ARKANSAS HOUSING WITH SERVICES NEEDS AND RESOURCES ANALYSIS

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Arkansas Needs and Resource Analysis: Housing with Services

Introduction
The purpose of this analysis is to assess the relative need for affordable housing with supportive services in Arkansas, and to compare this need with the available resources in Arkansas for low-income senior and disabled populations. To conduct this analysis, CSG gathered data from both direct sources and statistical surveys. On the resources side, CSG interviewed relevant state officials, surveyed providers, and compiled lists of various affordable housing types and supportive services on a county-by-county basis throughout the state of Arkansas. On the needs side, CSG obtained and analyzed data from a variety of government sources and other surveys. These include the Census Bureau's American Community Survey (ACS), the Survey on Income and Program Participation (SIPP), the National Long-Term Care Survey (NLTCS), the National Health Interview Survey (NHIS), and the Arkansas Omnibus Survey. Because detailed data on low-income individuals with disabilities is generally only available at the state level, CSG allocated housing and service needs to the county level based on county population.

After developing needs and resources data, CSG analyzed the data to identify the gaps between needs and resources, as well as other patterns in the data. Ultimately, the State of Arkansas can use this analysis as a basis for further investigation of resource gaps and unmet demand for housing with services. It is important to note that this analysis requires a number of strong assumptions due to data limitations. As a result, any gaps identified in this report should be further explored through local market studies before significant dollars are invested in addressing such gaps.

Senior Methodology and Results

Senior Analysis
CSG employed two methodologies to compare needs and resources for the senior population in Arkansas. The reason for developing two sets of estimates relates to the various limitations of individual data sets. By developing two sets of estimates, we can create a range of indicators rather than relying on a single figure or calculation. In addition, each of the methodologies reveals slightly different aspects of Arkansas' supportive housing and service environment. The first method makes use of the NLTCS and the ACS surveys. The second methodology relies on the NHIS, Omnibus, SIPP, and ACS surveys. Appendix A contains a table that describes the pros and cons of each of these data sets.

As mentioned above, on the resources side, CSG gathered data directly from providers and government agencies. One of the principal challenges of this report is to match this often highly specific information with the much more general needs information derived from survey data. In order to accomplish this, it is necessary to develop a model of senior and disabled housing and service needs based on derived population percentages for ADLs, income, age, disability type, etc. The two methodologies that CSG employed

to calculate the housing/service needs of low-income Arkansas seniors involved the following steps:

Senior Methodology #1 (see Appendix B for a more detailed description)
- Calculate Arkansas seniors with a chronic disability (2005 Census population estimates; disability data based on Spillman 2003 analysis of 1999 NLTCS)
- Break out this total by utilization of different levels of services (1999 NLTCS)
- Develop a target for the optimal number of skilled nursing facility residents in the State of Arkansas by applying a best-practice ratio (based on Washington State)
- Apply income screens based on detailed categories such as senior renters with individual incomes below 300% of SSI (2004 ACS, CSG calculations)
- Identify demand for licensed and unlicensed affordable housing with services
- Match with resource categories for licensed and unlicensed affordable housing with services

Senior Methodology #2 (see Appendix C for a more detailed description)
- Calculate Arkansas seniors who need affordable housing based on income screen (2005 Census population estimates; sub-population data from 2004 ACS, CSG calculations)
- Calculate senior renters who need various types of affordable housing with services; assume 2+ ADLs is criteria for licensed housing with services and apply a utilization factor (ADL statistics from the 1994-5 NHIS, utilization data from the Arkansas Omnibus Survey)
- Develop a target for the optimal number of skilled nursing facility residents in the State of Arkansas by applying a best-practice ratio (based on Washington State)
- Identify demand for licensed and unlicensed affordable housing with services
- Match with resource categories for licensed and unlicensed affordable housing with services

The purpose of this analysis is not simply to replicate Arkansas' current distribution of long-term care resources. Rather, this analysis seeks to identify the potential for the State of Arkansas to re-balance and expand its long-term care resources in order to meet the needs of state residents. In order to address this issue, it is necessary to develop criteria for the optimal package of housing and/or services that a frail or disabled low-income individual with particular conditions should receive. In the first methodology, CSG has used the national pattern of community and institutional service utilization as a guide. In the past, Arkansas has relied on institutionalization of its senior population to a greater extent than the national average. While 4% of those aged 65 and over were residents of nursing facilities in 2003, in Arkansas 4.8% of seniors were housed in nursing facilities (AARP, Across the States: Profiles of Long-Term Care, 2004). CSG also analyzed data from states that have earned a reputation as leaders in progressive long-term care in order to further develop targets for the state of Arkansas. Oregon has a 1.9% rate of senior nursing facility residence, and Washington State has a 2.9% rate (AARP, Profiles of LTC, 2004). CSG selected Washington's profile as a target for Arkansas.

The second methodology also uses Washington as a guide for optimal nursing home utilization, but it relies on limitations in activities of daily living (ADLs) to identify the total optimal demand for all types of licensed housing with services. According to the 1994-5 NHIS, 5.96% of all seniors have problems with two or more ADLs. CSG used this two-ADL condition as a criterion for the individuals who need more formal licensed housing with services, including SNFs, ALFs, and RCFs (as opposed to unlicensed housing with light/contracted services).

Both methods rely on Arkansas-specific ACS data for all income screens (including interaction of income with age and disability). The first method relies on the implicit utilization factors that are contained in the 2003 Spillman analysis of the 1999 NLTCS data. The second method uses the results of the 2006 Arkansas Omnibus Survey to calculate service-utilization rates for individuals with one-plus and two-plus ADL limitations.

Senior Results
The results of the senior portion of this analysis indicate that if Arkansas re-balanced its long-term care resources, it would need an additional 4,000-5,000 licensed ALF-type units (see Tables 1 and 2 for statewide results; Appendices B and C contain detailed results by county). At the same time, the analysis indicates that Arkansas has an excess of some 3,500 nursing home beds (when compared with an optimal allocation of resources). It should be noted that CSG is still trying to ferret out some inconsistencies with estimates of occupied Medicaid nursing facility beds. If the higher-bound estimates are correct, the excess of nursing home beds may be larger by several thousand beds.

The results also generally show a strong need for unlicensed affordable housing for seniors. This need is generally hard to pin down, because while some of these identified needs could be served through the development of additional units of housing with light/contracted services, some of it could be served through the provision of additional ADL- and IADL-services in the community. The need is also hard to pin down because there are no sources of asset data for the subject population. The results indicate a need for affordable housing without services of 4,000-5,000 units, and a need for either community services or housing with services that could range from a few thousand units up to 14,000 units.

As mentioned above, the purpose of this study is to point out potential gaps that the State of Arkansas should investigate in its effort to optimize its housing and supportive service resources. CSG has included county-level analysis in Appendices B and C. The county-level figures represent distributions of the state-level figures according to population. It should be noted that actual conditions on the ground may differ from the specific numbers contained in these appendices. In addition, it is important to recognize that this analysis combines data from several surveys due to the lack of a single comprehensive data source with sufficient detail to answer the questions this report addresses. Combining data from different sources introduces the possibility of error. Despite these caveats, these results should provide a useful guide to assess Arkansas' affordable housing and supportive service environment.

Table 1. Analysis of Gaps between Senior Needs and Resources: Methodology 1

Housing/Service	Needs	Resources	Gap (Surplus)	Comment
Affordable hsg. w/o services	15,161	10,834	4,328	
Unlicensed aff. hsg. w/services OR community ADL services	19,789	5,406	14,383	Maximum--some needs will be met with comm. services; The 5,406 units are primarily 202 units. The exact (informal) service level is uncertain.
Licensed AL-type hsg. w/serv. (Medicaid)	5,449	777	4,672	Includes estimate of RCF Medicaid beds
Licensed SNFs (Medicaid)	8,317	11,824	(3,507)	Actual number of occupied Medicaid SNF beds in Arkansas may vary from the figure presented. If upper bound figure based on state DMS data is correct, surplus NH beds could increase by several thousand.

Note: All gaps identified are for income qualified populations (not for total population).
Sources: NLTCS, ACS.

Table 2. Analysis of Gaps between Senior Needs and Resources: Methodology 2

Housing/Service	Needs	Resources	Gap (Surplus)	Comment
Affordable hsg. with or without services	40,627	28,841	11,786	Broad measure
Unlicensed aff. hsg. w/services OR community services	27,039	5,406	21,633	Maximum--some needs will be met with comm. services; part of difference with Meth. 1 category is that these are not necessarily ADL service needs
Licensed AL-type hsg. w/serv. (Medicaid)	5,271	777	4,494	Includes estimate of RCF Medicaid beds
Licensed SNFs (Medicaid)	8,317	11,824	(3,507)	See comment in Table 1 regarding SNF resources

Note: all gaps identified are for income qualified populations (not for total population).
Sources: ACS, NHIS, Arkansas Omnibus Survey.

Non-Senior Disabled Methodology and Results

Younger Disabled Analysis
In addition to analyzing the housing-with-services needs and resources of the senior population in Arkansas, CSG also analyzed the state's younger disabled population. This population was defined as individuals aged 18-64 who have a disability. CSG employed a similar methodology to the senior analysis. The primary data sources were the ACS

and the SIPP. Appendix A contains information on these surveys. As with the senior analysis, any gaps identified in this portion of the report should be further investigated through local market studies before resources are allocated.

On the resource side, CSG collected state government information on ICF/MR facilities, HUD 811 units, and other housing resources for the younger disabled. To develop a picture of the needs of Arkansas' younger disabled population, CSG employed the following methodology:

Younger Disabled Methodology (see Appendix D for a more detailed description)
- Calculate number of individuals in Arkansas who are aged 18-64 and have a disability (2004 ACS)
- Calculate the number of younger disabled who need assistance with a disability (2002 SIPP, Steinmetz 2006)
- Break out the percentage of younger disabled needing assistance who specifically need assistance with two or more ADLs (2002 SIPP, Steinmetz 2006)
- Apply income screens based on detailed categories such as non-senior renters with individual incomes below 60% of AMI (2004 ACS, CSG calculations) and those needing assistance with incomes below 300% of SSI
- Identify demand for licensed and unlicensed affordable housing with services
- Match with resource categories for licensed and unlicensed affordable housing with services

One of the challenges of analyzing the needs and resources of the younger disabled population involves the different ways that this population meets its service needs. In contrast to the senior disabled population, the younger disabled populations often rely more heavily on community-based services and less on housing with services. One important area for future research will be to seek out the opinions of the younger disabled community (through focus groups, provider interviews, etc.) to determine the cultural appeal of different housing with services options.

Younger Disabled Results
The results of CSG's analysis reveal a substantial need for affordable housing without services (see Table 3 for statewide results; Appendix D contains detailed results by county). When low-income younger disabled individuals who have incomes below 60% of family median income are compared with the low-income housing resources in the state of Arkansas (without services), a gap of over 50,000 units emerges. Although some of these individuals may have access to affordable, non-subsidized units in the community, the size of the gap indicates a strong need for additional subsidized units.

The results indicate that there are around 31,000 younger disabled individuals who need assistance with less than two ADLs and 10,000 who need assistance with two or more ADLs. The second data column of Table 3 contains the housing with service resources for the younger disabled population. For those who do not need assistance, this consists of all non-age restricted housing tax credit units in the state, along with USDA 515 units and a proportion of Housing Choice Vouchers and public housing units. For those who

need assistance with less than two ADLs, the resources are limited to HUD 811 units. For those who need assistance with two or more ADLs, the resources consist of ICF/MR beds and a proportion of the state's nursing home beds.

Because there are comparatively few affordable housing-with-services resources for this population in the state of Arkansas, it would appear that most of this population is seeking to meet its needs through community-based services. CSG does not have sufficient data on unduplicated younger disabled recipients of community-based services to determine whether a gap exists in the provision of these services. The third data column of Table 3 contains the combined number of individuals who are either meeting their needs through community-based services, or who have an unmet need and thus constitute a gap in state resources. It should be noted that although the number of housing-with-service resources for the younger disabled is comparatively small, many advocates for the disabled believe that the institutional resources that do exist are inappropriate settings for the younger disabled. It remains an open question whether any unmet needs of the younger disabled should be met purely through services in the community, or whether a non-institutional model of housing with services could also play a role in meeting this population's needs.

Table 3. Analysis of Gaps between Non-Senior Disabled Needs and Resources

Housing/Service	Needs	Housing Resources	Needs met through comm. services / Gap	Comment
Affordable hsg. w/o services	70,332	17,456	52,875	Some of these needs are being met through affordable housing programs for non-disabled populations
Need assistance with less than 2 ADLs	31,697	511	31,186	These needs could be met with either community-based services or housing with services
Need assistance with 2+ ADLs	10,420	2,941	7,479	Depending upon the severity of the disability, these needs could be met with either community-based services or housing with services

Note: All gaps identified are for income qualified populations (not for total population).
Sources: ACS, SIPP

Conclusion
CSG's analysis of the needs and resources for senior and younger disabled populations in Arkansas reveals a strong need for affordable housing with and without services. The senior analysis indicates that the state needs to construct 4,000-5,000 additional units of assisted living, while reducing its inventory of nursing home beds. The younger disabled analysis points out a need for thousands of additional units of affordable housing without services.

One key question for both the senior and younger disabled populations is the extent to which the needs of individuals with moderate ADL limitations are being met or can be met through community-based services. Going forward, it will be important for

researchers and policymakers to determine whether a gap exists between the need and provision of these services. It will also be important to assess how severe a level of acuity or functional limitation such community-based services can address, and what types of housing with services are appropriate for those who may need greater service levels.

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APPENDIX A: DATA SETS AND LIMITATIONS

Source	Pros	Cons
American Community Survey (ACS--Census Bureau)	Arkansas-specific data; large sample for detailed analysis	Information on six categories of disabilities, but no ADL or IADL information
National Long-Term Care Survey (NLTCS)	More detailed ADL/IADL information	National data; Accessing recent data requires special agreement with Duke Univ. & CMS
Survey on Income and Program Participation (SIPP)	More detailed ADL/IADL information	National data
National Health Interview Survey (NHIS)	More detailed ADL/IADL information	National data; 1990s data conflicts with 1980s data in some categories
Arkansas Omnibus Survey	Arkansas-specific data; detailed disability questions	Very small sample size inhibits multi-part queries and conclusions about sub-groups of total population such as disabled or elderly; data on household, not individual, basis

APPENDIX B: SENIOR MODEL BASED ON METHOD #1

Outline of Senior Methodology #1

The following outline describes the methodology used to develop each column of the first model of senior housing and service needs (the model results follow this outline). Each column is labeled with an identifying letter. The rows in the model labeled "Factor 1" and "Factor 2" contain the relevant percentages that were applied to calculate the figures contained in the columns.

Column	Description of Contents or Calculation Methodology
A	Number of Arkansas seniors (65+) who have a chronic disability. This calculation applies a percentage (19.7%) from the 1999 National Long Term Care Survey (NLTCS) to Arkansas population estimates from the 2005 American Community Survey (ACS)
B	Number of seniors who have a chronic disability and who can use technology to address the disability and remain in the community. This calculation applies the percentage of chronically disabled seniors who can use community-based technology (18.78%) to the total elderly chronic disabled population in Column A (1999 NLTCS)
C	Number of seniors who require human help with a disability. This calculation applies the percentage of chronically disabled seniors who need human help with a disability (80.71%) to the total elderly chronic disabled population in Column A (1999 NLTCS)
D	Number of seniors who can manage their disabilities by receiving human assistance with IADLs (instrumental activities of daily living) in a community setting. This calculation applies the relevant IADL percentage (21.32%) to the total elderly chronic disabled population in Column A (1999 NLTCS)
E	Number of seniors who can manage their disabilities by either 1) receiving human assistance with ADLs (activities of daily living) in a community setting, or 2) moving into an unlicensed senior housing development where light services are available. Examples of such unlicensed housing would be HUD 202 developments and USDA congregate housing. This calculation applies the percentage of chronically disabled seniors who need human help with at least one ADL (35.03%) to the total elderly chronic disabled population in Column A. We have assumed that individuals who need assistance with one or more ADLs can either remain in the community with appropriate assistance or are candidates for unlicensed senior housing settings.
F	Number of seniors who can only meet their disability/ADL needs in a licensed housing-with-services setting. This calculation applies the percentage of chronically disabled seniors who are institutional residents (24.37%) to the total elderly chronic disabled population in Column A.
G	This column presents what Arkansas' nursing home population would be if Arkansas housed the same percentage of its elders in nursing homes as Washington state. We selected Washington as the target because it is generally acknowledged as a progressive long-term care state that has made significant progress in de-institutionalizing its senior population. The calculation applies the percentage of Washington state seniors who reside in nursing homes (2.9%)

	to the total senior population of Arkansas (nursing home percentage is from AARP's Profiles of LTC, 2004; total senior population is from the ACS)
H	This column presents an estimate of the number of seniors who need care in some type of licensed setting, but who do not necessarily need to be housed in a nursing home. The figures in this column are calculated by subtracting Column G from Column F.
I	Number of non-disabled seniors who are renters and have incomes less than 60% of Area Median Income (AMI). The purpose of this column is to estimate the number of seniors who need affordable housing *without* services. This calculation applies the percentage of seniors who do not have a chronic disability (80.3%, 1999 NLTCS) to the total number of seniors (2005 ACS), and then multiplies this figure by the percentage of non-disabled seniors who are renters and have incomes less than 60% of AMI (5.04%, CSG calculations based on 2004 ACS).
J	Number of seniors who need IADL services and who have incomes below 300% of SSI. In this case, we are interested in estimating service demand (without housing). As a result, we have used 300% of SSI as an income cutoff. The calculation multiplies the percentage of disabled seniors with incomes below 300% of SSI (77.01%) by Column D (CSG calculations based on 2004 ACS).
K	This column estimates low-income seniors who need either ADL services in the community or unlicensed housing with services. Because we are interested in both services and housing in this calculation, we could either use 300% of SSI to estimate service eligibility, or we could use 60% of AMI to estimate affordable housing eligibility. We have employed 300% of SSI because in this context this is the more inclusive income criterion. The calculation multiplies the percentage of disabled seniors with incomes below 300% of SSI (77.01%) by Column E (CSG calculations based on 2004 ACS).
L	For purposes of comparison, we have performed the same calculation as in Column K, but with 60% of AMI as the income criterion.
M	Number of seniors who need licensed housing with services and who have incomes below 300% of SSI. The calculation multiplies the percentage of disabled seniors with incomes below 300% of SSI (77.01%) by Column F (CSG calculations based on 2004 ACS).
N	This column estimates the number of "target" nursing home residents who have qualified low incomes. The calculation multiplies the percentage of disabled seniors with incomes below 300% of SSI (77.01%) by Column G (CSG calculations based on 2004 ACS).
O	This column presents an estimate of the number of low-income seniors who need care in some type of licensed setting, but who do not necessarily need to be housed in a nursing home. The figures in this column are calculated by subtracting Column N from Column M.
P	Number of units of senior affordable housing without services. These are primarily low-income housing tax credit and Section 8 units that are targeted at or occupied by seniors.
Q	Number of units of senior affordable housing with light services or contracted

	services. These include HUD 202 units, USDA congregate housing, and Area Agency on Aging-sponsored housing.
R	Number of affordable units of licensed non-nursing-home housing with services. This total consists of estimates of Medicaid-funded residential care facility (RCF) units and assisted living units.
S	Number of occupied Medicaid-reimbursed nursing home beds. We have used state-level Medicaid cost report data (as analyzed by AARP) to develop this number. As noted in the report, the state DMS data on occupied Medicaid nursing home beds are somewhat higher. We have conservatively used the lower cost report figures because these generate smaller numbers of surplus beds.
T	Sum of affordable senior housing resources. This column equals P+Q+R+S.

The table below is a guide to table one in the text. The table has the same format as its counterpart in the body of the report. The relevant data boxes contain the column letters from the detailed model that generate the table entries.

Key to Table 1. Analysis of Gaps between Senior Needs and Resources: Methodology 1

Housing/Service	Needs	Resources	Gap (Surplus)	Comment
Affordable hsg. w/o services	I	P	I - P	
Unlicensed aff. hsg. w/services OR community ADL services	K	Q	K - Q	Maximum--some needs will be met with comm. services; The 5,406 units are primarily 202 units. The exact (informal) service level is uncertain.
Licensed AL-type hsg. w/serv. (Medicaid)	O	R	O – R	Includes estimate of RCF Medicaid beds
Licensed SNFs (Medicaid)	N	S	(N – S)	Actual number of occupied Medicaid SNF beds in Arkansas may vary from the figure presented. If upper bound figure based on state DMS data is correct, surplus NH beds could increase by several thousand.

	Health/Disability Screens								Income Screens							Resources				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
	Total Seniors with a Chronic Disability (NLTCS 1999)	Seniors who can utilize equipment/ technology to address disability	Seniors who require human help with disability	Seniors who can address disab. with IADL help/ services in community	Seniors who can address disab. with ADL help/ services in community (or w/ unlicensed hsg. w/ light services)	Seniors who require licensed housing with services	Target Nursing Home population based on model LTC states	Remaining seniors who are appropriate for other licensed housing with services (ALF, etc.)	Income Qualified non-disab. senior renters inc<60%AMI (need AH w/o services)	Income Qualified seniors who need IADL services (<300%SSI)	Income Qualified seniors who need ADL services or unlicensed hsg. w/ services (<300%SSI)	Income Qualified seniors who need ADL services or unlicensed hsg. w/ services (<60%AMI)	Income Qualified seniors who need licensed housing with services (<300%SSI)	Target Medicaid NH population (<300%SSI)	Remaining income qualified seniors who are appropriate for other licensed hsg. w/services (ALF, etc.)	Senior unlicensed aff. hsg. w/o services	Senior unlicensed aff. hsg. with (light/ contracted) services	Senior licensed aff. hsg. with services (RCFs & ALFs)	Occupied Medicaid Nursing Home Units	Total senior affordable hsg. resources
Calculation Method	Pct. of all seniors	Factor 1 x Column A	Factor 1 x Column A	Factor 1 x Column A	Factor 1 x Column A	Factor 1 x Column A	Washington State NH residents as % of 65+ pop.	Residual	Pct. of total senior pop. x inc. factor	Income factor x total pop. in this category	Income factor x total pop. in this category	Income factor x total pop. in this category	Income factor x total pop. in this category	Income factor x total pop. in this category	M - N	Resource	Resource	Resource	Resource	Resource
Factor 1	19.70%	18.78%	80.71%	21.32%	35.03%	24.37%	2.90%		80.30%	77.01%	77.01%	41.31%	77.01%	77.01%						
Factor 2									5.07%											
Total State	73,364	13,779	59,213	15,641	25,696	17,876	10,800	7,076	15,161	12,045	19,789	10,615	13,766	8,317	5,449	10,834	5,406	777	11,824	28,841
Arkansas	530	100	428	113	186	129	78	51	110	87	143	77	99	60	39	134	63	0	136	333
Ashley	612	115	494	130	214	149	90	59	126	100	165	89	115	69	45	73	108	0	44	225
Baxter	1,065	200	859	227	373	259	157	103	220	175	287	154	200	121	79	146	53	20	281	500
Benton	4,935	927	3,983	1,052	1,728	1,202	726	476	1,020	810	1,331	714	926	559	367	173	176	69	410	828
Boone	945	177	763	201	331	230	139	91	195	155	255	137	177	107	70	207	20	0	172	399
Bradley	322	60	260	69	113	78	47	31	67	53	87	47	60	36	24	222	34	20	0	276
Calhoun	148	28	119	31	52	36	22	14	30	24	40	21	28	17	11	0	0	0	69	69
Carroll	713	134	575	152	250	174	105	69	147	117	192	103	134	81	53	24	56	4	56	140
Chicot	344	65	278	73	120	84	51	33	71	56	93	50	65	39	26	81	119	0	84	284
Clark	605	114	488	129	212	147	89	58	125	99	163	88	114	69	45	150	16	0	100	266
Clay	438	82	353	93	153	107	64	42	90	72	118	63	82	50	33	53	40	0	142	234
Cleburne	670	126	541	143	235	163	99	65	139	110	181	97	126	76	50	22	65	2	104	192
Cleveland	235	44	190	50	82	57	35	23	49	39	63	34	44	27	17	11	0	0	60	71
Columbia	652	122	526	139	228	159	96	63	135	107	176	94	122	74	48	181	33	0	162	375
Conway	547	103	442	117	192	133	81	53	113	90	148	79	103	62	41	131	0	20	93	243
Craighead	2,290	430	1,848	488	802	558	337	221	473	376	618	331	430	260	170	299	188	40	354	881
Crawford	1,521	286	1,228	324	533	371	224	147	314	250	410	220	285	172	113	198	22	52	190	462
Crittenden	1,370	257	1,105	292	480	334	202	132	283	225	369	198	257	155	102	323	120	40	192	674
Cross	508	95	410	108	178	124	75	49	105	83	137	73	95	58	38	82	40	0	116	238
Dallas	225	42	182	48	79	55	33	22	47	37	61	33	42	26	17	127	37	0	89	253
Desha	379	71	306	81	133	92	56	37	78	62	102	55	71	43	28	126	46	0	111	283
Drew	493	93	398	105	173	120	73	48	102	81	133	71	93	56	37	43	62	20	100	224
Faulkner	2,564	482	2,070	547	898	625	378	247	530	421	692	371	481	291	190	256	100	40	234	630
Franklin	481	90	388	103	168	117	71	46	99	79	130	70	90	55	36	158	0	0	99	257
Fulton	315	59	254	67	110	77	46	30	65	52	85	46	59	36	23	7	58	0	114	179
Garland	2,470	464	1,993	527	865	602	364	238	510	405	666	357	463	280	183	381	191	59	380	1,010
Grant	458	86	370	98	160	112	67	44	95	75	124	66	86	52	34	0	67	0	35	102
Greene	1,040	195	839	222	364	253	153	100	215	171	281	150	195	118	77	150	23	20	124	317
Hempstead	617	116	498	132	216	150	91	60	128	101	166	89	116	70	46	83	89	0	152	324
Hot Spring	825	155	666	176	289	201	121	80	171	136	223	119	155	94	61	72	20	0	124	217
Howard	384	72	310	82	135	94	57	37	79	63	104	56	72	44	29	79	0	0	157	236
Independence	917	172	740	195	321	223	135	88	190	151	247	133	172	104	68	68	159	4	158	389
Izard	355	67	286	76	124	86	52	34	73	58	96	51	67	40	26	328	30	0	141	498
Jackson	465	87	375	99	163	113	68	45	96	76	125	67	87	53	35	82	70	20	113	286
Jefferson	2,157	405	1,741	460	755	525	317	208	446	354	582	312	405	244	160	211	420	21	408	1,060
Johnson	635	119	512	135	222	155	93	61	131	104	171	92	119	72	47	84	0	20	91	195
Lafayette	212	40	171	45	74	52	31	20	44	35	57	31	40	24	16	24	0	0	46	70
Lawrence	453	85	365	97	159	110	67	44	94	74	122	66	85	51	34	78	127	0	150	355
Lee	305	57	246	65	107	74	45	29	63	50	82	44	57	35	23	131	61	0	59	251
Lincoln	376	71	304	80	132	92	55	36	78	62	102	54	71	43	28	56	0	0	121	177
Little River	349	66	282	74	122	85	51	34	72	57	94	51	66	40	26	78	0	0	80	158
Logan	606	114	489	129	212	148	89	58	125	99	163	88	114	69	45	49	40	0	98	187
Lonoke	1,601	301	1,292	341	561	390	236	154	331	263	432	232	300	182	119	234	140	20	355	749
Madison	395	74	319	84	138	96	58	38	82	65	107	57	74	45	29	0	0	0	0	0
Marion	442	83	357	94	155	108	65	43	91	73	119	64	83	50	33	34	40	0	52	126
Miller	1,139	214	920	243	399	278	168	110	235	187	307	165	214	129	85	216	91	0	195	502
Mississippi	1,265	238	1,021	270	443	308	186	122	261	208	341	183	237	143	94	440	142	0	168	750
Monroe	246	46	198	52	86	60	36	24	51	40	66	36	46	28	18	117	93	0	114	324
Montgomery	245	46	198	52	86	60	36	24	51	40	66	35	46	28	18	7	15	0	0	22

Methodology #1

	Health/Disability Screens								Income Screens							Resources				
	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T
	Total Seniors with a Chronic Disability (NLTCS 1999)	Seniors who can utilize equipment/ technology to address disability	Seniors who require human help with disability	Seniors who can address disab. with IADL help/ services in community	Seniors who can address disab. with ADL help/ services in community (or w/ unlicensed hsg. w/ light services)	Seniors who require licensed housing with services	Target Nursing Home population based on model LTC states	Remaining seniors who are appropriate for other licensed housing with services (ALF, etc.)	Income Qualified non-disab. senior renters inc<60%AMI (need AH w/o services)	Income Qualified seniors who need IADL services (<300%SSI)	Income Qualified seniors who need ADL services or unlicensed hsg. w/ services (<300%SSI)	Income Qualified seniors who need ADL services or unlicensed hsg. w/ services (<60%AMI)	Income Qualified seniors who need licensed housing with services (<300%SSI)	Target Medicaid NH population (<300%SSI)	Remaining income qualified seniors who are appropriate for other licensed hsg. w/services (ALF, etc.)	Senior unlicensed aff. hsg. w/o services	Senior unlicensed aff. hsg. with (light/ contracted) services	Senior licensed aff. hsg. with services (RCFs & ALFs)	Occupied Medicaid Nursing Home Units	Total senior affordable hsg. resources
Calculation Method	Pct. of all seniors	Factor 1 x Column A	Factor 1 x Column A	Factor 1 x Column A	Factor 1 x Column A	Factor 1 x Column A	Washington State NH residents as % of 65+ pop.	Residual	Pct. of total senior pop. x inc. factor	Income factor x total pop. in this category	Income factor x total pop. in this category	Income factor x total pop. in this category	Income factor x total pop. in this category	Income factor x total pop. in this category	M - N	Resource	Resource	Resource	Resource	Resource
Nevada	252	47	203	54	88	61	37	24	52	41	68	36	47	29	19	43	11	20	87	161
Newton	223	42	180	48	78	54	33	22	46	37	60	32	42	25	17	0	22	0	44	66
Ouachita	715	134	577	153	251	174	105	69	148	117	193	104	134	81	53	190	67	0	191	448
Perry	276	52	223	59	97	67	41	27	57	45	75	40	52	31	21	0	10	0	48	58
Phillips	636	120	514	136	223	155	94	61	132	104	172	92	119	72	47	267	108	0	101	476
Pike	291	55	235	62	102	71	43	28	60	48	79	42	55	33	22	125	20	20	77	242
Poinsett	669	126	540	143	234	163	99	65	138	110	180	97	126	76	50	325	20	20	125	490
Polk	533	100	430	114	187	130	78	51	110	87	144	77	100	60	40	106	10	10	74	199
Pope	1,494	281	1,205	318	523	364	220	144	309	245	403	216	280	169	111	154	157	0	207	517
Prairie	241	45	194	51	84	59	35	23	50	39	65	35	45	27	18	22	15	0	119	157
Pulaski	9,674	1,817	7,808	2,062	3,388	2,357	1,424	933	1,999	1,588	2,609	1,400	1,815	1,097	719	1,820	620	40	1,034	3,514
Randolph	487	92	393	104	171	119	72	47	101	80	131	71	91	55	36	64	36	0	117	217
St. Francis	737	138	594	157	258	179	108	71	152	121	199	107	138	83	55	164	33	10	475	682
Saline	2,407	452	1,943	513	843	587	354	232	497	395	649	348	452	273	179	334	68	20	43	465
Scott	294	55	238	63	103	72	43	28	61	48	79	43	55	33	22	46	0	0	51	96
Searcy	210	40	170	45	74	51	31	20	43	35	57	30	39	24	16	0	30	0	52	82
Sebastian	3,135	589	2,530	668	1,098	764	461	302	648	515	846	454	588	355	233	327	28	79	422	855
Sevier	434	82	351	93	152	106	64	42	90	71	117	63	82	49	32	46	40	0	110	195
Sharp	459	86	371	98	161	112	68	44	95	75	124	66	86	52	34	20	51	0	148	219
Stone	309	58	250	66	108	75	46	30	64	51	83	45	58	35	23	0	59	20	69	148
Union	1,166	219	941	249	409	284	172	112	241	192	315	169	219	132	87	0	116	0	300	416
Van Buren	436	82	352	93	153	106	64	42	90	72	118	63	82	49	32	0	20	9	74	103
Washington	4,761	894	3,843	1,015	1,668	1,160	701	459	984	782	1,284	689	893	540	354	296	132	0	493	921
White	1,883	354	1,520	401	660	459	277	182	389	309	508	272	353	213	140	105	325	20	204	654
Woodruff	214	40	173	46	75	52	31	21	44	35	58	31	40	24	16	58	106	0	121	285
Yell	565	106	456	120	198	138	83	54	117	93	152	82	106	64	42	96	28	20	208	351

APPENDIX C: SENIOR MODEL BASED ON METHOD #2

Outline of Senior Methodology #2

The following outline describes the methodology used to develop each column of the second model of senior housing and service needs (the model results follow this outline). Each column is labeled with an identifying letter. The rows in the model labeled "Factor 1" and "Factor 2" contain the relevant percentages that were applied to calculate the figures contained in the columns.

Column	Description of Contents or Calculation Methodology
A	Number of Arkansas seniors (65+) who are renters and have family incomes below 60% of Area Median Income (AMI). This calculation applies the percentage of seniors in Arkansas who meet these criteria (7.66%) to population estimates from the 2005 American Community Survey (percentage based on CSG analysis of 2004 ACS data).
B	Number of senior renters who have incomes below 60% of AMI who need either affordable housing without services or with light/contracted services. This column is calculated by subtracting Column C from Column A.
C	Number of senior renters who need affordable licensed housing with services. This calculation multiplies the percentage of seniors who report problems with two or more ADLs (5.96%, 1994-5 National Health Interview Survey) by the number of low-income senior renters (Column A), and then multiplies this total by a utilization factor obtained from the Arkansas Omnibus Survey. The utilization factor (87.5%) is the percentage of senior survey households needing help with two or more ADLs who actually receive help with their ADL limitations.
D	This column performs the same calculation as in Column C, but with the income criterion of 300% of SSI instead of 60% of AMI. The purpose of the first three columns is to determine income-qualified senior demand for affordable housing without services or with light services. We have assumed that these housing options will primarily appeal to low-income renters. Sixty percent of AMI is the most appropriate income criterion for such a calculation because it gives a measure of affordable housing eligibility. The purpose of columns D, E, and F is to determine income-qualified senior demand for licensed housing with services. In this case, because functional limitations and medical acuity are the primary drivers of utilization of licensed housing-with-service options, we have assumed that low-income senior homeowners as well as renters are sources of demand. Column D calculates the demand from low-income senior renters, while Column E performs the same calculation for homeowners. We have used 300% of SSI as the income criterion because this offers a rough measure of service eligibility.
E	Number of senior homeowners who need licensed affordable housing with services. This calculation multiplies the percentage of seniors who report problems with two or more ADLs (5.96%, 1994-5 National Health Interview Survey) by the number of senior homeowners with incomes below 300% of SSI, and then multiplies this total by a utilization factor obtained from the Arkansas Omnibus Survey. The utilization factor (87.5%) is the percentage of

	senior survey households needing help with two or more ADLs who actually receive help with their ADL limitations.
F	Total number of seniors who need licensed affordable housing with services. This column is equal to the sum of columns D and E (renters and homeowners).
G	This column presents what Arkansas' low-income nursing home population would be if Arkansas housed the same percentage of its elders in nursing homes as Washington state. We selected Washington as the target because it is generally acknowledged as a progressive long-term care state that has made significant progress in de-institutionalizing its senior population. The calculation applies the percentage of Washington state seniors who reside in nursing homes (2.9%) to the total senior population of Arkansas (nursing home percentage is from AARP's Profiles of LTC, 2004; total senior population is from the ACS), and then applies the percentage of disabled seniors with incomes below 300% SSI (77.01%, CSG calculations based on 2004 ACS).
H	This column presents an estimate of the number of low-income seniors who need care in some type of licensed setting, but who do not necessarily need to be housed in a nursing home. The figures in this column are calculated by subtracting Column G from Column F.
I	Total seniors who need affordable housing with or without services. This column is the sum of columns B and F.
J	Number of units of senior affordable housing without services. These are primarily low-income housing tax credit and Section 8 units that are targeted at or occupied by seniors.
K	Number of units of senior affordable housing with light services or contracted services. These include HUD 202 units, USDA congregate housing, and Area Agency on Aging-sponsored housing.
L	Number of affordable units of licensed non-nursing-home housing with services. This total consists of estimates of Medicaid-funded residential care facility (RCF) units and assisted living units.
M	Number of occupied Medicaid-reimbursed nursing home beds. We have used state-level Medicaid cost report data (as analyzed by AARP) to develop this number. As noted in the report, the state DMS data on occupied Medicaid nursing home beds are somewhat higher. We have conservatively used the lower cost report figures because these generate smaller numbers of surplus beds.
N	Sum of affordable senior housing resources. This column equals J+K+L+M.

The table below is a guide to table two in the text. The table has the same format as its counterpart in the body of the report. The relevant data boxes contain the column letters from the detailed model that generate the table entries.

Key to Table 2. Analysis of Gaps between Senior Needs and Resources: Methodology 2

Housing/Service	Needs	Resources	Gap (Surplus)	Comment
Affordable hsg. with or without services	I	N	I - N	Broad measure
Unlicensed aff. hsg. w/services OR community services	B	K	B - K	Maximum--some needs will be met with comm. services; part of difference with Meth. 1 category is that these are not necessarily ADL service needs
Licensed AL-type hsg. w/serv. (Medicaid)	H	L	H - L	Includes estimate of RCF Medicaid beds
Licensed SNFs (Medicaid)	G	M	(G – M)	See comment in Table 1 regarding SNF resources

Methodology #2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Senior renters w/ need for affordable rental hsg. fam. Inc. <60%AMI	Senior renters w/need for aff. rental hsg. w/o services OR with light/ contracted services <60%AMI	Senior renters w/ need for licensed affordable hsg. with services <60%AMI	Senior renters w/ need for licensed aff. hsg. w/ services <300%SSI	Senior homeowners who need licensed affordable hsg. with services <300%SSI	Total seniors who need licensed aff. hsg. with services (<300%SSI)	Target Medicaid NH population (<300%SSI)	Remaining income qualified seniors who are appropriate for other licensed hsg. w/services (ALF, etc.)	Total Seniors who need aff. hsg. with or without services	Senior unlicensed aff. hsg. w/o services	Senior unlicensed aff. hsg. with (light/ contracted) services	Senior licensed aff. hsg. with services (RCFs & ALFs)	Occupied Medicaid Nursing Home Units	Total senior affordable hsg. resources
Calculation Method	ACS	A - C	2+ADLs x utilization factor	2+ADLs x utilization factor	2+ADLs x utilization factor	D + E	Same as Meth. 1	F - G	B + F	Resource	Resource	Resource	Resource	J+K+L+M
Factor 1	7.66%		5.96%	5.96%	5.96%		77.01%							
Factor 2			87.50%	87.50%	87.50%									
Total State	28,526	27,039	1,488	2,507	11,081	13,588	8,317	5,271	40,627	10,834	5,406	777	11,824	28,841
Arkansas	206	195	11	18	80	98	60	38	293	134	63	0	136	333
Ashley	238	226	12	21	92	113	69	44	339	73	108	0	44	225
Baxter	414	392	22	36	161	197	121	76	590	146	53	20	281	500
Benton	1,919	1,819	100	169	745	914	559	355	2,733	173	176	69	410	828
Boone	367	348	19	32	143	175	107	68	523	207	20	0	172	399
Bradley	125	119	7	11	49	60	36	23	178	222	34	20	0	276
Calhoun	57	54	3	5	22	27	17	11	82	0	0	0	69	69
Carroll	277	263	14	24	108	132	81	51	395	24	56	4	56	140
Chicot	134	127	7	12	52	64	39	25	190	81	119	0	84	284
Clark	235	223	12	21	91	112	69	43	335	150	16	0	100	266
Clay	170	161	9	15	66	81	50	31	242	53	40	0	142	234
Cleburne	261	247	14	23	101	124	76	48	371	22	65	2	104	192
Cleveland	91	87	5	8	35	44	27	17	130	11	0	0	60	71
Columbia	253	240	13	22	98	121	74	47	361	181	33	0	162	375
Conway	213	202	11	19	83	101	62	39	303	131	0	20	93	243
Craighead	890	844	46	78	346	424	260	165	1,268	299	188	40	354	881
Crawford	592	561	31	52	230	282	172	109	842	198	22	52	190	462
Crittenden	533	505	28	47	207	254	155	98	758	323	120	40	192	674
Cross	197	187	10	17	77	94	58	36	281	82	40	0	116	238
Dallas	87	83	5	8	34	42	26	16	125	127	37	0	89	253
Desha	147	140	8	13	57	70	43	27	210	126	46	0	111	283
Drew	192	182	10	17	75	91	56	35	273	43	62	20	100	224
Faulkner	997	945	52	88	387	475	291	184	1,420	256	100	40	234	630
Franklin	187	177	10	16	73	89	55	35	266	158	0	0	99	257
Fulton	122	116	6	11	48	58	36	23	174	7	58	0	114	179
Garland	960	910	50	84	373	457	280	177	1,368	381	191	59	380	1,010
Grant	178	169	9	16	69	85	52	33	254	0	67	0	35	102
Greene	404	383	21	36	157	193	118	75	576	150	23	20	124	317
Hempstead	240	227	13	21	93	114	70	44	342	83	89	0	152	324
Hot Spring	321	304	17	28	125	153	94	59	457	72	20	0	124	217
Howard	149	142	8	13	58	71	44	28	213	79	0	0	157	236
Independence	357	338	19	31	139	170	104	66	508	68	159	4	158	389
Izard	138	131	7	12	54	66	40	25	196	328	30	0	141	498

Methodology #2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Senior renters w/ need for affordable rental hsg. fam. Inc. <60%AMI	Senior renters w/need for aff. rental hsg. w/o services OR with light/ contracted services <60%AMI	Senior renters w/ need for licensed affordable hsg. with services <60%AMI	Senior renters w/ need for licensed aff. hsg. w/ services <300%SSI	Senior homeowners who need licensed affordable hsg. with services <300%SSI	Total seniors who need licensed aff. hsg. with services (<300%SSI)	Target Medicaid NH population (<300%SSI)	Remaining income qualified seniors who are appropriate for other licensed hsg. w/services (ALF, etc.)	Total Seniors who need aff. hsg. with or without services	Senior unlicensed aff. hsg. w/o services	Senior unlicensed aff. hsg. with (light/ contracted) services	Senior licensed aff. hsg. with services (RCFs & ALFs)	Occupied Medicaid Nursing Home Units	Total senior affordable hsg. resources
Calculation Method	ACS	A - C	2+ADLs x utilization factor	2+ADLs x utilization factor	2+ADLs x utilization factor	D + E	Same as Meth. 1	F - G	B + F	Resource	Resource	Resource	Resource	J+K+L+M
Jackson	181	171	9	16	70	86	53	33	257	82	70	20	113	286
Jefferson	839	795	44	74	326	399	244	155	1,194	211	420	21	408	1,060
Johnson	247	234	13	22	96	118	72	46	351	84	0	20	91	195
Lafayette	82	78	4	7	32	39	24	15	117	24	0	0	46	70
Lawrence	176	167	9	15	68	84	51	33	251	78	127	0	150	355
Lee	119	112	6	10	46	56	35	22	169	131	61	0	59	251
Lincoln	146	139	8	13	57	70	43	27	208	56	0	0	121	177
Little River	136	129	7	12	53	65	40	25	193	78	0	0	80	158
Logan	236	223	12	21	91	112	69	44	335	49	40	0	98	187
Lonoke	623	590	32	55	242	297	182	115	887	234	140	20	355	749
Madison	154	146	8	13	60	73	45	28	219	0	0	0	0	0
Marion	172	163	9	15	67	82	50	32	245	34	40	0	52	126
Miller	443	420	23	39	172	211	129	82	631	216	91	0	195	502
Mississippi	492	466	26	43	191	234	143	91	700	440	142	0	168	750
Monroe	95	91	5	8	37	45	28	18	136	117	93	0	114	324
Montgomery	95	90	5	8	37	45	28	18	136	7	15	0	0	22
Nevada	98	93	5	9	38	47	29	18	140	43	11	20	87	161
Newton	87	82	5	8	34	41	25	16	124	0	22	0	44	66
Ouachita	278	264	15	24	108	133	81	51	396	190	67	0	191	448
Perry	107	102	6	9	42	51	31	20	153	0	10	0	48	58
Phillips	247	235	13	22	96	118	72	46	352	267	108	0	101	476
Pike	113	107	6	10	44	54	33	21	161	125	20	20	77	242
Poinsett	260	247	14	23	101	124	76	48	371	325	20	20	125	490
Polk	207	196	11	18	80	99	60	38	295	106	10	10	74	199
Pope	581	550	30	51	226	277	169	107	827	154	157	0	207	517
Prairie	94	89	5	8	36	45	27	17	133	22	15	0	119	157
Pulaski	3,762	3,565	196	331	1,461	1,792	1,097	695	5,357	1,820	620	40	1,034	3,514
Randolph	190	180	10	17	74	90	55	35	270	64	36	0	117	217
St. Francis	286	271	15	25	111	136	83	53	408	164	33	10	475	682
Saline	936	887	49	82	364	446	273	173	1,333	334	68	20	43	465
Scott	114	108	6	10	44	55	33	21	163	46	0	0	51	96
Searcy	82	78	4	7	32	39	24	15	116	0	30	0	52	82
Sebastian	1,219	1,155	64	107	473	581	355	225	1,736	327	28	79	422	855
Sevier	169	160	9	15	66	80	49	31	241	46	40	0	110	195
Sharp	179	169	9	16	69	85	52	33	254	20	51	0	148	219
Stone	120	114	6	11	47	57	35	22	171	0	59	20	69	148

Methodology #2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
	Senior renters w/ need for affordable rental hsg. fam. Inc. <60%AMI	Senior renters w/need for aff. rental hsg. w/o services OR with light/ contracted services <60%AMI	Senior renters w/ need for licensed affordable hsg. with services <60%AMI	Senior renters w/ need for licensed aff. hsg. w/ services <300%SSI	Senior homeowners who need licensed affordable hsg. with services <300%SSI	Total seniors who need licensed aff. hsg. with services (<300%SSI)	Target Medicaid NH population (<300%SSI)	Remaining income qualified seniors who are appropriate for other licensed hsg. w/services (ALF, etc.)	Total Seniors who need aff. hsg. with or without services	Senior unlicensed aff. hsg. w/o services	Senior unlicensed aff. hsg. with (light/ contracted) services	Senior licensed aff. hsg. with services (RCFs & ALFs)	Occupied Medicaid Nursing Home Units	Total senior affordable hsg. resources
Calculation Method	ACS	A - C	2+ADLs x utilization factor	2+ADLs x utilization factor	2+ADLs x utilization factor	D + E	Same as Meth. 1	F - G	B + F	Resource	Resource	Resource	Resource	J+K+L+M
Union	454	430	24	40	176	216	132	84	646	0	116	0	300	416
Van Buren	170	161	9	15	66	81	49	31	242	0	20	9	74	103
Washington	1,851	1,755	97	163	719	882	540	342	2,637	296	132	0	493	921
White	732	694	38	64	284	349	213	135	1,043	105	325	20	204	654
Woodruff	83	79	4	7	32	40	24	15	118	58	106	0	121	285
Yell	220	208	11	19	85	105	64	41	313	96	28	20	208	351

APPENDIX D: YOUNGER DISABLED MODEL

Outline of Younger Disabled Methodology

The following outline describes the methodology used to develop each column of the younger disabled model of housing and service needs (the model results follow this outline). Each column is labeled with an identifying letter. The rows in the model labeled "Factor 1" and "Factor 2" contain the relevant percentages that were applied to calculate the figures contained in the columns.

Column	Description of Contents or Calculation Methodology
A	Number of Arkansas adults (age 18-64) who have a disability (CSG calculations based on 2004 ACS). Census disability categories include: sensory, physical, mental, self-care, mobility, and employment. This calculation multiplies the adult disabled share of the population (11.28%) by the total population of Arkansas.
B	Number of non-senior disabled who do not need assistance with a disability. This column is calculated by subtracting Column C from Column A.
C	Number of non-senior disabled who need assistance with a disability. This calculation multiplies the percentage of younger disabled who need assistance with a disability (17.79%, 2002 SIPP) by Column A.
D	Number of non-senior disabled who need assistance with less than two Activities of Daily Living (ADLs). This column is equal to Column C minus Column E.
E	Number of non-senior disabled who need assistance with two or more ADLs. This calculation multiplies the percentage of the non-senior disabled who need assistance with two or more ADLs (24.74%, 2002 SIPP) by Column C.
F	Number of non-senior adults who have a disability and have incomes below 300% of SSI. This calculation multiplies the percentage of the non-senior disabled who have incomes below 300% of SSI (75.52%, 2004 ACS) by Column A.
G	Number of non-senior disabled renters who do not need assistance with a disability and who have incomes below 60% AMI. This calculation multiplies the percentage of young disabled who are renters with family incomes below 60% AMI (27.29%, 2004 ACS) by Column B. Because this population needs housing but minimal services, we have employed the 60%-AMI screen as a measure of affordable housing eligibility. Because this column primarily indicates affordable housing demand (as opposed to service demand), we have limited this category to renters.
H	Number of non-senior disabled who need assistance with less than two ADLs and who have incomes below 300% SSI. This calculation multiplies the percentage of the non-senior disabled who have incomes below 300% of SSI (75.52%, 2004 ACS) by Column D. Because this column indicates service demand, we have employed the 300%-SSI screen as a measure of service eligibility and we have included both renters and homeowners.
I	Number of non-senior disabled who need assistance with two or more ADLs and who have incomes below 300% SSI. This calculation multiplies the percentage of the non-senior disabled who have incomes below 300% of SSI

	(75.52%, 2004 ACS) by Column E. Because this column indicates service demand, we have employed the 300%-SSI screen as a measure of service eligibility and we have included both renters and homeowners.

The table below is a guide to table three in the text. The table has the same format as its counterpart in the body of the report. The relevant data boxes contain the column letters from the detailed model that generate the table entries.

Key to Table 3. Analysis of Gaps between Non-Senior Disabled Needs and Resources

Housing/Service	Needs	Housing Resources	Needs met through comm. services / Gap	Comment
Affordable hsg. w/o services	G	J	G - J	Some of these needs are being met through affordable housing programs for non-disabled populations
Need assistance with less than 2 ADLs	H	K	H - K	These needs could be met with either community-based services or housing with services
Need assistance with 2+ ADLs	I	L	I - L	Depending upon the severity of the disability, these needs could be met with either community-based services or housing with services

Non-Senior Disabled Model

	Health/Disability Screens					Income Screens				Resources		
	A	B	C	D	E	F	G	H	I	J	K	L
	Non-senior disabled pop. (age 18-64)	Non-senior disabled who do not need assistance w/disability	Non-senior disabled who need assistance w/disability	Non-senior disabled who need assistance w/less than 2 ADLs	Non-senior disabled who need assistance w/2+ ADLs	Income qualified non-sen. disabled (<300%SSI)	Income qualified non-sen. disabled renters who do not need asst. (<60%AMI)	Income qualified non-sen. disab. who need asst. w/less than 2 ADLs (<300%SSI)	Income qualified non-sen. disab. who need asst. w/2+ ADLs (<300%SSI)	Aff. hsg. w/o services for non-sen. disab	Aff. hsg. for non-sen. disab w/ <2 ADLs	Aff. hsg. for non-sen. disab w/ 2+ ADLs
Calculation Method	Pct. of state pop. (2004 ACS)	A - C	Pct. of A	C - E	Pct. of C	Income factor x A	Income factor x B	Income factor x D	Income factor x E	Resource	Resource	Resource
Factor 1	11.28%		17.79%		24.74%	75.52%	27.29%	75.52%	75.52%			
Factor 2												
Total State	313,489	257,719	55,770	41,972	13,797	236,747	70,332	31,697	10,420	17,456	511	2,941
Arkansas	2,264	1,861	403	303	100	1,710	508	229	75	265	0	15
Ashley	2,614	2,149	465	350	115	1,974	587	264	87	100	0	5
Baxter	4,549	3,740	809	609	200	3,436	1,021	460	151	156	0	30
Benton	21,087	17,335	3,751	2,823	928	15,925	4,731	2,132	701	199	0	44
Boone	4,037	3,319	718	541	178	3,049	906	408	134	407	0	19
Bradley	1,375	1,131	245	184	61	1,039	309	139	46	148	0	72
Calhoun	630	518	112	84	28	476	141	64	21	3	0	7
Carroll	3,045	2,504	542	408	134	2,300	683	308	101	77	0	6
Chicot	1,469	1,208	261	197	65	1,110	330	149	49	99	0	9
Clark	2,585	2,125	460	346	114	1,952	580	261	86	157	0	145
Clay	1,870	1,537	333	250	82	1,412	420	189	62	80	5	15
Cleburne	2,864	2,355	510	383	126	2,163	643	290	95	33	0	11
Cleveland	1,004	826	179	134	44	758	225	102	33	53	0	7
Columbia	2,786	2,290	496	373	123	2,104	625	282	93	352	0	17
Conway	2,339	1,923	416	313	103	1,767	525	237	78	134	0	20
Craighead	9,784	8,043	1,741	1,310	431	7,389	2,195	989	325	599	20	186
Crawford	6,501	5,344	1,156	870	286	4,909	1,458	657	216	323	0	31
Crittenden	5,852	4,811	1,041	784	258	4,420	1,313	592	195	617	14	21
Cross	2,170	1,784	386	291	96	1,639	487	219	72	114	18	13
Dallas	962	790	171	129	42	726	216	97	32	199	14	71
Desha	1,620	1,331	288	217	71	1,223	363	164	54	175	5	12
Drew	2,109	1,733	375	282	93	1,592	473	213	70	169	0	11

Non-Senior Disabled Model

| | Health/Disability Screens | | | | | Income Screens | | | | Resources | | |
| | A | B | C | D | E | F | G | H | I | J | K | L |
Calculation Method	Non-senior disabled pop. (age 18-64)	Non-senior disabled who do not need assistance w/disability	Non-senior disabled who need assistance w/disability	Non-senior disabled who need assistance w/less than 2 ADLs	Non-senior disabled who need assistance w/2+ ADLs	Income qualified non-sen. disabled (<300%SSI)	Income qualified non-sen. disabled renters who do not need asst. (<60%AMI)	Income qualified non-sen. disab. who need asst. w/less than 2 ADLs (<300%SSI)	Income qualified non-sen. disab. who need asst. w/2+ ADLs (<300%SSI)	Aff. hsg. w/o services for non-sen. disab	Aff. hsg. for non-sen. disab w/ <2 ADLs	Aff. hsg. for non-sen. disab w/ 2+ ADLs
	Pct. of state pop. (2004 ACS)	A - C	Pct. of A	C - E	Pct. of C	Income factor x A	Income factor x B	Income factor x D	Income factor x E	Resource	Resource	Resource
Faulkner	10,958	9,009	1,949	1,467	482	8,276	2,458	1,108	364	206	37	574
Franklin	2,055	1,689	366	275	90	1,552	461	208	68	273	0	11
Fulton	1,346	1,107	239	180	59	1,017	302	136	45	13	0	12
Garland	10,553	8,675	1,877	1,413	464	7,969	2,367	1,067	351	424	53	41
Grant	1,957	1,609	348	262	86	1,478	439	198	65	24	0	4
Greene	4,444	3,654	791	595	196	3,356	997	449	148	200	0	13
Hempstead	2,638	2,168	469	353	116	1,992	592	267	88	152	0	26
Hot Spring	3,527	2,899	627	472	155	2,663	791	357	117	137	55	13
Howard	1,641	1,349	292	220	72	1,240	368	166	55	121	0	17
Independence	3,918	3,221	697	525	172	2,959	879	396	130	90	0	27
Izard	1,515	1,245	270	203	67	1,144	340	153	50	525	0	15
Jackson	1,985	1,632	353	266	87	1,499	445	201	66	139	0	12
Jefferson	9,216	7,576	1,639	1,234	406	6,960	2,068	932	306	408	0	64
Johnson	2,712	2,229	482	363	119	2,048	608	274	90	183	18	10
Lafayette	905	744	161	121	40	684	203	92	30	7	0	5
Lawrence	1,935	1,591	344	259	85	1,461	434	196	64	122	0	16
Lee	1,302	1,071	232	174	57	983	292	132	43	276	0	6
Lincoln	1,609	1,323	286	215	71	1,215	361	163	53	51	0	13
Little River	1,492	1,227	265	200	66	1,127	335	151	50	67	0	9
Logan	2,588	2,128	460	347	114	1,955	581	262	86	68	0	185
Lonoke	6,842	5,625	1,217	916	301	5,167	1,535	692	227	298	0	48
Madison	1,688	1,387	300	226	74	1,275	379	171	56	8	0	0
Marion	1,888	1,552	336	253	83	1,426	424	191	63	15	0	6
Miller	4,869	4,003	866	652	214	3,677	1,092	492	162	558	6	31
Mississippi	5,404	4,443	961	724	238	4,081	1,212	546	180	628	18	18

Non-Senior Disabled Model

	Health/Disability Screens					Income Screens				Resources		
	A	B	C	D	E	F	G	H	I	J	K	L
Calculation Method	Non-senior disabled pop. (age 18-64)	Non-senior disabled who do not need assistance w/disability	Non-senior disabled who need assistance w/disability	Non-senior disabled who need assistance w/less than 2 ADLs	Non-senior disabled who need assistance w/2+ ADLs	Income qualified non-sen. disabled (<300%SSI)	Income qualified non-sen. disabled renters who do not need asst. (<60%AMI)	Income qualified non-sen. disab. who need asst. w/less than 2 ADLs (<300%SSI)	Income qualified non-sen. disab. who need asst. w/2+ ADLs (<300%SSI)	Aff. hsg. w/o services for non-sen. disab	Aff. hsg. for non-sen. disab w/ <2 ADLs	Aff. hsg. for non-sen. disab w/ 2+ ADLs
	Pct. of state pop. (2004 ACS)	A - C	Pct. of A	C - E	Pct. of C	Income factor x A	Income factor x B	Income factor x D	Income factor x E	Resource	Resource	Resource
Monroe	1,049	863	187	140	46	792	235	106	35	179	0	12
Montgomery	1,046	860	186	140	46	790	235	106	35	10	0	0
Nevada	1,077	886	192	144	47	814	242	109	36	52	0	9
Newton	953	784	170	128	42	720	214	96	32	28	0	5
Ouachita	3,057	2,513	544	409	135	2,309	686	309	102	266	0	21
Perry	1,181	971	210	158	52	892	265	119	39	4	0	5
Phillips	2,719	2,236	484	364	120	2,054	610	275	90	378	23	21
Pike	1,245	1,024	222	167	55	940	279	126	41	157	0	8
Poinsett	2,859	2,351	509	383	126	2,159	642	289	95	409	0	13
Polk	2,276	1,871	405	305	100	1,719	511	230	76	90	0	8
Pope	6,382	5,247	1,135	855	281	4,820	1,432	645	212	244	33	32
Prairie	1,028	845	183	138	45	776	231	104	34	38	0	13
Pulaski	41,337	33,983	7,354	5,535	1,819	31,218	9,274	4,180	1,374	2,829	104	272
Randolph	2,083	1,712	371	279	92	1,573	467	211	69	86	0	13
St. Francis	3,147	2,587	560	421	139	2,377	706	318	105	237	9	186
Saline	10,286	8,456	1,830	1,377	453	7,768	2,308	1,040	342	847	8	5
Scott	1,258	1,034	224	168	55	950	282	127	42	62	0	5
Searcy	899	739	160	120	40	679	202	91	30	55	0	6
Sebastian	13,395	11,012	2,383	1,793	590	10,116	3,005	1,354	445	596	0	116
Sevier	1,856	1,526	330	249	82	1,402	416	188	62	61	0	12
Sharp	1,962	1,613	349	263	86	1,482	440	198	65	73	0	16
Stone	1,322	1,086	235	177	58	998	296	134	44	11	23	7
Union	4,984	4,097	887	667	219	3,764	1,118	504	166	83	0	52
Van Buren	1,864	1,533	332	250	82	1,408	418	189	62	6	10	8
Washington	20,344	16,725	3,619	2,724	895	15,364	4,564	2,057	676	507	0	83

Non-Senior Disabled Model

	Health/Disability Screens					Income Screens				Resources		
	A	B	C	D	E	F	G	H	I	J	K	L
	Non-senior disabled pop. (age 18-64)	Non-senior disabled who do not need assistance w/disability	Non-senior disabled who need assistance w/disability	Non-senior disabled who need assistance w/less than 2 ADLs	Non-senior disabled who need assistance w/2+ ADLs	Income qualified non-sen. disabled (<300%SSI)	Income qualified non-sen. disabled renters who do not need asst. (<60%AMI)	Income qualified non-sen. disab. who need asst. w/less than 2 ADLs (<300%SSI)	Income qualified non-sen. disab. who need asst. w/2+ ADLs (<300%SSI)	Aff. hsg. w/o services for non-sen. disab	Aff. hsg. for non-sen. disab w/ <2 ADLs	Aff. hsg. for non-sen. disab w/ 2+ ADLs
Calculation Method	Pct. of state pop. (2004 ACS)	A - C	Pct. of A	C - E	Pct. of C	Income factor x A	Income factor x B	Income factor x D	Income factor x E	Resource	Resource	Resource
White	8,046	6,615	1,431	1,077	354	6,077	1,805	814	267	268	38	32
Woodruff	913	751	163	122	40	690	205	92	30	305	0	13
Yell	2,413	1,984	429	323	106	1,822	541	244	80	122	0	22