
Mothers enrolled in school	24	17%	17%	25%
Mothers experiencing financial difficulties	22	82%	73%	64%
Mothers socially isolated	21	38%	19%	0%**
Mothers living independently of family	24	42%	67%	71%**
Mothers receiving TANF	23	17%	17%	4%
Mothers receiving Food Stamps	22	41%	50%	50%
Mothers receiving WIC	22	82%	82%	77%
*p<.05 **p<.01 ***p<.001				

Change in Parenting Attitudes, Hartford Outcomes, 2013

Child Abuse Potential Inventory, Rigidity Subscale (CAPI-R): Hartford Outcomes

In Table 34, we present outcome data on the Child Abuse Potential Inventory Rigidity Scale (CAPI-R), a self-report scale that measures the rigidity of attitudes and beliefs about the appearance and behavior of children. The subscale is based on the theoretical assumption that rigid attitudes and beliefs lead to a greater probability of child abuse and neglect (Refer to page 18 for a more thorough description of the CAPI-R.). Hartford parents complete the CAPI-R at program entry, after six months, and then on annual anniversaries of their start date in the program.

- The average entry rigidity scores in Hartford are higher than among NFN participants statewide. For families who entered in 2013, the average entry Rigidity score for Hartford participants was 32.9 (N=145) compared to statewide average of 27.8 (N=617) and 26.6 (N=319) for non-urban participants (all other participants excluding Hartford and New Haven program participants). At program entry, 58% of Hartford mothers scored at or above the cutoff score of 30, compared to 45% statewide.

Similar to the statewide sample, we report on a separate outcome analyses for Hartford NFN mothers who completed six months, one year, and two years of services ,and who scored at or above the CAPI-R cut-off score at program entry and those who scored below the cut-off.

- The results of these analyses are shown in Table 34 below, and indicate that the mother subgroup with scores at or above the cut-off at program entry made significant decreases in their rigid parenting attitudes for mother's completing six months, one year, and two years of program services. This decrease in scores also indicates a reduction in risk for children maltreatment.
- For mothers that scored below cut-off at entry, there is no clear pattern of change.

Table 34. Change in Mean Scores on the Child Abuse Potential Inventory Rigidity Subscale for 1 and 2 Year Participants by Entry CAPI-R Score, Hartford Data, 2013								
CAPI Rigidity Scores 2012-2013	**Scored Below Cut-Off at Entry (N=31)**		**Scored At or Above Cut-Off at Entry (N=39)**					
	Entry	**6 Month**	**Entry**	**6 Month**				
Rigidity	19.5	24.7**	44.4	36.4**				
CAPI Rigidity Scores 2012-2013	**Scored Below Cut-Off at Entry (N=21)**			**Scored At or Above Cut-Off at Entry (N=23)**				
	Entry	**6 Month**	**1 Year**	**Entry**	**6 Month**	**1 Year**		
Rigidity	20.4	26.8	20.4	47.3	39.6	39.7*		
CAPI Rigidity Scores 2011-2013	**Scored Below Cut-Off at Entry (N=12)**				**Scored At or Above Cut-Off at Entry (N=10)**			
	Entry	**6 Month**	**1 Year**	**2 Year**	**Entry**	**6 Month**	**1 Year**	**2 Year**
Rigidity	19.4	19.3	19.7	16.3	42.3	40.6	29.5	27.5
* p<.05 ** p<.01 *** p<.001								

2013 New Haven Data Analysis: Summary of Key Findings

In this next section, enrollment, demographic and risk characteristics, participation and retention rates, and outcome data are examined for high-risk families who received home visitation in NFN sites of New Haven, CT. Note: Different N size is due to missing/unknown data. Summary of highlights are below:

Program Capacity and Enrollment of Families
- In 2013, 1,181 first-time mothers were screened for risk in New Haven and 603 (or 51%) were identified at high-risk for poor parenting. Of these mothers, 595 were offered home visiting and 191 initiated services.
- In addition, of the 1,181 first-time mothers screened in 2013, 578 (49%) of these first-time mothers were identified at low-risk for poor parenting. Fifty-one percent of these mothers were offered Nurturing Connections phone support and referral services.

Demographic and Risk Profiles of Entering Families
- In 2013, New Haven mothers showed the most stress, as measured by the Kempe Family Stress Inventory, due to current living situations and financial issues, as well as past experiences of child maltreatment, and a history of substance abuse/ crime/ mental health.
- Reported race/ ethnicity in New Haven NFN of mothers enrolled in 2013 appear disproportionate to the statewide NFN as well as the New Haven population (Census Bureau, 2010).
- The percentage of fathers living in households in New Haven (41%) is proportionate to the average percentage of fathers living in households among NFN participants statewide (44%). In addition, fathers in New Haven are, on average, reportedly more involved with their children (88% at least somewhat involved in New Haven compared to 78% statewide).
- 53% of enrolled mothers living in New Haven were screened prenatally, compared to 41% statewide.
- 10% of New Haven participating mothers gave birth prematurely (before 37 weeks of gestation) which is less than the statewide rates (14%) in 2013. Twelve percent of children were born under 5 pounds 8 ounces (low birth weight), a lower rate than statewide and at Hartford NFN sites, 16% and 13% respectively.

Participation and Retention Rates
- Similar to previous years, New Haven families received an average of 2.2 home visits per month out of an attempted 2.9 in 2013.
- Since 2009, there has been an overall increase in the 6-month, 1-year, and 2-year retention rates, which parallels the statewide population retention rate. Sixty-six percent of families remained in the program for at least six months, 47% remained in the program for at least one year, and 31% remained for at least two years.

New Haven NFN Program Outcomes
- New Haven mothers showed significant increases in total scores on the Community Life Skills scale after one and two years of program involvement. Significant improvements were also seen in the budgeting and support services subscales after one year of participation.
- Further, mothers who scored at or above the CAPI-R cutoff showed decreases in their rigid parenting beliefs after six months, one year, and two years of program participation; statistically significant decreases at six months and one year participation but not for two year scores.
- Significant changes in social isolation were seen after six months of participation. Additionally, significant increases in full-time employment significantly increased after two years.

High-Risk Families and Enrollment in NFN
New Haven Data, 2013

In this section, we provide enrollment data for those who screened at low-risk (and participated in Nurturing Connections) and those who screened at high-risk (and participated in home visiting services) at the New Haven sites. This is the New Haven network's fifth full year of program services, and similar to last year, many sites are close to or at program capacity.

Screening
- Table 35 shows that of the 1,181 first-time mothers screened in New Haven in 2013, 578 (49%) screened at low-risk for poor parenting. Of the low-risk families, 295 (51%) were offered Nurturing Connections services and of those offered, 60 (20%) accepted services. The rate of accepting Nurturing Connections is lower than the reported rate for 2011 (29%); the rate is substantially lower NFN Sites than statewide (42%) and in Hartford (40%). Of the instances in 2013 in which Nurturing Connections services were not offered, the primary reason, approximately 78% of the time, was due to reaching program capacity (data not shown here).
- As shown in Table 36, of the 603 mothers (51% of the total number of mothers screened) who screened at high-risk in New Haven, 595 (99%) were offered home visiting, and of those offered, 191 (32%) accepted and initiated home visiting services. The rate of initiating services has decreased from 2011 and 2012, with initiation rate of 46% and 36% respectively. In addition, the rate of initiating home visiting services in New Haven (32%) is less than Hartford (67%), however, when comparing raw numbers, about the same number of families initiated services in New Haven (n=195) than Hartford (n=190).

Table 35. Screening in New Haven, 2013	
Total # of screens	1,181
# Low-risk	578
Offered Nurturing Connections	295 (51%)
Accepted Nurturing Connections	60 (20%)
# High-risk	603
Offered Home Visiting	595 (99%)
Accepted Home Visiting	365 (61%)
Initiated Home Visiting Services	191 (52%)

Table 36. Disposition of Families Identified as High-risk, New Haven Data, 2011-2013			
	2011	**2012**	**2013**
# of positive screens	504	584	603
Offered Home Visiting	478 (95%)	541 (93%)	595 (99%)
Initiated Services	218 (46%)	195 (36%)	191 (32%)

Risk Profiles: New Haven Mothers' Kempe Scores, 2013

2013 New Haven Mothers' Kempe Scores on Individual Items

The Kempe Family Stress Inventory (Kempe) is scored across 10 items, with each item scored either 0 (no/low risk), 5 (moderate risk), or 10 (severe risk), to indicate presence and severity of past and current stressors. Each of these items includes a larger set of criteria from which judgments are made, and these criteria provide a much better description of stress; we report on these data for families in New Haven who scored in the severe range focusing on items with the highest rates of severe stress:

- Similar to the Kempe scores of NFN Hartford mothers, NFN New Haven mothers scored in the severe range in New Haven most often on the Childhood History of Abuse and Neglect (33%), Multiple Stresses (26%), in addition to History of Crime, Substance Abuse, and Mental Health (13%) sub-scales.
- *Childhood History of Abuse/Neglect:* Of the 33% mothers completing this subscale scored in the severe range on the Childhood History of Abuse and Neglect subscale, 47% (22) mothers were either removed from their homes or abandoned as children, 47% (22) were raised in a home with at least one alcohol/ drug addicted parent, and 34% (16) were raised in more than two families.
- *Multiple Stresses:* 26% mothers scored in the severe range on the Multiple Stresses subscale. Sixty-seven percent (23) mothers described their living situation as stressful, twenty-three mothers 62% (23) noted their finances caused much stress, and 43% mothers (16) moved frequently.
- Similar to Kempe Scores in Hartford, a considerable percentage of New Haven mothers scored moderate stress on other Kempe subscales. Seventy-eight percent reported moderate or severe scores on Child Unwanted/ Poor Bonding, while a total of 59% of mothers scored moderate to severe on the multiple stresses subscale, and a total of 54% of mothers scored moderate to severe range in the Low Self-esteem/ Social Isolation/ Depression subscale.

Families at Acute Risk

New Haven data show that families experienced lower rates of episodes of mental health, interpersonal, or substance abuse when they entered the program as compared to families statewide and in Hartford. One percent of New Haven mothers experienced acute issues at program entry compared to 8% statewide and 9% in Hartford. However, data indicate that 4.7% (not shown in tables) of actively participating New Haven families (N=492) experienced acute stress, (domestic violence, substance abuse, or mental health) at some point during the 2013 year, also lower than the reported rates of families active in Hartford NFN mothers (6.6%) and NFN mothers statewide (8.3%).

Table 37. New Haven Mothers' Kempe Scores, 2013			
New Haven Mothers' Kempe Scores, 2013 **N=199**	**0** **Low**	**5** **Moderate**	**10** **Severe**
Childhood History of Abuse/Neglect (N=143)	53%	14%	33%
Multiple Stresses (N=142)	41%	33%	26%
Low Self-esteem/ Social Isolation/ Depression (N=143)	46%	42%	12%
History of Crime, Substance Abuse, Mental Illness (N=143)	65%	20%	13%
Potential for Violence (N=139)	86%	7%	7%
CPS History (N=142)	98%	1%	1%
Child Unwanted/ Poor Bonding (N=143)	22%	76%	2%
Unrealistic Expectation of Child (N=142)	66%	34%	0%
Harsh Punishment (N=138)	92%	7%	1%
Negative Perception of Child (N=110)	93%	5%	2%

Home Visitation Families at Program Entry

Family and Household Data (Table 38)

• 53% of enrolled New Haven NFN mothers (N=199) in 2013 were screened prenatally, compared to statewide population and Hartford NFN, 41% and 42%, respectively.

• Reported race/ ethnicity in New Haven NFN of mothers enrolled in 2013 appear disproportionate to the statewide NFN sites as well as the New Haven population (Census Bureau, 2010).

• Hispanic mothers are proportionate between New Haven NFN sites and statewide NFN sites, 42% and 47% respectively as compared to 27% in New Haven.

• 34% of mothers in New Haven NFN sites are black compared to 21% statewide and 35% reported in New Haven.

• According to the Census Bureau 2010, 70% of city of New Haven population was white, compared to 32% of New Haven NFN and 23% statewide NFN sites.

• 33% of New Haven NFN participants were living with their mothers, comparable to 32% NFN mothers statewide.

• 34% of New Haven fathers were residing in the households with NFN mothers and children, which is slightly lower than the statewide rate of 37%.

• Rates of father involvement in New Haven NFN sites were slightly higher than statewide NFN sites (87% vs. 81% at least somewhat involved, respectively)

Financial and Social Risk Factors (Table 39)

• 50% of mothers had financial difficulties as reported by the home visitor (lower than 71% statewide).

• 15% of New Haven NFN mothers were reported by home visitors as socially isolated compared to 25% of statewide NFN mothers.

• 7% of New Haven mothers had an arrest history, compared to 17% NFN mothers statewide and 15% in Hartford NFN mothers.

• Fewer mothers were receiving food stamps in New Haven than NFN mothers in Hartford (46%) and NFN mothers statewide (32%).

Table 38. Household Information, New Haven Data, 2013

Enrolled Families (N=199)	
Prenatal Screens	53%
Mother's Marital Status (N=163)	
Single, never married	82%
Married	17%
Divorced, separated, widow	1%
Mother's Race/Ethnicity (N=155)	
White	16%
Black	34%
Hispanic	42%
Other (includes multi-racial)	8%
Mother age at Baby's Birth (N=137)	
Under 16 years	3%
16-19 years	28%
20-22 years	23%
23-25 years	17%
26 years and older	29%
Median Age	22 y.o
Living in the Household (N=168)	
Maternal Grandmother	33%
Father	41%
Father's Involvement with Child (N=87)	
Very involved	82%
Somewhat involved	6%
Sees child occasionally	2%
Very rarely involved	1%
Does not see baby at all	9%

Health Related Risk Factors (Table 40)

• 7% of New Haven NFN children were born with a serious medical problem.

• 10% of children were born premature in 2013, consistent to rates reported for 2012 and 2011, 10% and 11%, respectively. The rate of premature births in New Haven NFN sites is slightly lower than the NFN statewide rate of 14%.

• The rate of children born with low birth-weight (12%) in New Haven NFN sites is also lower than the statewide NFN site percentage (16%).

Table 39. New Haven Mothers' Social Problems/ Risk Factors, 2013

Socially isolated (N=139)	30%
Arrest history (N=161)	11%
Financial difficulties (N=148)	70%
Receiving TANF (N=162)	5%
Receiving Food Stamps (N=162)	23%

Table 40. Pregnancy & Birth Information, New Haven Data, 2011-2013

Health Related Risk Factors	2011 N=112	2012 N=134	2013 N=122
Mother smoked cigarettes during pregnancy	4%	7%	9%
Mother drank alcohol during pregnancy	1%	2%	3%
Mother used illicit drugs during pregnancy	5%	6%	7%
Child born with serious medical problems	14%	14%	7%
Premature Birth (before 37 weeks gestation)	11%	10%	10%
Born Low Birth Weight (under 5 lbs 8 oz)	15%	13%	12%
Child has a Pediatrician	98%	97%	98%

Education and Employment Rates at Program Entry
New Haven Data, 2013

Table 41. Mothers' Life Course, New Haven Data, 2013		
Mother Life Course Indicators	**18 and younger**	**19 and older**
Education	(N=24)	(N=93)
Eighth grade or less	0%	1%
More than 8th grade, < high school	63%	11%
High school degree or GED	21%	41%
Some vocational training/college	13%	33%
College degree or graduate work	4%	14%
Enrolled in School	(N=26)	(N=96)
Yes	54%	10%
Employment Status	(N=24)	(N=94)
Mother employed	17%	34%
Full-time	0%	14%
Part-time job or occasional work	12%	12%
Employed Prior to Pregnancy	(N=24)	(N=89)
Yes	38%	65%

New Haven NFN 2013: Mothers' Life Course Information

Mothers' education and employment data are presented in Table 41, separating mothers who were 19 years or younger when they had their child from those who were 20 years and older, due to different expectations of employment and education based on mother's age.

• 62% of the younger cohort of mothers had less than a high school education at program entry (lower than 68% statewide). Of the 15 young mothers who had not yet graduated high school, 10 were currently enrolled in middle or high school.

• In comparison to the statewide population, the older cohort in New Haven had on average comparable levels of education: 18% and 17% respectively had less than a high school diploma; 49% had at least some post secondary education in New Haven compared to 51% among the statewide population.

• Rates of employment for the younger cohort of New Haven mothers (9%) was lower than the statewide population (17%). The rates of employment for the older cohorts in New Haven (35%) and the older cohorts statewide (32%) are comparable.

Home Visitation Participation, New Haven Data, 2013

Table 42. New Haven Program Participation, 2011-2013

	2011 N = 487	2012 N = 500	2013 N=492
Average # of attempted home visits	2.9	2.8	2.9
Average # of completed home visits	2.1	2.2	2.2
Average # of office/out of home visits	0.1	0.04	0.1
Average # of NFN social events attended	0.1	0.1	0.1
Total # of visits completed	2.3	2.3	2.4

Figure 8. Six Month, 1 Year, and 2 Year Retention Rates By Year of Program Entry, New Haven Data

Participation Rates

- Similar to the statewide and Hartford populations, families in New Haven, on average, completed slightly more than 2 visits per month (see Table 42) out of nearly 3 attempts. These data have remained consistent over the past three years.

Program Retention Rates

- Six-month and 1-year retention rates for New Haven families are presented in Figure 8. There was a slight decrease in 6-month and 1-year retention between 2011 cohort and 2012 cohort. For families starting the program in 2012, 66% were active at least six months and 47% were active at least one year. For parents who started the program in 2011, 31% of participants were active at least two years. Two year retention in New Haven NFN has steadily increased.

Table 43. Reasons New Haven Families Leave Home Visiting, 2011-2013

	2011 N=177	2012 N= 143	2013 N=235
Family moved out of service area	16%	9%	10%
Unable to locate mother	32%	31%	28%
Discharged, family was noncompliant	0%	0%	0%
Family decided to discontinue services	8%	15%	20%
Working or in school full-time, no time for home visits	10%	22%	17%
Goals were met/family graduated	1%	5%	15%
Baby removed from home by DCF	1%	3%	<1%
Discharged, family was not appropriate for the program	0%	1%	0%
Other family member did not approve of services	<1%	0%	<1%
Home visitor left the program	8%	0%	0%
Other	14%	10%	7%

Reasons Families Leave the Program

As shown in Table 43, New Haven families ended NFN home visiting services in 2013 because:

- 38% of families moved out of service area or the staff was unable to locate family at their known address. This rate is less than the 44% statewide percentage.
- 20% of families left the program for unspecified reasons.
- 17% of parents left the program because they were working or being enrolled in school and did not have time for home visits.
- 15% of families reached their goals or family graduated, the highest percentage in the last three years.

Outcomes: Change in Utilization of Community Resources, New Haven Data, 2013

Community Life Skills Scale (CLS): New Haven Outcomes

Data on the total CLS scale, and each of the subscales were analyzed in a pair-wise T-test among mothers active for six months (N=89) and one year (N=62). A repeated measure analysis was conducted to measure CLS scores for mothers that completed two years (N=21) as of the end of 2013.

- Among those completing six months, improvements were seen in CLS scores; however there was no statistically significant difference.
- Participants in the program who completed one year in NFN services showed significant improvement in the total scores, as well as in the area of support services and in budgeting. Statistically significant increase in total score on the CLS was seen for 2-year participants.
- These data indicate that after one and two years, New Haven NFN participants develop the capacity to make improvements in their daily living through accessing resources and budget management.

Table 44. Change in Mean Scores on the Community Life Skills Scale 6 Month, 1 Year, and 2 Year Participants, New Haven, 2013

Community Life Skills	Entry (N=89)	6 Months
Total	26.0	26.4
Transportation	3.5	3.5
Budgeting	3.6	3.8
Support services	4.6	4.6
Support/Involvement	5.0	5.2
Interests/Hobbies	2.9	3.0
Regularity/Organization/Routines	7.0	7.0

Community Life Skills	Entry (N=62)	1 Year
Total	26.1	27.2*
Transportation	3.5	3.7
Budgeting	3.5	3.9*
Support services	4.6	4.7*
Support/Involvement	4.9	5.2
Interests/Hobbies	2.9	3.1
Regularity/Organization/Routines	7.0	7.0

Community Life Skills	Entry (N=21)	1 Year	2 Year
Total	26.1	27.5	29.3**
Transportation	3.6	3.6	3.8
Budgeting	4.0	4.1	4.4
Support services	4.5	4.5	4.9
Support/Involvement	5.1	5.6	5.9
Interests/Hobbies	2.8	3.1	3.4
Regularity/Organization/Routines	6.9	7.2	7.4

*p<.05   **p<.01   ***p<.001

Change in Mothers' Life Course Outcomes, New Haven Data, 2013

Home visitors complete a questionnaire annually for each family active in the program on life course outcomes. As shown in Table 45 change in each of the life course outcomes was analyzed separately (in a nonparametric Cochran's Q Test) for mothers who completed questions at six months (2012-2013), one year (2012-2013) and two years (2011-2013).

Education, Employment, Independent Living
- Mothers who completed two years of NFN services had significantly higher rates of full-time employment: 29% compared to 4% of mothers at entry. Significant outcomes were also found in independent living for those who participated for two years and home visitors assessed significantly fewer mothers as socially isolated for those who completed six months and two years of participation.

Financial Difficulties and Support
- Use of mothers receiving Food Stamps increased for participants who completed six months (29%) and two years of NFN services (44%); also, WIC support increased significantly for those who completed six months (79%) of participation compared to entry (64%).

Table 45. Change in Mothers' Life Course Outcomes for 6 Month, 1 & 2 Year Participants, New Haven Data				
Mothers' Living Circumstances: 2012-2013	**N**	**Entry**	**6 Month**	
Mothers with at least a high school education	72	63%	64%	
Mothers employed	71	14%	18%	
Mothers employed full-time	76	4%	5%	
Mothers enrolled in school	74	31%	28%	
Mothers experiencing financial difficulties	64	61%	55%	
Mothers socially isolated	63	16%	6%*	
Mothers living independently of family	71	32%	35%	
Mothers receiving TANF	74	8%	8%	
Mothers receiving Food Stamps	72	17%	29%*	
Mothers receiving WIC	72	64%	79%**	
Mothers' Living Circumstances: 2012-2013	**N**	**Entry**	**1 Year**	
Mothers with at least a high school education	47	66%	72%	
Mothers employed	44	27%	27%	
Mothers employed full-time	53	8%	8%	
Mothers enrolled in school	51	22%	33%	
Mothers experiencing financial difficulties	43	67%	65%	
Mothers socially isolated	43	23%	9%	
Mothers living independently of family	46	52%	50%	
Mothers receiving TANF	51	8%	10%	
Mothers receiving Food Stamps	49	33%	47%	
Mothers receiving WIC	49	84%	76%	
Mothers' Living Circumstances: 2011-2013	**N**	**Entry**	**1 Year**	**2 Year**
Mothers with at least a high school education	19	84%	84%	84%
Mothers employed	19	26%	37%	47%
Mothers employed full-time	24	4%	17%	29%*
Mothers enrolled in school	20	10%	15%	30%
Mothers experiencing financial difficulties	18	67%	44%	44%
Mothers socially isolated	16	44%	19%	6%**
Mothers living independently of family	18	17%	56%	67%**
Mothers receiving TANF	19	16%	11%	11%
Mothers receiving Food Stamps	18	11%	39%	44%*
Mothers receiving WIC	18	50%	78%	83%*
*p<.05 **p<.01 ***p<.001				

Changes in Parenting Attitudes, New Haven Outcomes, 2013

Child Abuse Potential Inventory, Rigidity Subscale (CAPI-R): New Haven Outcomes

In Table 46, we present outcome data on the Child Abuse Potential Inventory Rigidity Subscale (CAPI-R), a self-report scale that measures attitudes and beliefs about the appearance and behavior of children. Mothers who have less rigid expectations of their children are less likely to treat their children forcefully. A significant decrease on the Rigidity subscale reveals that a mother is less likely to feel that her children should *always* be neat, orderly, and obedient.
The average score for a normative population on the CAPI-R is 10.1 with a standard deviation of 12.5. The cut off score on the CAPI-R is 30, with 5% of the general population scoring at or above this score.

- The average CAPI-R score at program entry in 2013 for New Haven mothers was 25.3 (N=153), lower than the entry mean score for Hartford participants (32.9). New Haven NFN average CAPI-R score is comparable to the 2013 entry average scores among the NFN participants statewide (27.8), and higher than the total average (26.6) of all other non-urban communities (e.g., all sites excluding Hartford and New Haven program sites).
- At program entry, 40% of New Haven mothers scored at or above the cutoff score of 30, compared to 45% statewide and 33% in Hartford.
- Similar to the statewide and Hartford samples, we ran separate outcome analyses for New Haven participants who scored above the CAPI-R cut-off score at program entry and those who scored below the cut-off. The results of these analyses were similar to the statewide and Hartford analyses. While significant changes for parents who scored below the cut-off at entry were not found, parents with scores at or above the cut-off at program entry made significant decreases in their rigid parenting attitudes for mothers that completed six months and one year of program services. Scores in New Haven NFN decreased after two years, however the average score did not fall below the cut-off. Overall, there is a improvement in parenting attitudes after participation in the program.

Table 46. Change in Means Scores on the Child Abuse Potential Inventory Rigidity Subscale for 1 and 2 Year Participants by Entry CAPI-R Score, New Haven Data, 2013							
CAPI Rigidity Scores 2012-2013	**Scored Below Cut-Off at Entry (N=47)**		**Scored At or Above Cut-Off at Entry (N=44)**				
	Entry	**6 Month**	**Entry**	**6 Month**			
Rigidity	14.9	15.4	44.4	37.7***			
CAPI Rigidity Scores 2012-2013	**Scored Below Cut-Off at Entry (N=32)**			**Scored At or Above Cut-Off at Entry (N=26)**			
	Entry	**6 Month**	**1 Year**	**Entry**	**6 Month**	**1 Year**	
Rigidity	14.9	14.0	8.8***	46.5	40.5	29.1***	
CAPI Rigidity Scores 2011-2013	**Scored Below Cut-Off at Entry (N=14)**				**Scored At or Above Cut-Off at Entry (N=6)**		
	Entry	**6 Month**	**1 Year**	**2 Year**	**Entry**	**6 Month**	**1 Year**	**2 Year**
Rigidity	15.3	14.9	15.7	13.1	41.7	37.5	33.8	33.3
* p<.05 ** p<.01 *** p<.001							

Section 4
Home Visitation for Fathers
Summary of Key Findings

In this fourth section, we describe the demographic and risk profiles for fathers participating in home visitation. Data on program participation, beliefs about the roles of fathers, and outcomes are also presented. Below is a summary of findings.

Demographic and Risk Profile
- For fathers entering the NFN Home Visitation in 2013 (N=58), thirty-three percent of participants were black, 45% were Hispanic, and 16% were white. Fifty– nine percent of fathers had completed their high school education, and 44% were employed.
- Risk profiles indicate that NFN staff have recruited a high-risk population of fathers. Fifty– two percent of fathers qualified for the severe risk range of experiencing a history of crime, with overlapping issues of substance abuse, or mental illness; and 43% of fathers have experienced multiple stressors, in the severe range, on the Kempe Family Stress Inventory.
- The average score on the CAPI-R for 2013 entering fathers was 28.1 (N = 46, SD = 15.10), which means that NFN fathers come into the program with scores indicative of high-risk.

Beliefs about the Roles of Fathers
- The Role of the Father Questionnaire instrument indicated that 97% of participants believed that fathers play a pivotal role in raising their children, a role as important as mothering. These items are shown on page 42, Table 49, for fathers who entered the program in 2013 with comparison to all participating fathers (N=121).

Program Participation
- Fathers typically receive two home visits out of an attempted of nearly three visits, which is comparable to the NFN statewide population.
- In 2013, 64% of fathers remained in the program at least six months, and 45% remained in the program for at least one year. Another 20% of the fathers who enrolled in the home visiting services in 2011 continued services for two years.
- The most frequently noted reasons fathers left the program in 2013 was due to families moving, were unavailable due to time constraints, or home visitor was unable to locate father.

Outcomes
Pairwise-samples t-tests were conducted to examine the impact of NFN home visiting program (6 months and 1 year of involvement) on all fathers' scores on the CLS and CAPI-R measures.
- Knowledge and use of community resources improved for fathers completing six months and one year of program services.
- For fathers who completed six months and one year services, fathers' rigidity scores de- creased compared to their entry scores. These scores were not significant, but are important for future exploration as more fathers engage in the program and complete the evaluation tools.

Research Going Forward
- The Center for Social Research is conducting a qualitative process evaluation of the Home Visiting Model for fathers to better understand the development and experience of fathers and home visitors, as well as their working relationship.

Home Visitation Families at Program Entry, Father Home Visiting Data, 2013

While fathers have always been invited to participate in home visits, NFN home visiting services have typically been geared toward mothers. In October 2008, a Fatherhood Subcommittee was convened with the goal of redesigning traditional NFN home visiting services to be more father-friendly. On March 1, 2009, a home visiting pilot for fathers officially began in five NFN sites, including four sites in New Haven and one site in Torrington. Males were hired as home visitors and services were offered to fathers of already enrolled NFN children. Subsequently, services were offered to fathers of children who were already enrolled in NFN services and/or also fathers who met eligibility criteria as rated by the Primary Father Figure adapted REID screen (see Appendix). The structure of home visits for fathers are comparable to standard NFN home visits: services are offered on a weekly basis, parenting curricula are used, and parent-child interaction is modeled. Over the past two years, Father Home Visiting has expanded to a total of 11 sites across Connecticut. In this section, we present data on program participants, including demographic and risk profile, a description of services, and preliminary outcomes.

Demographic Profile

As of the end of 2013, 244 fathers had received home visits with 58 fathers entering NFN in 2013. The demographic profile of the fathers entering NFN at program entry are provided in Table 47. (Note: Different N sizes are due to missing information.)

- 21% of NFN fathers were younger than 20 years old when they entered the program.
- One-third or 33 of fathers were black, less than a half or 45% of fathers reported Hispanic, and less than one-fifth (16%) of fathers reported white.
- 59% of fathers had completed high school, with 15% having some post-secondary education.
- 44% of fathers were employed, only 22% full-time. Moreover, 87% were reportedly struggling financially.
- Home visitors reported 13% of the fathers to be socially isolated.
- 95% of fathers were at least somewhat involved with their child at program entry.
- Over one-half (52%) of enrolled NFN fathers had an arrest history.

Table 47. Demographic Characteristics of Father Home Visiting Participants at Program Entry (N=58)	%
Father's Age (N=47)	
Under 16 years	2%
16-19 years	19%
20-22 years	34%
23-25 years	28%
26 years and older	17%
Median	22 years
Father Race/Ethnicity (N=49)	
Black	33%
Hispanic	45%
White	16%
Other	6%
Language Father Speaks (N=48)	
English	73%
Spanish	4%
English and Spanish	23%
Other	0%
Father's Highest Level of Education Completed (N=46)	
Eighth grade or less	4%
More than 8th grade, < than HS	37%
High school degree or GED	44%
Vocational training or some college	15%
College degree or graduate work	0%
Father's Employment Status (N=45)	
Not employed	56%
Employed	44%
Full-time	22%
Part-time, occasional work, or more than one job	21%
Fathers Enrolled in School (N=47)	13%
Fathers with Financial Difficulties (N=45)	87%
Fathers Socially Isolation (N=40)	13%
Father's Involvement with Child (N=39)	
Very involved	77%
Somewhat/ occasionally involved	18%
Does not see baby at all	5%
Fathers with an Arrest History (N=42)	52%

Risk Profiles: Fathers' Kempe Scores,
Father Home Visiting Data, 2013

Risk Profile
Kempe Family Stress Inventory
We assessed parental stress using the Kempe Family Stress Inventory for fathers participating in Home Visiting Services in 2013.

Fathers scored in the severe range for several items on the Kempe Family Stress Inventory:

- Rates of Childhood History of Abuse and Neglect are the highest stress experience with 52% (N=46) of fathers scoring in the severe range.
- 43% of participating fathers scored severe on the Multiple Stresses subscale.
- 33% of fathers scored severe on History of Crime, Substance Abuse, and Mental Illness Subscale.
- Potential for Violence subscale scores show that 24% of entering fathers score in the severe range.
- Additionally, a substantial percentage of fathers participating in home visiting scored moderate on the following subscales: Child Unwanted/ Poor Bonding (68%), Unrealistic Expectations of Child (54%), Multiple stressors (45%), Low Self-Esteem/ Social Isolation/ Depression (38%), and History of Crime, Substance Abuse, Mental Illness (37%).

Table 48. Fathers' Kempe Scores, 2013			
	0 Low	5 Moderate	10 Severe
Childhood History of Abuse/ Neglect (N=46)	28%	20%	52%
Multiple Stresses (N=47)	13%	45%	43%
Potential for Violence (N=47)	66%	10%	24%
History of Crime, Substance Abuse, Mental Illness (N=46)	30%	37%	33%
Low Self-esteem/ Social Isolation/ Depression (N=47)	40%	38%	21%
CPS History (N=47)	75%	15%	10%
Negative Perception of Child (N=43)	88%	12%	0%
Harsh Punishment (N=45)	91%	4%	4%
Unrealistic Expectation of Child (N=46)	46%	54%	0%
Child Unwanted/ Poor Bonding (N=47)	21%	68%	11%

Beliefs About the Roels of Fathers,
Father Home Visiting Data, 2013

The Role of the Father Questionnaire (ROFQ) is a self-report inventory that assesses someone's beliefs on how important the role of fathering is to raising a child. Scores on the ROFQ range from 15 to 75, with higher scores reflecting belief in a high level of involvement with and a strong emotional relationship to children. Participants in the fathering home visiting program complete the ROFQ at program entry, six months, then annually. Using the ROFQ began a few months after the fathering home visiting pilot started, and thus we have a smaller sample of fathers who have completed this form at program entry. For purposes of this year's evaluation, we are going to report on pre-test data only for FY 2013 and compare with all fathers who completed the ROFQ (N=121).

Program entry data from the 36 fathers (mean score is 61.96) who completed the ROFQ at the start of NFN in 2013 are compared with all fathers who enrolled and completed the ROFQ at entry, presented in Table 49. All of the fathers agreed (either strongly or moderately) that "it is essential for the child's well being that fathers spend time interacting and playing with their children". Items that showed more variation in agreement between current fathers and overall fathers are: "the way a father treats his baby in the first six months has important life-long effects on the child" and it is difficult for men to express tender and affectionate feelings toward babies". Desirably low percentages among agree strongly and agree moderately was "mothers are naturally more sensitive caregivers than fathers" and fathers are able to enjoy children more when the children are older and don't require as much care"

Table 49. Father Responses on the ROFQ at Program Entry	2013 Program Entry N = 36	All Participating Fathers N = 121
Items of Role of Fatherhood Questionnaire	PCT "Agree Strongly" or "Agree Moderately"	PCT "Agree Strongly" or "Agree Moderately"
It is essential for the child's well being that fathers spend time interacting and playing with their children.	100%	100%
It is difficult for men to express tender and affectionate feelings toward babies.	22%	30%
Fathers play a central role in the child's personality development.	97%	97%
The responsibilities of fatherhood never overshadow the joys.	77%	67%
Fathers are able to enjoy children more when the children are older and don't require as much care.	34%	31%
Very young babies are generally able to sense an adult's moods and feelings. For example, a baby can tell when you are angry.	78%	83%
Very young babies are affected by adults' moods and feelings. For example, if you are angry with a baby he/she may feel hurt.	83%	85%
The most important thing a man can invest time and energy into is his family.	100%	97%
A father should be as heavily involved in the care of a baby as the mother is.	100%	97%
Mothers are naturally more sensitive caregivers than fathers are.	60%	58%
Even when a baby is very young it is important for a father to set a good example for his baby.	100%	97%
It is as important for a father to meet a baby's psychological needs as it is for the mother to do so.	91%	96%
It is important to respond quickly to a young baby each time it cries.	77%	77%
The way a father treats his baby in the first six months has important life-long effects on the child.	69%	80%
All things considered, fatherhood is a highly rewarding experience.	100%	97%

Home Visitation Participation,
Father Home Visiting Data, 2013

Program Participation

As shown in Table 50, fathers were visited in the home, on average, slightly more than twice home visits per month out of an attempted rate of nearly 3 visits. Including visits that take place outside of the home and social events, fathers were seen 2.6 times per month in 2013. Also, there is slight increase in frequency of home visits from the previous years.

Table 50. Fathering Home Visitation: Frequency of Home Visits and Program Participation, 2011-2013	2011 N=64	2012 N=82	2013 N=133
Average # of attempted home visits	3.0	2.7	2.9
Average # of completed home visits	1.8	2.1	2.2
Average # of office/out of home visits	0.4	0.1	0.3
Average # of NFN social events attended	0.3	0.2	0.1
Total # of contacts	2.5	2.4	2.6

Table 51. Reasons Fathers Left the Program, 2013	N=48
Family moved out of service area	6%
Unable to locate father	29%
Discharged, family was noncompliant	0%
Family decided to discontinue services	29%
Working or in school full-time, no time for home visits	13%
Goals were met/family graduated	8%
Baby removed from home by DCF	2%
Discharged, family was not appropriate for the program	4%
Other family member did not approve of services	0%
Home visitor left the program	0%
Other	8%

Reasons Fathers Leave NFN

Forty-eight fathers left the NFN fathering program in 2013. The reasons fathers left are not exclusive and include multiple explanations:

- 29% were discharged due to inability to locate father.
- 29% of fathers made a decision to discontinue services.
- 13% discontinued services because their home visitor left the program and they did not want to continue services with a female home visitor.
- 8% of fathers left the program after their goals were met.

Program Retention: Six-month, one-year, and two-year retention rates are shown in *Figure 9 by the year fathers enter the program.* For fathers who entered the program in 2012, 64% remained in the program for at least six months, and 45% remained in the program at least one year. For the two-year retention rate of the 2011 cohort, 20% of fathers entering the program participated for two years.

Retention rates for *all fathers enrolled in NFN Father Program since inception* are presented in Figure 10. Fifty-nine percent of fathers remained in the program for at least six months, while 40% were active at least one year and 23% of fathers remained in the program for two years, as of program inception in 2009.

Figure 9.
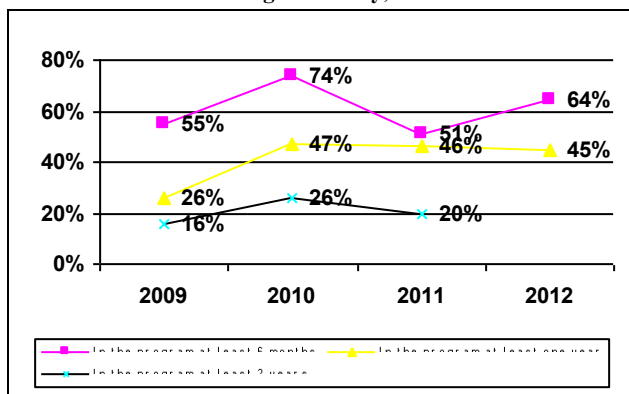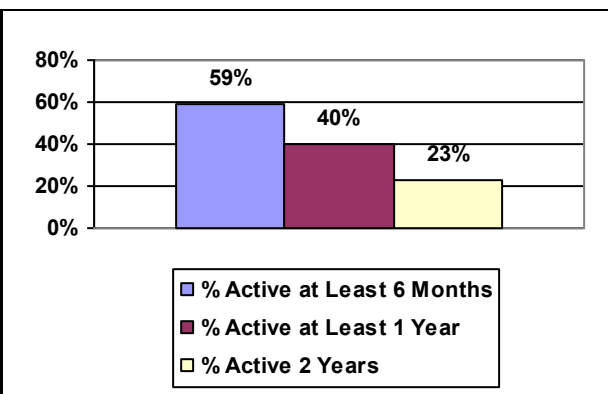**Six Month, 1 Year, and 2 Year Program Retention Rates by Year of Program Entry, Father HV**

Figure 10.
Six Month, 1 Year, and 2 Year Program Retention Rates– Overall Father HV

Outcomes: Utilization of Community Resources, Father Home Visiting Data, 2009-2013

Community Life Skills Scale

- The Community Life Skills (CLS) scale is a standardized self-report instrument that measures someone's knowledge and use of resources in his/her community. The CLS produces an overall score as well as scores on six subscales: Transportation, Budgeting, Support Services, Support Involvement, Interests/Hobbies, and Regularity/Organization/Routines. The overall (total) score on the CLS ranges from 0-33, with higher scores indicating more effective use of community resources.
- Program entry and six month outcome data were available for 31 fathers by the end of 2013. These data are presented in Table 52. There were increases in the total CLS score as well as in the Budgeting, Support Services, Support/ Involvement, and routines from program entry to six months. Pairwise t-test showed no significance of scores for fathers completing six-month services. This may be attributed to the small number of fathers participating in the program during development.
- Outcome data for fathers who completed one year of services is also shown for 30 fathers who completed the CLS at entry and one year (see Table 54). There were increases in the total CLS score, budgeting, support services, support/ involvement, and Hobbies. However, pairwise t-test did not show significant difference between entry and one year of participation on the measure.

Table 52. Change in Mean Scores on the Community Life Skills Scale after 6 Months, All Father Participants

N=31	Entry	6 Months
Total	23.2	24.0
Transportation	3.6	3.4
Budgeting	3.1	3.4
Support services	4.3	4.5
Support/Involvement	3.9	4.3
Interests/Hobbies	2.8	2.4
Regularity/Organization/ Routines	5.9	6.1

* p<.05   ** p<.01   *** p<.001

Table 53. Change in Mean Scores on the Community Life Skills Scale after 6 Months, 2012 Father Cohort

N=13	Entry	6 Months
Total	23.2	24.2
Transportation	3.5	3.5
Budgeting	3.5	3.5
Support services	4.2	4.5
Support/Involvement	3.8	4.2
Interests/Hobbies	2.7	2.7
Regularity/Organization/ Routines	5.5	6.0

* p<.05   ** p<.01   *** p<.001

Table 54. Change in Mean Scores on the Community Life Skills Scale 1 Year Outcomes, All Participants (since program inception)

N=30	Entry	1 Year
Total	23.5	24.7
Transportation	3.3	3.3
Budgeting	3.3	3.6
Support services	4.3	4.5
Support/Involvement	3.6	4.4
Interests/Hobbies	2.8	2.9
Regularity/Organization/Routines	6.6	6.5

* p<.05   ** p<.01   *** p<.001

Change in Fathers' Life Course Outcomes, Father Home Visiting Data, 2013

Father Life Outcomes

In this section, analyses were performed for participating NFN fathers receiving services for six months (data collected exclusive to Hartford and New Haven father home visiting sites), and all 11 father HV sites at one year of service since program inception. In addition, 2012 cohort from entry to one year of service is presented in Table 56. These data remain exploratory as a result of having small sample sizes.

Education and Employment

- For fathers that participated for six months, fathers made gains in employment.

Financial Difficulties

- Rates of fathers who experience financial difficulties increased at six months and remained high at one year of program participation.

Involvement with Children

- At least 94% of fathers in the NFN program appeared at least somewhat involved with their child at six months and one year of participation. In addition, 100% of the fathers in the 2012 cohort were at least somewhat involved with their child.

Table 55. Change in Fathers' Life Course Outcomes for 6 month and 1 Year Participants

Fathers' Living Circumstances, 2009– 2013 (Hartford/ New Haven Sites only)	N	Entry	6 Month
Fathers with at least a high school education	30	60%	60%
Fathers employed	32	44%	56%
Fathers with financial difficulties	26	81%	88%
Fathers socially isolated	28	25%	11%
Fathers at least somewhat involved with their children	21	95%	100%
Fathers' Living Circumstances, 2009-2013 (All State Sites)	**N**	**Entry**	**1 Year**
Fathers with at least a high school education	24	83%	83%
Fathers employed	24	50%	50%
Fathers with financial difficulties	22	82%	82%
Fathers socially isolated	18	39%	33%
Fathers at least somewhat involved with their children	16	94%	94%

Table 56. Change in Fathers' Life Course Outcomes for 1 year, 2012 cohort

Fathers' Living Circumstances, 2012-2013 (All State Sites)	N	Entry	1 Year
Fathers with at least a high school education	13	85%	85%
Fathers employed	13	46%	38%
Fathers with financial difficulties	11	73%	73%
Fathers socially isolated	9	67%	33%
Fathers at least somewhat involved with their children	7	100%	100%

Change in Parenting Attitudes,
Father Home Visiting Data, 2009-2013

Child Abuse Potential Rigidity Subscale

The Child Abuse Potential Inventory (CAPI) is a standardized self-report instrument designed to measure someone's potential to abuse or neglect a child. We use the Rigidity Subscale of the CAPI (CAPI-R) to assess changes in rigid parenting attitudes over time. Parents who have less rigid expectations of their children are less likely to treat their children forcefully. A significant decrease on the Rigidity subscale reveals that a parent is less likely to feel that their children should *always* be neat, orderly, and obedient.

- The CAPI-R data show that NFN fathers come into the program with scores indicative of high-risk. For fathers entering in 2013 (N=46) CAPI-R total mean score was 28.1.
- Scores on the CAPI-R scale was analyzed in a pair-wise T-test for all fathers who participated in NFN fir a total of six months (N=37) and one year (N=28) . As shown in Table 57 and Table 58, there was a decrease in rigidity subscale for fathers participating in the program for six months and for one year. Additionally, for all fathers who remained in the program for one year and participated in the CAPI-R measure at entry and 1-year time points (N=12), rigidity scores decreased. No significant differences were found in change scores which may be due to small sample size.

Table 57. Mean Scores on the Child Abuse Potential Inventory Rigidity Subscale 6 Month, All Father Participants		
N=37	**Entry**	**6 Month**
Mean Rigidity Score	34.2	30.1

Table 58. Mean Scores on the Child Abuse Potential Inventory Rigidity Subscale 1 Year, All Father Participants		
N=28	**Entry**	**1 Year**
Mean Rigidity Score	30.4	25.3

- With regard to CAPI-R scores from the 2012 cohort (see table 59 and 60), fathers who completed six months (N=13) of services and one year (N=13) of services, rigidity scores decreased. Although these change scores were not significant, the outcomes are progressing in the favorable direction.

Table 59. Mean Scores on the Child Abuse Potential Inventory Rigidity Subscale 6 Month, 2012 Father Cohort		
N=13	**Entry**	**6 Month**
Mean Rigidity Score	38.6	36.5

Table 60. Mean Scores on the Child Abuse Potential Inventory Rigidity Subscale 1 Year, 2012 Father Cohort		
N=13	**Entry**	**6 Month**
Mean Rigidity Score	30.9	20.5

References

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Appendix: REVISED EARLY IDENTIFICATION SCREEN

The Revised Early Identification (REID) Screen for Determining Eligibility

1. Mother is single, separated, or divorced
2. Partner is unemployed
3. Inadequate income or no information
4. Unstable housing
5. No phone
6. Education under 12 years
7. Inadequate emergency contacts
8. History of substance abuse
9. Late, none, or poor prenatal care
10. History of abortions
11. History of psychiatric care
12. Abortion unsuccessfully sought or attempted
13. Adoption sought or attempted
14. Marital or family problems
15. History of, or current depression
16. Mother is age 18 or younger
17. Mother has a cognitive deficit

*FOR THE SCREEN TO BE POSITIVE, 3 items must be true or 8 items must be unknown **or items 8, 11, 14, or 15 are present with one other item**

The Revised Early Identification (REID) Screen for Determining Eligibility– Primary Father Figure

1. PFF is single, separated, or divorced
2. PFF is unemployed
3. Inadequate income or no information
4. Unstable housing
5. No phone
6. Education under 12 years
7. Inadequate emergency contacts
8. History of substance abuse
9. PFF has a history of arrests
10. PFF has experienced interpersonal violence (victim or perp)
11. History of psychiatric care
12. Abortion of considered by either parent
13. Adoption considered by either parent
14. Marital or family problems
15. History of, or current depression
16. PFF is age 18 or younger
17. PFF has a cognitive deficit

FOR THE SCREEN TO BE POSITIVE, 3 items must be true or 8 items must be unknown **or items 8, 10, 11, 14, or 15 are present with one other item**