

## WASHINGTON WORKFIRST PROGRAM

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## WorkFirst Length of Stay Measures

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An important measure for any public assistance program is the length of time that individuals or families continue to receive assistance once they enter the program. Length of stay information can be useful for forecasting caseload levels and modeling the impacts of policy changes. Length of stay measures are also often seen as indicators of a program's performance, but in this respect length of stay measures may be ambiguous and should always be considered in conjunction with other factors within and outside of the program.

Over the past several years, Washington's WorkFirst<sup>1</sup> program managers have used various measures of length of stay (LOS) to track the basic dynamics of the caseload and the program's performance. One measure that has often been reported is the average "lifetime" length of stay on Temporary Aid to Needy Families (TANF) – that is, the average number of accumulated months that cases have received TANF since the program's inception in July 1997 (not counting any periods of non-assistance). Another measure often used is the median length of stay, which tracks an entering group of cases (called a "cohort") and measures the number of months that pass before 50 percent of the cohort has left the program.

There are some problems with using these length of stay (LOS) measures. The lifetime length of stay measure (LLOS) has an inherent upward bias and tells us little about the dynamics of the caseload. The median LOS measure (MLOS) is less ambiguous, but by focusing on entering cases it provides no information about the overall caseload at a particular point in time.

This research brief examines these methods of LOS measurement, suggests a new one, and presents historical LOS information for Washington's All-Family WorkFirst caseload. The goal of the brief is to identify a LOS measure that usefully summarizes the length of stay of All-Family cases. Throughout this brief, "cases" refer to Assistance Units (AU) identified with unique AU numbers.

### Two Perspectives on Length of Stay

There are two equally valid ways of looking at how long cases stay on TANF. One perspective focuses on all of the cases receiving TANF at some point in time, for example, this month. This is the "point in time" or "snapshot" perspective. From this perspective, we could look at the average "current" length of stay that all current cases have been on TANF since they most recently entered, the average lifetime length of stay of these cases as mentioned above, or the percent of cases that have been on longer than, say, 12 months. From month to month we would compute this average or proportion and compare it with past values to see if it is rising or falling, compared with recent months or a year ago. One problem with this approach is that it lumps together very short term cases with very long term cases and sometimes masks underlying changes in caseload dynamics. Short-term TANF cases are usually quite different from long-term cases in terms of the types of assistance and services needed.

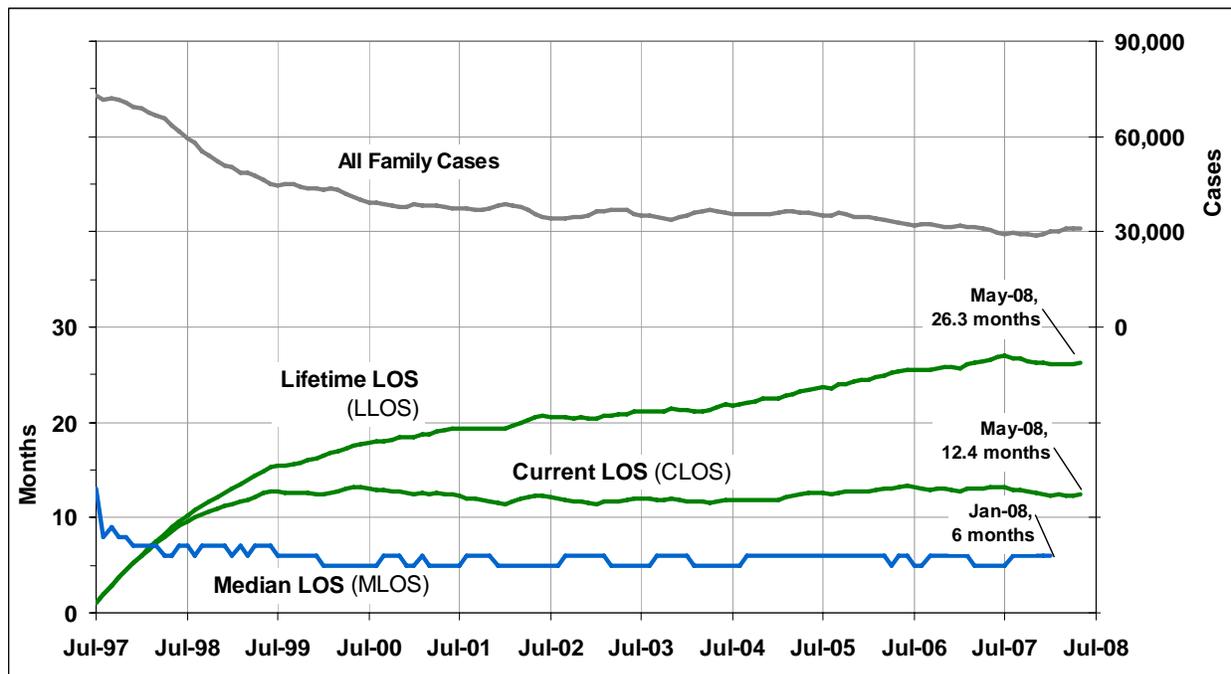
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<sup>1</sup> WorkFirst is Washington's Temporary Aid to Needy Families (TANF) program. Two basic types of TANF cases are Child-Only cases in which parents or guardians are not grant recipients, and All-Family cases in which parents do receive part of the TANF grant and who in most cases are required to participate in employment programs.

The other perspective on length of stay, instead of looking at all cases at one point in time, focuses on one group (or “cohort”) of cases entering TANF in a given month and tracks it through time. Although we must wait a number of months to see what happens with each entering cohort, this longitudinal perspective isolates the experience of entering cohorts and most clearly answers the question, “Are TANF cases staying longer?”

In general, from either the point-in-time or the longitudinal perspective, the length of stay of All-Family TANF cases in Washington has been remarkably consistent over time. Figure 1 shows the two measures that have been most often used to describe LOS for the TANF population – the lifetime LOS (LLOS) and the median LOS (MLOS) – along with the current LOS (CLOS) for the All Family caseload. This latter measure, the CLOS, is the average number of months that cases have been on TANF since their most recent entry to TANF, rather than their lifetime cumulative months. Since about July 1999, when the initial All Family TANF caseload decline slowed and the LOS measures “matured,” there has been very little variation in the CLOS and MLOS measures, with the former consistently at about 12 months and the latter measure alternating between 5 and 6 months.

**Figure 1 – Historical LOS Measures for All-Family TANF Cases**



The lifetime LOS measure, however, rose consistently throughout the period. This is because the measure is temporally biased, meaning that it will tend to increase with each passing month unless unusually high numbers of first-time entrants or newer returners enter the caseload that month. In other words, even with a “stationary” caseload in which new entrants, returners, and exiters are consistent every month in numbers and characteristics, the LLOS measure will tend to increase simply with the passage of time. Another reason for this is that with the passage of time, the pool of ex-TANF clients who are at risk of re-entry increases.

While this measure may be of some interest in gauging the current caseload's status with respect to the TANF 60-month time limit, it does little to inform us about recent caseload dynamics ("Are cases staying longer?") or the point-in-time status of the caseload ("Does the caseload consist of long-term or short-term cases?").

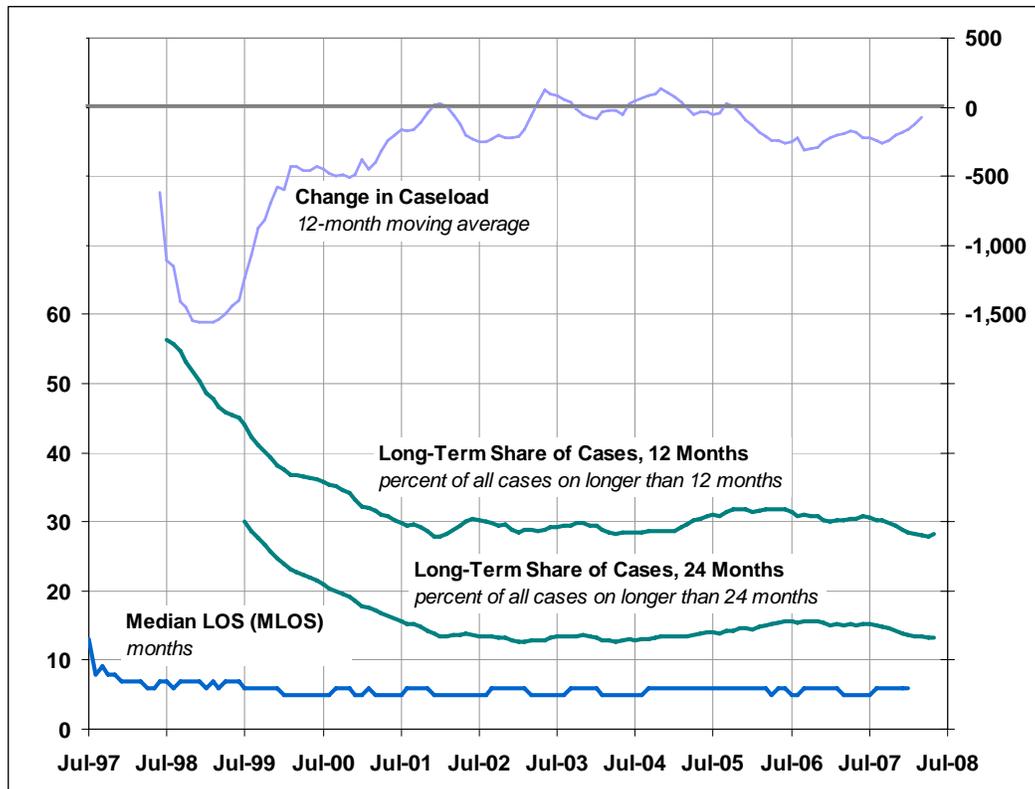
### **Recommended Length of Stay Measures**

The desirable qualities of a length of stay measure are that it should be easy to understand, relatively simple to calculate, unambiguous, and robust (not too sensitive to small changes in input data). One measure reviewed above, the median LOS, possesses these qualities and is useful for monitoring length of stay from a dynamic perspective. By isolating the experience of recent entering cohorts and comparing them to past cohorts, the MLOS measure most clearly answers the dynamic caseload question, "Are TANF cases staying longer?" As seen in Figure 1, by this measure the All-Family TANF caseload is remarkably stable. That is, on average, entering cases today do not appear to be staying longer than in earlier years.

The often-cited lifetime LOS measure, however, falls short, for the reasons noted previously. An alternative measure for monitoring point-in-time caseload status that conveys clearer information about the composition of the caseload is the proportion of current cases that have been on longer than some period, for example, longer than 12 or 24 months since the beginning of their most recent spell. Over time, this measure can tell us if the caseload is becoming more or less concentrated on longer-term clients, and it is not subject to the cumulative temporal bias that affects the lifetime LOS measure.

Two versions of the long-term share (LTS) cases measure are shown in Figure 2, one for cases lasting longer than 12 months and one for cases lasting longer than 24 months. Also shown is the median LOS for entrants and a smoothed depiction of All-Family monthly caseload changes (smoothed using a 12-month moving average). The moving average for the monthly caseload change reduces the effects of seasonality, making it easier to spot periods of fundamental caseload growth, such as during Summer 2003 and Fall 2004. The early period of rapid caseload decline shows up clearly between 1998 and 2001, as does the period of slow decline over the past two years (fiscal year 2006 through 2007). The median LOS measure is quite stable and shows no perceptible relation to fundamental caseload change. The long-term share measures, however, do appear to change with respect to the fundamental trend in caseload, especially the LTS for cases on longer than 12 months. Once the TANF caseload stabilized by the end of 2001, caseload declines were associated with increases in the LTS and caseload increases were associated with dips in the LTS. This relationship gives some weight the notion that caseloads become relatively "harder to serve" in periods of general caseload decline. It also shows that the LTS of cases on longer than 12 or 24 months is partly driven by temporary increases and declines in the short-term caseload.

**Figure 2 – Recommended Length of Stay Measures for All-Family TANF Cases**



Of the two proportional measures shown in Figure 2, the LTS for cases on TANF longer than 12 months will most often be the best measure for monitoring the point-in-time length of stay of the TANF caseload. While both measures correlate well with fundamental changes in the caseload, the 12-month LTS measure is more responsive than the 24-month measure and aligns well with program policies.<sup>2</sup> Diversion Cash Assistance is based on a 12-month period and the Pregnancy to Employment pathway corresponds well to a 12-month cycle (approximately one third of All-Family cases are in this pathway, and the number of months on TANF for the average P to E case is around 12 months).

### Which LOS measure to use?

If a single measure were to be selected from the measures described above, the long-term share (LTS) measure would be the best choice, as it provides the most information about the current status of the All-Family caseload and has a close observed relationship to the caseload's underlying trend. While no LOS measure is completely unambiguous on its own and should be compared with other relevant information in its interpretation (the effect of the economy on entry rates, policy changes, etc.), the LTS measure is the least ambiguous of the simple length of stay measures described so far. With that said, an even more noteworthy finding after examining TANF All-Family length of stay measures is that by any of the measures, the length of stay has been remarkably consistent for the past 7 years, showing no significant short-term swings.

<sup>2</sup> The correlation coefficients for both LTS measures with the 12-month moving average caseload changes are both higher than 0.90 (negatively correlated). In contrast, the correlation of the 12-month measure with monthly changes (not smoothed) is -0.65, and -0.23 for the 24-month measure.

## Length of Stay for Caseload Subgroups

Perhaps a larger problem with using a single length of stay measure for the entire All-Family caseload is that it masks important variations within the caseload. The TANF caseload is composed of a number of subgroups, some overlapping each other, that require different kinds of services and follow different pathways through the program. Some families, for example, are headed by parents with long-term disabilities who are working through the lengthy process of applying for Social Security Income (SSI) or by parents who are needed at home to care for others who are disabled. Around a third of the caseload is composed of parents who are pregnant or with infants and are on the Pregnancy to Employment pathway. Others are resolving substance abuse, family violence, mental health, or homelessness issues that impede their ability to gain stable employment. Other parents have few barriers, but need cash assistance only briefly to get through a difficult time.

Table 1 provides point-in-time length of stay measures for these groups for April 2008, as well as for parents who have short-term medical deferrals, those who have not complied with some kind of requirement that prompted a case staffing (or “processing referral back” code), and “all other” cases that don’t fit into any of these selected groups. Most striking is the divergence of LOS measures for the “all other” group from the other subgroups with barriers. In April 2008, the current length of stay for the entire caseload was 12.3 months; for the “all other” group, the CLOS was only four months. See Data Note four for a description of subgroup codes. (The current LOS, as discussed above, is the average number of months since the most recent entry into TANF.)

**Table 1 – Point-in-Time Subgroup Characteristics, Average LOS Measures in April 2008**

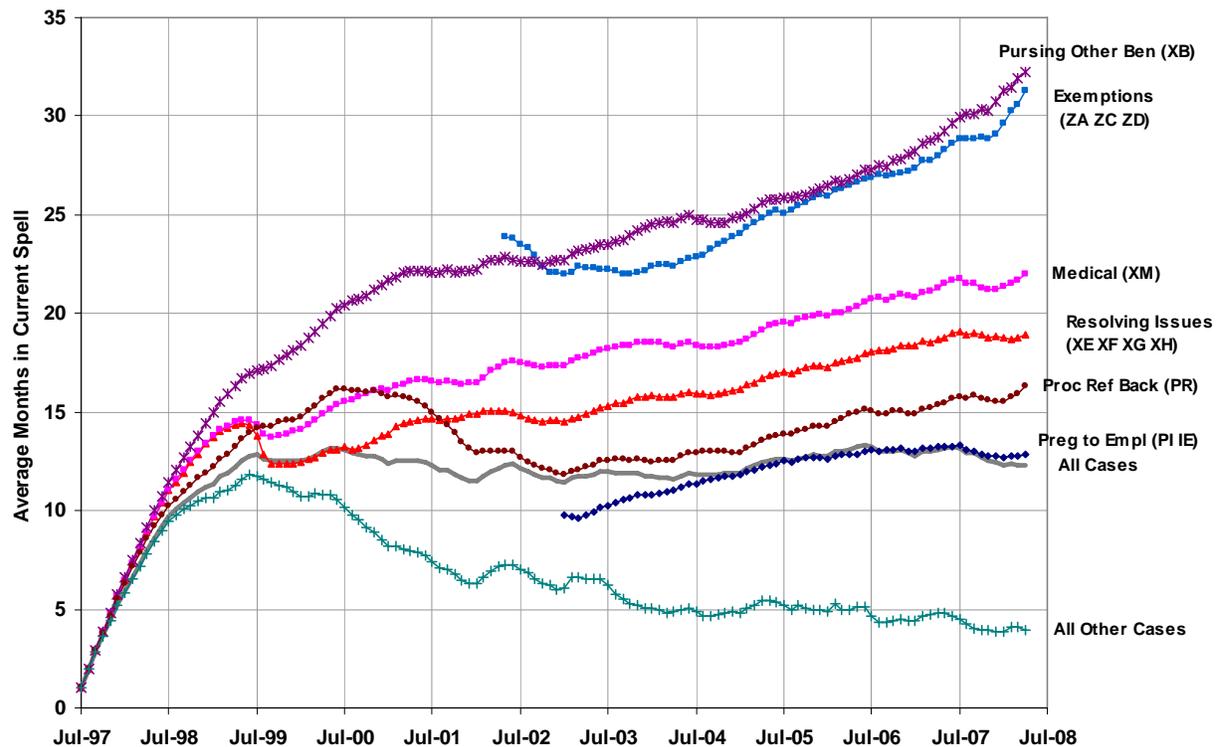
Selected Subgroups	Number of Cases	Current LOS (CLOS)	Lifetime LOS (ALOS)	Long-Term Share (LTS) (>12 Mos)	Average Months Off Before Re-Entry			Exits	Current LOS at Exit	Lifetime LOS as of Exit	
					Lifetime LOS At Entry	Returning Entries	Re-Entry				
Pregnancy to Employment (PI IE)	13,630	12.9	22.4	31.3	1,284	9.4	592	17.3	1,321	9.7	17.1
Resolving Issues (XE XF XG XH)	10,718	18.9	35.4	45.9	621	14.3	397	23.5	806	13.5	27.8
Exemptions (ZA ZC ZD)	3,417	31.3	46.9	68.8	72	17.5	42	24.4	130	25.8	38.0
Medical Deferral (XM)	8,550	22.0	38.0	50.8	424	15.3	268	24.4	598	14.8	28.3
Pursuing Other Benefits (XB)	2,643	32.3	49.5	70.6	69	16.5	41	26.9	107	27.9	44.4
Processing Refer Back (PR)	17,572	16.3	31.9	39.2	1,215	15.1	767	18.6	1,824	10.6	23.6
All Other Cases	3,415	4.0	17.1	4.7	1,136	13.4	669	22.7	777	3.0	15.2
All Cases	31,040	12.3	26.1	27.9	3,821	13.1	2,206	20.9	3,564	7.9	19.2

Note: Cases (AUs) were assigned to subgroups if any adult in the AU was coded with a JAS code in parentheses at any point during the case spell. Cases can be assigned to more than one subgroup. See Data Notes for subgroup codes

Although we determined earlier that CLOS is not the best stand-alone measure for describing the entire caseload, mainly because it is so consistent over time, it is actually quite useful for comparing subgroups within the caseload. Figure 3 tracks the CLOS for the selected groups in each month since TANF implementation (July 1997). After two-years of “maturing” of the CLOS measure, the diverging lengths of stay for the subgroups become apparent. As would be expected, those with long-term disabilities who are pursuing other benefits or those caring for others with disabilities (“Exemptions”) have the longest current LOS. The next lengthiest CLOS are those cases with medical deferrals and those resolving social or health issues. Once the PI indicator was implemented in January 2003, the Pregnancy to Employment subgroup became aligned to the average for all cases, which is not a surprise given that it comprises around a third

of the caseload and therefore weighs heavily in the average. Cases with WorkFirst compliance issues also tend to have lengthier stays, and their average CLOS is increasing. The only group whose average CLOS has declined is the “all other cases” group. These cases have no significant barriers and stay on TANF for only a short time.

**Figure 3 – Current Length of Stay (CLOS) of Subgroups**

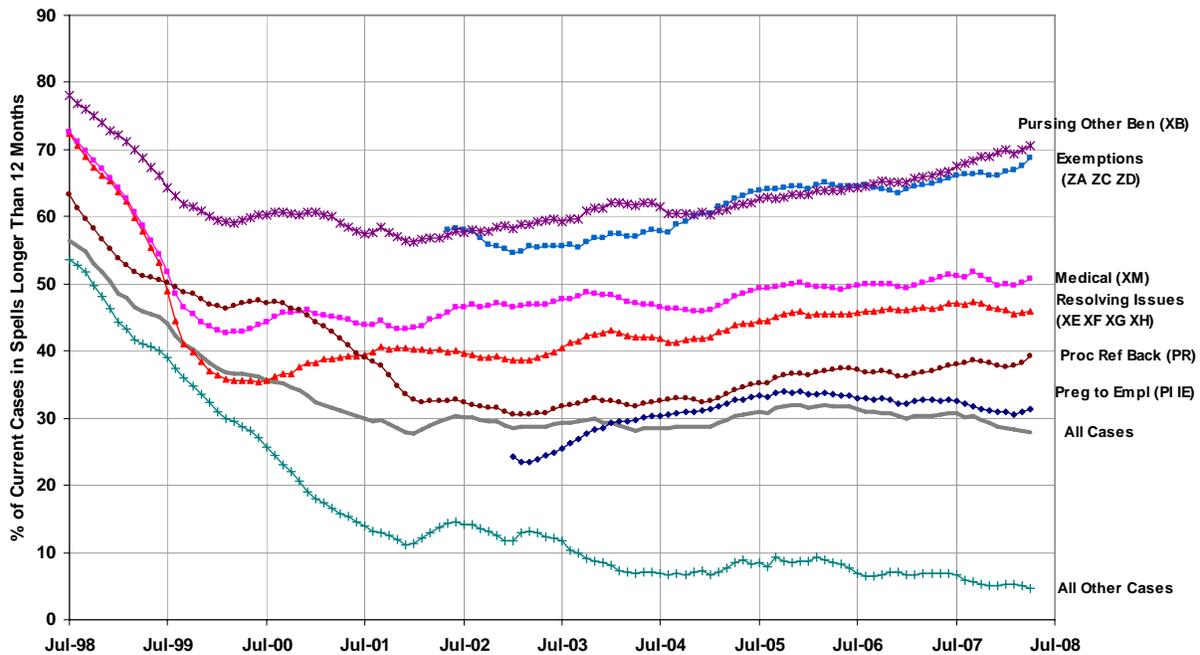


Note: Some codes not valid in earlier years; see Data Note 4.

A very similar view of subgroup length of stay is apparent in the long-term share (LTS) for cases on longer than 12 months, which is the preferred measure for measuring overall length of stay noted in the previous section. Figure 4 shows the percentage of cases in each subgroup that have been on TANF for more than 12 months since their most recent entry. While there is clearly an upward drift in the LTS for most of the subgroups, it is less dramatic than that seen with the CLOS in Figure 3. This is mainly because the CLOS measure gives longer-term cases greater weight due to the skewness in the distribution of cases by duration in any given month. That is, the average is “pulled up” by a relative few outlying cases that have been on TANF for many years.

Two noteworthy trends are the upward drift of long-term cases that are pursuing other benefits (such as SSI) and those with problems engaging in the program (Processing Referral Back). While the overall caseload length of stay has declined over the past two years, the length of stay for non-cooperating cases has increased. This could be due to case managers loosening their enforcement of participation requirements, or it may signify an increasing share of parents with barriers who have difficulty complying with participation requirements.

Figure 4 – Long-Term Share (LTS) for Cases on TANF Longer Than 12 Months



Note: Some codes not valid in earlier years; see Data Note 4.

## Conclusion

This brief has explored various measures of length of stay for the All Family TANF caseload with the aim of selecting a single measure which unambiguously summarizes length of stay. Keeping in mind that a single measure for the entire caseload will mask important subgroup differences, and that conclusions should not be based on looking a single measure of LOS without considering other information, the long-term share of clients on TANF with current spells longer than 12 months appears to be the best alternative. This measure is easy to understand, unambiguous, and robust. It appears to track the fundamental caseload trend very well, rising in periods of caseload decline and falling in periods of caseload growth, while at the same time providing information about the current composition of the caseload. Overall, a key finding from this brief is that by any measure, the length of stay in the All-Family TANF caseload has been remarkably consistent over time and is not subject to large short-term swings.

## Data Notes

1. The primary data source for this analysis is the Client Longitudinal Dataset produced at the Office of Financial Management. This table begins with a precursor Client Table produced at the Department of Social and Health Services (EMAPS) and is further modified to include case- and client-level longitudinal information. The data source for these tables is the Automated Client Eligibility System (ACES) data warehouse (loaded 6/2008). Case level longitudinal variables including current months on TANF and total months on TANF were calculated based on the AU number and benefit month fields in the table.
2. All-Family and Child-Only case designations were derived from the presence of adults as recipients on a case in a given month. Note that All-Family or Child-Only case status can change in mid-spell. No attempt to correct for these changes has been made, but a study indicated that such status changes have little or no effect on the length of stay measures presented.
3. Case exits are recorded as occurring the month *following* the last month of receipt of TANF for a spell, that is, the first month off of TANF. This ensures transitional symmetry with the definition of case entries as being the first month on TANF.
4. Subgroups were identified by selecting cases with adults that were coded at any point during a spell with the following codes:

<b>Subgroup</b>	<b>Code</b>	<b>Activities Included</b>	<b>Valid as of:</b>
<i>Pregnancy to Employment (PI IE)</i>	PI	Pregnancy to Employment Pathway Indicator	Jan 2003
	IE	Infant Exemption Indicator	Aug 2007
<i>Resolving Issues (XE XF XG XH)</i>	XE	Alcohol/Substance Abuse Treatment	Feb 2002
	XF	Family Violence Intervention	Oct 1997
	XG	Mental Health Services	Feb 2002
	XH	Resolution of Homelessness	Oct 1997
<i>Exemptions (ZA ZC ZD)</i>	ZA	Age 55+ Caretaking Relative	May 2002
	ZC	Caring for Child With Special Needs	May 2002
	ZD	Adult With Severe Chronic Condition	May 2002
<i>Pursuing Other Benefits (XB)</i>	XB		Oct 1997
<i>Medical Deferral (XM)</i>	XM	Temporary Medical Exemption	Oct 1997
<i>Processing Refer Back (PR)</i>	PR	Referral back to case manager	Oct 1997
<i>All Other Cases</i>		None of the above activities	

Note that some of the codes used to assign cases to subgroups were not actually implemented until relatively recently, such as some of the deferral and exemption codes which became valid in 2002. Cases were assigned if their representative parent participated in any of the coded activities at any point during current spell on TANF. Thus, a case with a current spell in July 2007 and in the Pregnancy to Employment pathway, but which has continuously been on TANF since July 2003, would be counted in the charts showing LOS for Pregnancy to Employment between those dates (Figures 3 and 4).

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