Appendix A

Sampling and Weighting Design for Quantitative Analysis of Success Rates in Urban PHAs

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Sampling and Weighting Design for Quantitative Analysis of Success Rates in Urban PHAs

The primary objectives of the quantitative study were to estimate the current success rates of voucher holders, compare success rates according to the demographic characteristics of voucher holders, and examine the relationship between market tightness and success rates in metropolitan. In this section, we describe the sampling and weighting procedures for the PHAs and the voucher holders that participated in the study.

We used a two-stage sampling design to select our sample of voucher holders. In the first stage we selected a representative sample of 50 large, urban PHAs in the continental United States that expected to issue at least 50 vouchers during the study's four month intake data collection period. From each of these 50 PHAs, we selected the second stage sample of about 50 voucher holders for inclusion in the data collection, for a total sample of about 2,500 voucher holders.

This appendix includes sections on development of the sampling frame (A-1), procedures for selecting the sample of PHAs and voucher holders for the study (A-2), and imputation of success status for voucher holders with unknown final status (A-3).

A.1   Sampling Frame

The study estimated success rates for eligible PHAs included in the sampling frame. The sampling frame included larger, non-rural PHAs in the continental U.S. It consisted of 406 of the 2,534 PHAs in the U.S., accounting for 62 percent of the total reserved Section 8 Vouchers and Certificates.

This section first describes the sampling universe (i.e., target population) and then the sampling frame (i.e., list from which sample was chosen) for this study.

Sampling Universe

The statement of work defined the target population for this study as all voucher holders in non-rural areas in the lower 48 states in the U.S. In order to meet the study's time and analytic constraints other restrictions were placed on the target population. First, the statement of work specified a maximum 10 month data collection period. This translated into an intake period of four months for the sample. Once a voucher is issued, up to six months may be needed to track voucher holders through either lease-up or expiration of the voucher. It was assumed that voucher holders would typically be given up to 120 days of

search time. In addition, the PHAs stop the clock when a unit is submitted for lease approval (this is called tolling). Time also must be allowed for PHAs to collect and submit the data. Hence, we decided to include in the sample only vouchers issued in the first four months of the data collection period to ensure that there would be enough time to track the eventual success of the voucher holder in leasing a unit that meets the program standards or the eventual expiration of the voucher. Since we wanted each PHA in the study to track at least 50 voucher holders, only sites that had programs large enough for us to expect 50 issuances from turnover during a four month period were included in the sampling universe.

Based on earlier studies we assumed that annual turnover rates were about 14 percent and success rates were about 75 percent. Thus, any PHA with at least 804 slots was expected to issue at least 50 new vouchers in a four month period. The derivation of the minimum PHA size of 804 slots to be included in the study is shown below.

> If X is the number of slots and turnover is 14 percent per year, then
>
> $0.14 * X$ = turnover per year.
>
> If the success rate is 75 percent, then
>
> $(0.14 * X) / 0.75$ = number of annual issuances needed to fill those slots.
>
> Under these assumptions, in a four month period (1/3 of a year) a PHA will have
>
> $[(0.14 * X) / 0.75] / 3$ issuances.
>
> Solving for X (number of slots), any PHA with at least 804 slots was expected to issue at least 50 vouchers in four months because
> $[(0.14 * 804) / 0.75] / 3 = 50$.

We rounded the 804 to 800 and thus required a PHA to have at least 800 slots to be included in the sampling universe.

A second restriction to the sampling universe results from analytic constraints. Important questions to be addressed by the study are the roles market conditions and PHA practices and procedures play in success rates. Thus, we restricted the sample to PHAs that serve one market area and PHAs that have a single set of practices and procedures for all voucher holders within each particular program (i.e., they can vary by type of voucher).[1] As a result, we excluded most statewide PHAs and other PHAs that operate from multiple offices.

In summary, the sampling universe or target population for the non-rural part of the study was voucher holders in PHAs that had a single set of practices and procedures for all voucher holders within each particular program and had at least 800 Section 8 slots in one non-rural

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[1] A priori, a few Moving to Work Demonstration sites were the only PHAs we thought might fail the single set of practices and procedures criteria.

market area. This universe included portions of statewide PHAs serving at least 800 households in a particular non-rural location.

Sampling Frame

The sampling frame for the first stage selection (selection of PHAs) was constructed using a list of all PHAs located in urban areas along with information on the size of the PHA's tenant-based Section 8 program. The list was based on a file provided by HUD in mid-November, 1999. The file contained the number of reserved vouchers and certificates in each PHA as of the end of the PHA's most recent fiscal year. In total, 1,662,163 certificates and vouchers in 2,534 PHAs were included in the file.[2]

We excluded the following PHAs from our sampling frame:

- All 921 non-metro PHAs, with a total of 168,828 certificates and vouchers. (Some were added back later, as described below).

- All 1,183 remaining small PHAs with fewer than 800 certificates and vouchers, with a total of 314,933 certificates and vouchers.

- The remaining 42 PHAs in Alaska, Hawaii, Guam, Puerto Rico, the U.S. Virgin Islands (not in the lower 48 states) and statewide PHAs, with a total of 179,473 certificates and vouchers.

We then added back in:

- Eighteen metro area components of state-wide PHAs that met the study's size requirements, with a total of 35,827 certificates and vouchers.[3]

Our final sampling frame thus consisted of 406 PHAs with 1,034,756 certificates and vouchers. This is the universe to which our estimates apply and the list from which the PHAs were selected for the study. The list of these PHAs is included as Exhibit A-1.

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[2]   The file was provided by HUD on November 16, 1999 and is based on HUDCAPS data. It identified PHAs that operate in metropolitan areas, non-metropolitan areas, and both. PHAs that operate in metropolitan areas or both metropolitan and non-metropolitan areas were kept in the sampling frame if they met the other eligibility criteria listed. The file does not include any Welfare to Work Vouchers awarded to the PHAs.

[3]   Information on the number of certificate and voucher holders in each metropolitan area that a state PHA operates was provided by HUD's Office of Policy Development and Research on October 15, 1999. It is based on MTCS records from the prior 18 months. Certificate and voucher holders whose address could not be geocoded were excluded by HUD. The file included 65,507 vouchers and certificate holders.

Exhibit A-1
Sampling Frame

PHA Number	PHA Name	Certs & Vouchers	PHA Number	PHA Name	Certs & Vouchers
PA031	Altoona Housing Authority	802	NC159	Western Piedmont Council of GO	911
WA049	HA of Thurston County	804	PA003	Scranton Housing Authority	912
MA024	Brockton Housing Authority	806	IA087	Dubuque Dept of Human Rights	915
WI195	Kenosha Housing Authority	808	IL015	Madison HA	916
CA120	Baldwin Park Hsg Authority	808	FL075	Clearwater H/A	921
VA901-6760		810	AZ031	Tempe Housing Authority	926
CT007	Stamford Housing Authority	813	MI009	Flint Housing Commission	928
OH008	Trumbull MHA	814	PA004	Allentown Housing Authority	930
KS001	Kansas City Housing Authority	814	PA013	Erie City Housing Authority	931
LA023	Alexandria Housing Authority	816	OH025	Lake MHA	936
NM067	Region V Housing Authority	824	PA075	Cumberland County Hsg Auth.	937
IN021	Housing Authority of the City	826	TX440	Pasadena (City of)	940
VA901-5720		827	IA018	Sioux City Housing Authority	941
PA017	Washington County Hsg Auth.	830	AR131	Jonesboro Urban Renewal & HA	941
NC166	Northwest Piedmont Co of Gov	832	CO072	Jefferson County	942
IL006	Champaign County Hsg Auth.	834	WA003	HA City of Bremerton	943
MA020	Quincy Housing Authority	837	ND012	Grand Forks	944
TX018	Lubbock	840	OH062	Miami Metropolitan Hsg Auth.	944
CA084	Mendocino County	840	KS002	City of Topeka City Hall	946
MI006	Saginaw Housing Commission	841	IA117	Southern Iowa Reg Hsg Auth.	948
WI214	Dane County Hsg Authority	841	ID013	Boise City HA	951
CO052	Aurora	842	UT011	Utah County	952
UT009	Davis County	842	WV036	Kanawha County HA	959
MA010	Lawrence Housing Authority	847	OH015	Butler Met.HA	960
TX008	Corpus Christi Hsg Authority	847	MA005	Holyoke Housing Authority	962
ID016	SW Idaho Cooperative HA	852	SC056	Charleston County Hsg Redvel	967
TX456	Tyler	852	PA035	Dauphin County Hsg Authority	968
PA057	Luzerne County Hsg Authority	853	CA088	City of Santa Rosa	975
WA025	Bellingham HA	853	MI045	Plymouth Housing Commission	978
FL011	City of Lakeland H/A	863	WI003	Madison CDA	983
IA050	Waterloo Housing Authority	864	TX017	Galveston Housing Authority	993
MO003	St Joseph Housing Authority	864	GA010	HA Marietta	993
PA036	Lancaster Housing Authority	866	IL004	Springfield Housing Authority	994
NY903-5660		867	NJ091	Paterson Housing Authority	996
IL116	McHenry County Hsg Authority	867	GA901-120		997
TX455	Odessa	876	TX472	Amarillo	998
TX028	Mc Allen Housing Authority	879	MA001	Lowell Housing Authority	999
NY443	City of Utica	883	NY449	City of Buffalo BMHA	1,000
CA123	Pomona Housing Authority	886	OH021	Springfield Met.HA	1,002
PA010	Butler County Hsg Authority	886	CA082	Inglewood Housing Authority	1,002
PA015	Fayette County Hsg Authority	886	OH028	Erie MHA	1,003
AR002	North Little Rock Hsg Authority	892	TX011	Laredo Housing Authority	1,005
OR028	NW Oregon Housing Assn	896	TX512	Det Cog	1,007
IL012	Decatur HA	896	IN011	Gary HA	1,008
SD045	Pennington County	898	CT029	West Haven Housing Authority	1,009
AZ035	City of Yuma Housing Authority	899	NY113	City of New Rochelle	1,014
ND021	Burleigh County	899	CA105	Burbank Housing Authority	1,014
OH044	Allen MHA 160001003 A/C #	899	NY077	Town of Islip HA	1,015
MO205	Franklin Cty Public Hsg Age	900	FL088	Gainesville H/A	1,016

PHA Number	PHA Name	Certs & Vouchers	PHA Number	PHA Name	Certs & Vouchers
VA012	Chesapeake Redevelopment & H/A	1,018	DE001	Wilmington Housing Authority	1,167
ND014	Fargo	1,019	VT001	Burlington Housing Authority	1,167
SC003	City of Spartanburg H/A	1,024	OH022	Greene Metro Housing Authority	1,171
OR014	Marion County HA	1,026	CA705	Los Angeles County Hsg Auth.	1,175
WV004	Huntington WV Hsg Authority	1,029	MN003	Duluth HRA	1,188
CA132	Oceanside Housing Authority	1,031	FL010	HA Fort Lauderdale City	1,191
MA031	Somerville Housing Authority	1,034	TX436	Mesquite	1,200
VA902-8840		1,036	NM063	Region Vi Regional Hsg Auth.	1,215
NJ003	Elizabeth Housing Authority	1,043	NY028	HA of Schenectady	1,216
CA116	National City Housing Authority	1,044	OH018	Stark Metropolitan Housing Aut	1,226
AZ005	Mesa Housing Authority	1,044	IN022	Bloomington Housing Authority	1,227
FL093	Orange Co Section 8	1,048	OR001	Clackamas County HA	1,228
TX435	Garland	1,062	GA004	HA Columbus GA Gen Fund Acct C	1,232
MO197	St. Clair Co. Housing Authority	1,063	KS162	Johnson County Hsg Authority	1,232
FL073	HA Tallahassee	1,064	PA007	Chester Housing Authority	1,234
NV007	North Las Vegas Hsg Authority	1,066	NJ013	Passaic Housing Authority	1,238
FL032	HA Ocala	1,068	CO058	Adams County	1,248
NC057	Gastonia H/A	1,073	CA106	City of Redding Hsg Authority	1,251
KY133	Covington Housing Authority	1,073	PA081	Lehigh County Housing Authority	1,256
AL086	HA Jefferson County	1,076	CT006	Waterbury Housing Authority	1,256
AR003	Fort Smith	1,077	CA111	Santa Monica Hsg Authority	1,259
IA022	City of Iowa City	1,086	SC057	HA North Charleston	1,261
FL020	HA Brevard County	1,087	WA006	HA City of Everett	1,265
CA035	San Buenaventura Hsg Auth.	1,089	CA114	Glendale Housing Authority	1,267
WI183	Racine County HA	1,093	WV001	Charleston Housing Authority	1,268
VA028	Arlington Co Dept of Human Ser	1,097	OR015	HA of Jackson County	1,276
NM057	Bernalillo County Housing Dept	1,098	MD018	Anne Arundel Cty Hsg Auth.	1,276
NY003	The Muni HA City of Yonkers	1,103	CA044	Yolo County Housing Authority	1,278
FL104	HA Pasco County	1,104	NJ095	Monmouth County HA	1,288
NJ912-5015		1,107	KY130	Lexington-Fayette County HA	1,301
CA073	Housing Authority City of Napa	1,108	IL022	HA Rockford	1,302
TX392	Denton	1,108	FL091	City of Fort Myers	1,304
SC001	H/A of Charleston	1,109	NC011	HA Greensboro	1,304
IN006	Anderson HA	1,118	PA046	Housing Authority of the County of Chester	1,309
MA023	Lynn Housing Authority	1,119	NC007	HA Asheville	1,324
AL006	H/A City of Montgomery	1,120	TX452	Bexar County Hsg Authority	1,328
WV005	Parkersburg Housing Authority	1,123	TX434	Grand Prairie	1,332
VA011	Roanoke Redevelopment & H/A	1,125	WV037	HA of Mingo County	1,335
AL169	HA Prichard	1,131	CA079	Pasadena Housing Authority	1,336
IA024	City of Cedar Rapids	1,134	UT004	Salt Lake City	1,337
OR016	HA of Yamhill County	1,141	PA022	York City Housing Authority	1,337
LA006	Monroe Housing Authority	1,146	CO002	Pueblo	1,350
VA001	Portsmouth Redevelopment & H/A	1,156	GA002	HA Savannah	1,362
NY009	Albany Housing Authority	1,161	NH001	Manchester Housing Authority	1,362
NJ912-3640		1,161	TN004	Chattanooga H/A	1,363
NY902-6840		1,165	CA143	Imperial Valley Hsg Authority	1,364

PHA Number	PHA Name	Certs & Vouchers	PHA Number	PHA Name	Certs & Vouchers
CA043	County of Butte Hsg Authority	1,374	FL068	H/A City of Homestead	1,618
GA228	HA Jonesboro	1,375	VA004	Alexandria Redevelopment & H/A	1,619
IL003	Peoria HA	1,387	TX023	Beaumont	1,629
FL009	HA West Palm Beach General Fun	1,388	PA012	Montgomery County Housing Authority	1,631
OH016	Mansfield MHA	1,394	GA007	HA Macon	1,631
AZ009	Maricopa County Hsg Authority	1,399	WA039	HA of Snohomish County	1,655
WA008	HA City of Vancouver	1,402	PA018	Westmoreland County Housing Authority	1,681
TX441	Harris County Hsg Authority	1,405	NV002	City of Las Vegas Hsg Auth,	1,697
CA023	County of Merced Hsg Auth.	1,420	CA102	Garden Grove Hsg Authority	1,699
CA055	City of Vallejo	1,427	FL080	HA Palm Beach County	1,714
CO028	Colorado Springs Housing Authority	1,431	NC002	Raleigh HA	1,717
SD016	Sioux Falls	1,438	NJ912-6160		1,719
TX007	Brownsville Housing Authority	1,454	MA901-8000		1,750
CA062	City of Alameda Hsg Authority	1,457	MA003	Cambridge Housing Authority	1,755
AR004	HA of The City of Little Rock	1,466	FL092	City of Pensacola Section 8	1,760
CA064	San Luis Obispo Hsg Authority	1,467	TX526	Brazos Valley Development Coun	1,774
NC145	Economic Improv Council, Inc	1,470	KS004	Wichita Housing Authority	1,796
TX499	Ark-Tex Cog	1,475	TX481	Panhandle Community Services	1,824
CA031	Oxnard Housing Authority	1,478	NJ912-5190		1,830
NC001	HA Wilmington	1,491	MS019	Miss Reg Housing Authority Iv	1,830
CA076	Santa Barbara Hsg Authority	1,492	FL089	Hillsborough County-Bocc	1,838
NC009	Fayetteville Metropolitan H/A	1,507	MO199	Lincoln County Pub Housing Agency	1,839
TX010	Waco	1,519	CA058	City of Berkeley Housing Authority	1,841
OH002	Youngstown MHA	1,526	NV001	City of Reno Housing Authority	1,851
LA004	Lake Charles Hsg Authority	1,526	CA052	County of Marin Hsg Authority	1,860
NJ204	Gloucester Housing Authority	1,537	RI001	Providence H A	1,861
TX431	Tarrant County	1,544	GA001	HA Augusta	1,863
ME003	Portland Housing Authority	1,548	OH048	Hamilton County Public Hsg	1,879
CT003	Hartford Housing Authority	1,565	VA017	Hampton Redevelopment & Housing Authority	1,885
UT003	Salt Lake County	1,569	LA013	Jefferson PH HA, Sec.8 Program	1,892
IN015	South Bend HA	1,573	TN003	Knoxville Community Devel Corp	1,899
MI073	Grand Rapids Housing Comm.	1,575	SC002	HA Columbia	1,924
OR022	HA Washington County	1,578	CA093	Santa Ana Housing Authority	1,933
IN016	HA City of Evansville	1,586	WI218	Milwaukee Co HA	1,942
MA007	New Bedford Housing Authority	1,591	IL030	St Clair County HA	1,967
NC013	HA Durham	1,607	SC004	HA Greenville	1,973
IN003	Fort Wayne HA-City of Fort Way	1,607	MA035	Springfield Housing Authority	1,974
DE005	New Castle County	1,613	LA002	Shreveport Housing Authority	1,984
TX034	Port Arthur	1,614	WA054	Pierce County HA	1,993
MA012	Worcester Housing Authority	1,614	MN147	Dakota County HRA	1,994
CA010	City of Richmond Hsg Authority	1,616	IL101	Dupage County Illinois	2,007
LA003	East Baton Rouge Parish HA	1,616	FL002	St. Petersburg H/A	2,016

PHA Number	PHA Name	Certs & Vouchers	PHA Number	PHA Name	Certs & Vouchers
CA085	County of Sonoma	2,067	GA237	H/A Dekalb County	2,723
IL056	Lake County HA	2,121	NJ002	Newark Housing Authority	2,728
VA007	Richmond Redevelopment & H/A	2,121	VA019	Fairfax Co Red and Housing Authority	2,739
PA023	Delaware County Hsg Authority	2,126	FL066	Hialeah H/A	2,766
TX433	Arlington	2,130	NM001	Albuquerque Housing Authority	2,767
PA051	Bucks County Hsg Authority	2,151	NJ912-5640		2,843
NV013	County of Clark Hsg Authority	2,157	KY131	City of Louisville HA	2,846
MA006	Fall River Housing Authority	2,181	OK901-5880		2,846
VA003	Newport News Redevelopment & H	2,196	NE002	Housing Authority of Lincoln	2,855
TX482	Central Texas Cog	2,197	CA101	Los Angeles County Hsg Authority	2,861
TX001	Austin Housing Authority	2,203	NY001	HA of Syracuse	2,881
TX559	Dallas County	2,229	CA033	County of Monterey Housing Authority	2,886
IA020	Des Moines Municipal Housing A	2,289	WI186	Brown County HA	2,889
FL004	Orlando H/A	2,293	AZ004	Tucson Housing Management Div	2,921
CA030	Tulare County Hsg Authority	2,325	CA028	County of Fresno Housing Authority	3,006
GA901-520		2,327	CA024	County of San Joaquin Housing	3,015
CA072	Santa Cruz County Housing Authority	2,339	OK002	Oklahoma City	3,120
OR006	HA & Comm Svcs Agency Lane Co	2,341	FL079	Broward County Housing Authority	3,148
AL002	Mobile Housing Board	2,410	TX004	Fort Worth	3,161
WA005	HA City of Tacoma	2,422	CA006	City of Fresno Hsg Authority	3,211
CA092	Area Housing Authority of Ventura County	2,432	MI901-2160		3,211
OR011	HA City of Salem	2,435	FL003	HA Tampa	3,222
NJ067	Bergen County HA	2,465	MD015	Hsg Auth. Prince Georges Co	3,230
VA006	Norfolk Redevelopment & H/A	2,468	AL001	Hsg Auth. of Birmingham Dis	3,241
CT001	Bridgeport Housing Authority	2,473	KY105	Jefferson County HA	3,347
CA021	Santa Barbara County Housing Authority	2,473	WA002	HA County of King	3,364
FL017	HA Miami Beach	2,508	CT004	Housing Authority of City of New Haven	3,402
OH005	Dayton Metropolitan HA	2,516	CA007	County of Sacramento	3,404
NY903-5380		2,524	CA026	County of Stanislaus Hsg Auth.	3,443
WA055	HA City of Spokane	2,570	NY409	City of Buffalo	3,459
CA008	Kern County Housing Authority	2,571	TX003	El Paso	3,487
OH012	Lorain MHA	2,613	CT051	City of Hartford	3,553
NJ009	Jersey City Housing Authority	2,620	MN001	St Paul PHA	3,580
NC012	HA Winston-Salem	2,654	TN005	Metropolitan Development & Housing	3,588
FL062	Pinellas County H/A	2,687	CA014	County of San Mateo Housing Authority	3,594
OH006	Lucas MHA	2,700	OH007	Akron MHA	3,613
NC003	HA Charlotte	2,710	NE001	Omaha Housing Authority	3,651

PHA Number	PHA Name	Certs & Vouchers	PHA Number	PHA Name	Certs & Vouchers
OK073	Tulsa	3,712	TX006	San Antonio Housing Authority	9,585
NY091	Town of Amherst	3,714	GA006	HA Atlanta GA	9,658
MS058	Miss Regional H/A Vi	3,730	MD002	Housing Authority of Baltimore	9,715
CA005	City of Sacramento	3,767	IL025	HA of Cook County	10,117
NY041	HA of Rochester	3,782	FL005	Miami Dade Housing Authority	10,249
MS040	Miss Regional H/A Viii	3,861	TX005	Houston Housing Authority	10,286
CA104	Anaheim Housing Authority	3,886	PA002	Philadelphia Housing Authority	11,319
WA001	HA City of Seattle	3,992	TX009	Dallas	11,340
MD004	Montgomery Co Hsg Authority	3,997	CA002	Los Angeles County Hsg Auth.	14,947
AZ001	City of Phoenix	4,046	NY110	City of New York	15,934
CO001	Denver	4,076	IL002	Chicago Housing Authority	25,233
MI001	Detroit Housing Commission	4,163	CA004	City of Los Angeles Hsg Auth.	37,251
CA056	San Jose Housing Authority	4,264	NY005	New York City Hsg Authority	76,980
PA006	Allegheny County Hsg Auth.	4,329			
MN002	Minneapolis PHA	4,332	TOTAL		1034756
NY903-5600		4,353			
MA901-1120		4,454			
MD033	Baltimore Co. Housing Office	4,515			
TN001	HA Memphis	4,523			
MO004	St. Louis County Hsg Authority	4,589			
CA001	San Francisco Hsg Authority	4,997			
PA001	Hsg Authority City of Pittsburg	5,012			
MO001	St. Louis Housing Authority	5,080			
CA067	Alameda County Hsg Authority	5,165			
OH004	Cincinnati Metropolitan Housing Authority	5,224			
MO002	H.A.K.C.	5,234			
OR002	HA of Portland	5,338			
CA068	Long Beach Housing Authority	5,370			
MN163	Metropolitan Council HRA	5,381			
FL001	Hsg Authority of Jacksonville	5,438			
CA019	San Bernardino County Housing Authority	5,601			
CA011	County of Contra Costa Housing Authority	5,618			
WI002	HA of The City of Milwaukee	5,640			
IN017	City of Indianapolis	5,700			
DC001	D.C Housing Authority	6,211			
CA059	County of Santa Clara Housing	6,415			
CA027	Riverside County Hsg Authority	6,429			
OH001	Columbus Metro. HA	6,478			
LA001	New Orleans Housing Authority	6,985			
CA094	Orange County Hsg Authority	7,408			
CA108	San Diego County Hsg Auth.	7,982			
CA063	San Diego Hsg Commission	8,399			
OH003	Cuyahoga MHA	8,696			
MA002	Boston Housing Authority	9,018			
CA003	Oakland Housing Authority	9,422			

A.2 Sample Selection

This section discusses the process for the actual selection of PHAs and voucher holders from among the 406 sites in the sampling frame.

Stratification

We did not stratify the population of PHAs by geography or other possible variables of stratification. Reasons for stratifying at the PHA level for sampling might be: (a) to get a larger sample of a certain type of PHA to get more precise subgroup estimates for that type of PHA; (b) to increase the precision of estimates (for a given sample size) by assuring proportionate sampling of groups of PHAs with different expected average outcomes; or (c) to over-sample groups of PHAs with higher variances of the outcome measures of interest. Given the information available prior to data collection, we did not believe there were any compelling stratifying characteristics.

There was no reason to believe that success rates varied greatly by geographic regions such as Census regions, so there was no reason to stratify by geographic region. Also, since we selected the sample with probability proportional to size, we wanted to ensure that large and medium size agencies had the same probability of being included in the sample irrespective of location.

We also considered stratifying based on an estimate of market tightness. We did assume that there is a relationship between success rates and market tightness. Thus, it was important to include PHAs with a range of vacancy rates in our sample. Nevertheless, we did not stratify based on market tightness for the following reasons:

- Based on our experience with other studies, such as the 1994 study of success rates, we expected that a random sample of sites would naturally yield a range of market conditions, so that stratifying by market tightness was not necessary.

- It would be very difficult to obtain an appropriate measure of market tightness that could have been used for stratification. In order to be used for stratification, a variable must be available for all PHAs in the sampling frame. Potential measures of market tightness included vacancy rates or days units remain vacant until lease-up. There are no current, consistent, comprehensive sources of data on either of these measures. The Census Housing Vacancy and Homeownership Survey provides fairly current information on rental vacancies, but only for the 75 largest metropolitan areas in the country, and only one rate for the entire area. The 1990 Census provides vacancy rates for smaller areas, but is not current enough for this study. No consistent measures of time to lease are available.

While we did not stratify the sample based on market tightness, we obtained estimates of market tightness for the study sample of PHAs for both the market as a whole and for the

portion of the market affordable to voucher holders. These measures of market tightness were based on interviews with PHA staff and other knowledgeable experts in each market. These measures were used to investigate the relationship between success rates and market tightness.

First Stage Sampling: PHAs

The goal of the first stage sampling was to include 50 PHAs in the study. This represents almost one-eighth of the 406 PHAs in our sampling universe. A sample of 50 PHAs was expected to be large enough to ensure representativeness of the wide range of market conditions and voucher types currently being issued. In the 1994 study of success rates a smaller number of sites was required. At that time programs were more homogeneous in terms of the types of vouchers being issued because there were fewer special programs. With more special programs, more PHAs were needed in the sample to increase the representativeness of the types of vouchers that voucher holders in our sample received. A larger PHA-level sample was also necessitated by the research objectives for this study. Almost all of the research objectives are investigations of the relationship between success rates and factors that vary across PHAs (e.g., market conditions, demographic characteristics of voucher recipients, and PHA policies and procedures). Thus the more PHAs in the sample the better for these investigations. In deciding on a sample of 50 PHAs we balanced the study's analytic goals with budget constraints. Including additional PHAs would have required more resources for all the data collection activities associated with each site: interviewing staff on PHA policies and procedures, training and providing technical assistance for using the automated tracking software, maintaining biweekly contact with each site, collecting and reviewing data from each PHA, and interviewing other local experts on market conditions in the PHA's jurisdiction. In balancing analytic requirements and budget constraints we decided on a sample of 50 PHAs.

To be sure that we ended up with 50 PHAs that were eligible for the study (i.e., issuing at least 50 vouchers over first four months of the study) and willing to participate, we randomly selected 100 of the 406 PHAs using the probability proportionate to size (PPS) sampling method. The advantages of PPS sampling for this study are twofold. First, unless size is strongly associated with success rates, PPS sampling would be expected to produce more precise national estimates by increasing the probability that selected sites will cover a large portion of voucher holders. Second, PPS sampling can be used to create an approximately self-weighting sample of voucher holders with roughly equal numbers of observations in each sampled sites. This is very useful for analyses of success rates including both individual and PHA-level characteristics.

With PPS sampling, a PHA having a large number of voucher holders will have a larger probability of selection than a PHA with a small number of voucher holders. For example, a PHA with 4,000 vouchers will have twice the probability of being included in the sample as a PHA with 2,000 vouchers. This procedure ensures that the number of voucher holders associated with the sample of sites selected will account for large proportion of the voucher

holders in the population. If we had selected a simple random sample of sites, we might have selected only small sites and, therefore, not have represented a large proportion of voucher holders. For example, a simple random sample of sites could have excluded the New York City PHA representing almost 77,000 vouchers.

We used the number of current reserved vouchers and certificates as our measure of size rather than the number of expected issuances during the study period. This is because our experience from other studies was that PHAs often cannot accurately predict upcoming issuances. This was the case in the 1994 study of success rates, in which several PHAs that expected to issue a large number of vouchers and certificates during the study period in fact issued none. The ability to forecast issuances is further complicated by special allocations and set-asides. For example, from our recent work on case studies of conversion of properties from property-based to tenant-based assistance we know that PHAs cannot predict issuances associated with opt-outs and prepayments. Often the final decision on whether an owner will opt out is not made until close to the actual expiration of the contract. Although Welfare to Work vouchers were expected to be issued within one year of award at each site, it was not clear how well the timing of the study's data collection would coincide with these issuances. As a result, we decided *not to* include the Welfare to Work Vouchers in our measure of size for sampling.

All 100 of the selected PHAs were contacted as part of the screening and recruitment effort.

PHAs in Initial Sample of 100. The 100 PHAs selected for the initial sample are shown in Exhibit A-2 along with their measure of size and initial first-stage sampling weights. The initial first-stage sampling weights are equal to the inverse probability of selection (discussed below). The 15 largest PHAs, with a total of 271,054 certificates and vouchers, were selected with certainty because each accounted for more than 1/100th of the total sample. Certainty sites were identified iteratively. Below, we describe the PPS procedure that selected the initial 100 sites.

In the PPS procedure each site is associated with the number of vouchers in the site.

Let X_i be the number of vouchers in the ith PHA. Let there be N PHAs in the sampling frame. Calculate the total number of vouchers in the sampling frame:

$$X = \sum_{i=1}^{N} X_i$$

Exhibit A-2
Sample of 100 PHAs Selected with Probability Proportional to Size
(Measure of Size is Certificates and Vouchers Reserved as of PHA's end of FY 1999)

Site. No.	HA_NUM	Site Name	Measure of Size	Initial First-Stage Sampling Weight
1	NY005	NYC HA	76,980	1.0
2	CA004	City of LA	37,251	1.0
3	IL002	Chicago HA	25,233	1.0
4	NY110	City of New York	15,934	1.0
5	CA002	LA County	14,947	1.0
6	TX009	Dallas	11,340	1.0
7	PA002	Philadelphia HA	11,319	1.0
8	TX005	Houston HA	10,286	1.0
9	FL005	Miami Dade HA	10,249	1.0
10	IL025	HA of Cook Cty	10,117	1.0
11	MD002	HA of Baltimore	9,715	1.0
12	GA006	HA Atlanta	9,658	1.0
13	TX006	San Antonio	9,585	1.0
14	CA003	Oakland	9,422	1.0
15	MA002	Boston HA	9,018	1.0
16	OH003	Cuyahoga MHA	8,696	1.03
17	CA063	San Diego HSG Commission	8,399	1.07
18	CA108	San Diego CTY HA	7,982	1.13
19	LA001	New Orleans HA	6,985	1.29
20	OH001	Columbus MHA	6,478	1.39
21	CA027	Riverside CTY HA	6,429	1.40
22	DC001	DC HA	6,211	1.45
23	IN017	City of Indianapolis	5,700	1.58
24	CA011	CTY of Contra Costa HA	5,618	1.60
25	CA019	San Bernardino CTY HA	5,601	1.61
26	MN163	Metro Council	5,381	1.67
27	OR002	HA of Portland	5,338	1.69
28	OH004	Cincinnati MHA	5,224	1.72
29	CA067	Alameda CTY HA	5,165	1.74
30	PA001	HA of City of Pittsburgh	5,012	1.80
31	MO004	St. Louis CTY HA	4,589	1.96
32	MD033	Baltimore CTY HSG Office	4,515	1.99
33	NY905	NY903-5600	4,353	2.07
34	PA006	Allegheny CTY HA	4,329	2.08
35	MI001	Detroit Hsg Comm	4,163	2.16
36	AZ001	City of Phoenix	4,046	2.22
37	MD004	Montgomery CTY HA	3,997	2.40
38	MS040	Miss Regional HA VIII	3,861	2.33

Exhibit A-2 *(Continued)*
Sample of 100 PHAs Selected with Probability Proportional to Size
(Measure of Size is Certificates and Vouchers Reserved as of PHA's end of FY 1999)

Site. No.	HA_NUM	Site Name	Measure of Size	Initial First-Stage Sampling Weight
39	CA005	City of Sacramento	3,767	2.39
40	OK073	Tulsa	3,712	2.42
41	OH007	Akron MHA	3,613	2.49
42	MN001	St Paul PHA	3,580	2.51
43	TX003	El Paso	3,487	2.58
44	CA007	CTY of Sacramento	3,404	2.64
45	WA002	HA CTY of King	3,364	2.68
46	MD015	HA Prince Georges CTY	3,230	2.79
47	CA006	City of Fresno HA	3,211	2.80
48	OK002	Oklahoma City	3,120	2.89
49	AZ004	Tucson Hsg Mgmt Div	2,921	3.08
50	NY001	HA of Syracuse	2,881	3.12
51	OK905	OK901-5880	2,846	3.16
52	NM001	Albuquerque HA	2,767	3.25
53	NJ002	Newark HA	2,728	3.30
54	FL062	Pinellas CTY HA	2,687	3.35
55	OH012	Lorain MHA	2,613	3.45
56	OH005	Dayton Metro HA	2,516	3.58
57	CT001	Bridgeport HA	2,473	3.64
58	CA092	Area HA of Ventura CTY	2,432	3.70
59	CA072	Santa Cruz CTY HA	2,339	3.85
60	IA020	Des Moines Municipal HA	2,289	3.93
61	VA003	Newport News Redevelopment & HSG	2,196	4.10
62	TX433	Arlington	2,130	4.23
63	CA085	Cty of Sonoma	2,067	4.36
64	LA002	Shreveport	1,984	4.54
65	WI218	Milwaukee CTY HA	1,942	4.64
66	VA017	Hampton Redevel & HSG	1,885	4.78
67	NV001	City of Reno HA	1,851	4.86
68	NJ915	NJ912-5190	1,830	4.92
69	MA003	Cambridge HA	1,755	5.13
70	CA102	Garden Grove HA	1,699	5.30
71	PA012	Montgomery CTY HA	1,631	5.52
72	MA012	Worcester HA	1,614	5.58
73	MA007	New Bedford HA	1,591	5.66
74	CT003	Hartford HA	1,565	5.75
75	TX010	Waco	1,519	5.93
76	NC145	Economic Improvement Council	1,470	6.13

Exhibit A-2 *(Continued)*
Sample of 100 PHAs Selected with Probability Proportional to Size
(Measure of Size is Certificates and Vouchers Reserved as of PHA's end of FY 1999)

Site. No.	HA_NUM	Site Name	Measure of Size	Initial First-Stage Sampling Weight
77	CO028	Colorado Springs HA	1,431	6.30
78	FL009	HA West Palm Beach General Fund	1,388	6.49
79	GA002	HA Savannah	1,362	6.61
80	TX434	Grand Prairie	1,332	6.76
81	KY130	Lexington-Fayette CTY HA	1,301	6.92
82	WA006	HA City of Everett	1,265	7.12
83	NJ013	Passaic HA	1,238	7.27
84	NY028	HA Schenectady	1,216	7.40
85	DE001	Wilmington HA	1,167	7.72
86	AL169	HA Prichard	1,131	7.96
87	TX392	Denton	1,108	8.13
88	CA035	San Buenaventura HA	1,089	8.27
89	NV007	North Las Vegas HA	1,066	8.45
90	MA031	Somerville HA	1,034	8.71
91	CA105	Burbank HA	1,014	8.88
92	NY449	City of Buffalo HA	1,000	9.00
93	MI045	Plymouth HA	978	9.21
94	IA117	Southern Iowa Reg HA	948	9.50
95	MI009	Flint HA	928	9.70
96	AZ035	City of Yuma HA	899	10.01
97	TX455	Odessa	876	10.28
98	TX008	Corpus Christi HA	847	10.63
99	NC166	Northwest Piedmont CTY HA	832	10.82
100	WI195	Kenosha HA	808	11.14

Associate the numbers 1 to X_1 with PHA 1, the numbers $X_1 + 1$ to X_2 with PHA 2, the numbers $X_1 + X_2 + 1$ to X_3 with PHA 3. Do this for all N PHAs in the sampling universe. Assume we want a sample of n sites.

Compute $K = \dfrac{X}{n}$. Generate a random number between 1 and K.

Let this be "r". Form the numbers $r, r + K, r + 2K, r + 3K.................r + (n-1)K$.

Select those sites for the which the range of numbers associated with the site, contain the numbers formed above starting with the random number. According to this procedure the probability of including the i th site in the sample is

$$\pi_i = n \frac{X_i}{X}.$$

(The inverse of the sampling probability is the initial sampling weight.) For some sites in which X_i is large, it may happen that $n X_i \succ X$. This means that the probability of selection is greater than one. All such sites are included in the sample with certainty. The new sample size to be selected is the original sample size minus the certainty units. This sample of this size is now selected with probability proportional to the remaining sizes. In all, the 15 largest sites were selected with certainty.

The remaining 85 PHAs were chosen with probability proportionate to size, but none were selected with certainty. That means, if a different random number happened to be generated (the number "r" above), a different sample of 85 PHAs would be selected. This sample of 85 non-certainty sites is only one of many possible samples that could have been chosen (the 15 certainty sites would have been selected no matter what random number was generated), and thus the final sample of 50 PHAs was only one of many samples that could have been chosen. All estimates from the sample have standard errors associated with them to reflect the range of estimates that could be expected if a different sample had been selected. The only way to avoid this sampling error is to select all sites in the sampling universe (i.e., do a census).

Results of Initial Screening Calls with the 100 PHAs
The initial screening calls with the 100 sampled PHAs yielded the following results:

	Certainty Sites	Non-Certainty Sites	Total
Willing and Eligible	13	57	70
Not Eligible	0	16[A]	16
Not Willing, but eligible	2	7	9
Not Willing, eligibility unknown	0	5	5
Total	15	85	100

[A] Sixteen of the selected sample were ineligible because they either did not expect to have enough issuances *in metropolitan* areas during the study period (14 sites); or they were not operating a standard program (2 sites with numerous waivers associated with their Moving to Work programs).

Adjustments to Initial First Stage Sampling Weights to Account for Ineligible and Unwilling PHAs

As a result of the information on ineligible and unwilling PHAs obtained during the screening calls, several adjustments needed to be made to the first stage sampling weights and to estimates of the eligible universe represented by the sample. Separate adjustments were made to the weights for certainty and non-certainty sites.

Certainty Sites. None of the certainty sites were found to be ineligible during the initial screening calls. Thus, our estimate of the eligible universe in these sites remained 271,054 vouchers. However, two of the 15 certainty sites were not willing to participate in the study. We treated these refusals as if they were a random sub-sample of the set of certainty sites and assigned their weights to the other certainty sites so that the total weight for this group of PHAs remained at 15. The initial first-stage sampling weight for each certainty site was 1, so the adjustment for each site's weight was $15/13 * 1 = 1.154$.

A total of 16 non-certainty sites were found to be ineligible based on the screening calls. These 16 sites, with a total weight of 87.39 (45,519 units) represent 144,095 units in the universe. No adjustments were made to the initial first-stage sampling weights to account for these ineligible PHAs, because they represent other ineligible PHAs in the universe. Instead the impact of these 16 sites was to reduce our estimate of the eligible universe by 144,095 units. Of the 16 ineligible PHAs, two sites had numerous waivers connected with the Moving to Work (MTW) program and were not operating standard programs, while 14 sites, were ineligible because they did not expect to have enough issuances in metropolitan areas within the study period. These 14 sites had a total weight of 80.57 (38,426 units) representing 126,071 units in the universe.

Seven non-certainty sites were unwilling to participate in the study, but were assumed eligible based on their responses to the initial contact. These seven sites, with a total weight of 38.83 (16,292 units) represent 63,613 units in the universe. We treated these seven refusals as if they were a random subsample of the eligible non-certainty sites and allocated their weight to the remaining 57 willing and eligible non-certainty sites to preserve the total weight of this group of PHAs.

Five non-certainty sites were unwilling to participate in the study, but we could not determine their eligibility based on their responses to the initial contact. These five sites, with a total weight of 26.21 (11,501 units) represent 45,013 units in the universe. Based on what was known about the eligibility status of all ineligible and refusals we allocated a portion of the weight of this group of PHAs to the ineligible and to the eligible but unwilling categories. As noted above the total weight of the standard program (non-MTW) ineligibles was 80.57 and the total weight for refusals was 38.83. We allocated 80.57/ (80.57+38.83) of

the weight of the unknowns to the ineligible category (17.69), and 38.83/(80.57+38.83) of the weight of the unknowns to the refusal category (8.52). The table below summarizes the revised initial first-stage sampling weights and universe estimates:

	Certainty Sites	Non-Certainty Sites	Total
Initial Sample Size	15	85	100
Sum of Weights	15	391	406
Units in the PHAs	271,054	249,039	520,893
Total Initial Universe Estimate	271,054	765,744	1,036,798
Final Sample Size	13	57	70
Sum of Weights (Excludes Ineligibles)	15	287	302
Units in the PHAs	243,801	175,727	419,528
Final Universe Estimate (Excludes Ineligibles)	271,054	614,334	895,643

One concern that is raised by the number of unwilling sites is the degree of representativeness of the sample. To that end, separately for certainty and non-certainty sites, we compared some characteristics of the willing/eligible and unwilling/eligible sites along some key dimensions such as PHA size, tenant characteristics (income, race, household composition), area vacancy rates, and census tract characteristics (percent poverty and percent minority). Along all dimensions the unwilling sites were within the range of the minimum/maximum for the willing sites.

Selection of 50 PHAs
We selected a subsample of 50 PHAs from the 70 PHAs that were both willing and eligible based on the initial screening and recruitment effort. At this stage, the largest five sites were selected with certainty, and the remaining 45 sites were selected using systematic sampling after ordering all PHAs by size. Systematic sampling is selecting every nth site where n is the inverse of the fraction of sites to be selected. For example, since there were 70 sites remaining after eligibility and willingness to participation were determined and 5 sites were selected with certainty, then we needed to select 45 of the remaining 65 sites. Thus, the remaining 65 PHAs were ordered by size and every 65/45th site was selected (65/45 = the inverse of 45/65). Thus, all non-certainty sites had an equal selection probability at this stage and we maintained a similar distribution of PHAs by size as in the initial selection.

Once data collection began, two additional sites were dropped from the study. The City of Buffalo Housing Authority was selected to be in the study. However, we mistakenly recruited the Buffalo Municipal Housing Authority to participate. The Buffalo Municipal Housing Authority was not in our sampling frame because they did not have a Section 8 Program until 2000 (or possibly late 1999). They received some vouchers as part of a public housing litigation settlement and then applied for, and received, some vouchers for persons with a disability. Because of staff limitations, they only provided records on 20 (rather than 50) families searching for S8 housing. All were vouchers for persons with a disability. Also their sample was picked retrospectively (i.e., after some people had found housing and others

had a chance to look already). At the other study sites, the sample was picked when the voucher was issued rather than after the families had some time to search. Thus the weights for the 44 remaining non-certainty sites were multiplied by 45/44 to account for the loss of this site.

The second site, San Antonio was dropped because it turned out that no vouchers were to be issued during the study's data collection period making it ineligible for the study. The site provided a sample of 50 voucher holders who were issued vouchers during January of 2000, which was prior to the study's data collection window. As a result, the observations were not included in the study analysis. No changes in weights result from dropping San Antonio, as it was ineligible and represents other ineligible sites. However, our estimate of the eligible universe is affected. The units represented by the observations in San Antonio totaled 16,388 (1.7 was the PHA weight multiplied by 9585 units). Thus our final universe estimate for certainty sites and overall decrease by that number. Our revised final universe estimates are:

Revised Final Universe Estimate (Excludes San Antonio)	254,666	614,334	879,255

Exhibit A-3 shows the final sample of 48 PHAs used in the analysis along with their final weights. The final weight is the product of the initial first stage sampling weight multiplied by the adjustment for selecting a sample of willing and eligible properties (1 for the second stage certainty sites, and 65/45 for the remaining sites), multiplied by the adjustment for the dropping Buffalo (1 for the second stage certainty sites, and 45/44 for the remaining sites).

Exhibit A-3
Sample of 48 PHAs

HA_NUM	Site Name	MOS	Initial First-Stage Sampling Weight Stage WT	Rvsd WT\Control for Non-Response	Control for Selection of 50	Final PHA Wt
NY005	NYC HA	76,980	1.00	1.15	1.00	1.15
CA004	City of LA	37,251	1.00	1.15	1.00	1.15
IL002	Chicago HA	25,233	1.00	1.15	1.00	1.15
CA002	LA County	14,947	1.00	1.15	1.00	1.15
TX009	Dallas	11,340	1.00	1.15	1.00	1.15
FL005	Miami Dade HA	10,249	1.00	1.15	1.48	1.70
IL025	HA of Cook County	10,117	1.00	1.15	1.48	1.70
GA006	HA Atlanta	9,658	1.00	1.15	1.48	1.70
MA002	Boston HA	9,018	1.00	1.15	1.48	1.70
OH003	Cuyahoga MHA	8,696	1.03	1.23	1.48	1.82
CA063	San Diego HSG Commission	8,399	1.07	1.28	1.48	1.89
LA001	New Orleans HA	6,985	1.29	1.54	1.48	2.28
DC001	DC HA	6,211	1.45	1.74	1.48	2.57
IN017	City of Indianapolis	5,700	1.58	1.89	1.48	2.80
MN163	Metro Council	5,381	1.67	2.00	1.48	2.95
CA067	Alameda CTY HA	5,165	1.74	2.08	1.48	3.08
MO004	St. Louis CTY HA	4,589	1.96	2.35	1.48	3.47
MD033	Baltimore CTY HSG Office	4,515	1.99	2.38	1.48	3.52
PA006	Allegheny CTY HA	4,329	2.08	2.49	1.48	3.68
MI001	Detroit Hsg Comm	4,163	2.16	2.59	1.48	3.82
AZ001	City of Phoenix	4,046	2.22	2.66	1.48	3.93
CA005	City of Sacramento	3,767	2.39	2.86	1.48	4.23
OK073	Tulsa	3,712	2.42	2.90	1.48	4.28
OH007	Akron MHA	3,613	2.49	2.98	1.48	4.40
TX003	El Paso	3,487	2.58	3.09	1.48	4.56
MD015	HA Prince Georges CTY	3,230	2.79	3.34	1.48	4.94
CA006	City of Fresno HA	3,211	2.80	3.35	1.48	4.95
OK002	Oklahoma City	3,120	2.89	3.46	1.48	5.11
AZ004	Tucson Hsg Mgmt Div	2,921	3.08	3.69	1.48	5.45
NY001	HA of Syracuse	2,881	3.12	3.74	1.48	5.52
NM001	Albuquerque HA	2,767	3.25	3.89	1.48	5.75
NJ002	Newark HA	2,728	3.30	3.95	1.48	5.84
FL062	Pinellas CTY HA	2,687	3.35	4.01	1.48	5.93
OH005	Dayton Metro HA	2,516	3.58	4.29	1.48	6.33
CT001	Bridgeport HA	2,473	3.64	4.36	1.48	6.44
IA020	Des Moines Municipal HA	2,289	3.93	4.71	1.48	6.95

Appendix A – Sampling and Weighting Design for Quantitative Analysis of Success Rates in Urban PHAs

Exhibit A-3 *(Continued)*
Sample of 48 PHAs

HA_NUM	Site Name	MOS	Initial First-Stage Sampling Weight Stage WT	Rvsd WT\Control for Non-Response	Control for Selection of 50	Final PHA Wt
VA003	Newport News Redevelopment & HSG	2,196	4.10	4.91	1.48	7.25
WI218	Milwaukee CTY HA	1,942	4.64	5.56	1.48	8.21
NJ915	NJ912-5190	1,830	4.92	5.89	1.48	8.70
PA012	Montgomery CTY HA	1,631	5.52	6.61	1.48	9.76
CT003	Hartford HA	1,565	5.75	6.89	1.48	10.17
TX434	Grand Prairie	1,332	6.76	8.09	1.48	11.96
KY130	Lexington-Fayette CTY HA	1,301	6.92	8.29	1.48	12.24
WA006	HA City of Everett	1,265	7.12	8.53	1.48	12.60
CA035	San Buenaventura HA	1,089	8.27	9.90	1.48	14.63
MI045	Plymouth HA	978	9.21	11.03	1.48	16.29
TX008	Corpus Christi HA	847	10.63	12.73	1.48	18.80
WI195	Kenosha HA	808	11.14	13.34	1.48	19.71

Second Stage Sampling: Voucher Holders

The second stage sampling involved selecting specific voucher holders in each of the selected sites. Our goal was to sample the first 50 voucher holders following training in each non-certainty site. In the certainty sites more than 50 voucher holders were sampled in order to preserve a self-weighting sample. As with the other sites, the sample consisted of the first cases in the site following the training. Thus, the initial second stage sampling weight equals the measure of size (MOS) divided by the target sample size of voucher holders.

In fact, the number of voucher holders in several sites was different from the target. Thus, the final second stage weights of the sampled voucher holders reflect the actual sample sizes. (MOS/actual sample size of voucher holders). In sites where data were provided on more than 50 voucher holders, the final second stage weight for each voucher holders is less than the initial second stage weight, and in sites where data were provided on fewer than 50 voucher holders, the final second stage weight for each voucher holder is greater than the initial second stage weight. The final analytic weight for each voucher holders is the product of the final first stage weight (PHA weight) times the final second stage weight (voucher holder weight). Exhibit A-4 shows the target and actual number of voucher holders sampled in each site, the initial and final second stage weights for voucher holders in each site, and the final analytic weight for voucher holders in each site.

Exhibit A-4
Final Weights for Voucher Holders

HA_NUM	Site Name	MOS	Target Response	Initial Voucher Holder Weight (MOS/Target)	Actual Response	Final Second Stage Weight (MOS/Actual)	Final First Stage Weight (PHA Weight)	Final Weight (1st Stage Wt* 2nd Stage Wt)
NY005	NYC HA	76,980	257	299.53	239	444.97	1.15	513.43
CA004	City of LA	37,251	125	298.01	125	298.01	1.15	343.86
IL002	Chicago HA	25,233	85	296.86	85	296.86	1.15	342.53
CA002	LA County	14,947	50	298.94	51	293.08	1.15	338.17
TX009	Dallas	11,340	50	226.80	50	226.80	1.15	261.69
FL005	Miami Dade HA	10,249	50	204.98	54	189.80	1.70	323.52
IL025	HA of Cook Cty	10,117	50	202.34	50	202.34	1.70	344.90
GA006	HA Atlanta	9,658	50	193.16	50	193.16	1.70	329.25
MA002	Boston HA	9,018	50	180.36	50	180.36	1.70	307.43
OH003	Cuyahoga MHA	8,696	50	173.92	58	149.93	1.82	273.19
CA063	San Diego HSG Commission	8,399	50	167.98	50	167.98	1.89	317.96
LA001	New Orleans HA	6,985	50	139.70	50	139.70	2.28	318.80
DC001	DC HA	6,211	50	124.22	42	147.88	2.57	379.32
IN017	City of Indianapolis	5,700	50	114.00	49	116.33	2.80	325.14
MN163	Metro Council	5,381	50	107.62	50	107.62	2.95	317.94
CA067	Alameda CTY HA	5,165	50	103.30	49	105.41	3.08	324.45
MO004	St. Louis CTY HA	4,589	50	91.78	50	91.78	3.47	318.22
MD033	Baltimore CTY HSG Office	4,515	50	90.30	50	90.30	3.52	317.89
PA006	Allegheny CTY HA	4,329	50	86.58	33	131.18	3.68	482.69
MI001	Detroit Hsg Comm	4,163	50	83.26	28	148.68	3.82	568.11
AZ001	City of Phoenix	4,046	50	80.92	50	80.92	3.93	317.79
CA005	City of Sacramento	3,767	50	75.34	50	75.34	4.23	318.53
OK073	Tulsa	3,712	50	74.24	49	75.76	4.28	324.31
OH007	Akron MHA	3,613	50	72.26	50	72.26	4.40	318.29

Appendix A – Sampling and Weighting Design for Quantitative Analysis of Success Rates in Urban PHAs

Exhibit A-4 (Continued)
Final Weights for Voucher Holders

HA_NUM	Site Name	MOS	Target Response	Initial Voucher Holder Weight (MOS/Target)	Actual Response	Final Second Stage Weight (MOS/Actual)	Final First Stage Weight (PHA Weight)	Final Weight (1st Stage Wt* 2nd Stage Wt)
TX003	El Paso	3,487	50	69.74	50	69.74	4.56	318.30
MD015	HA Prince Georges CTY	3,230	50	64.60	50	64.60	4.94	318.84
CA006	City of Fresno HA	3,211	50	64.22	47	68.32	4.95	338.40
OK002	Oklahoma City	3,120	50	62.40	51	61.18	5.11	312.76
AZ004	Tucson Hsg Mgmt Div	2,921	50	58.42	50	58.42	5.45	318.30
NY001	HA of Syracuse	2,881	50	57.62	36	80.03	5.52	441.70
NM001	Albuquerque HA	2,767	50	55.34	49	56.47	5.75	324.66
NJ002	Newark HA	2,728	50	54.56	50	54.56	5.84	318.51
FL062	Pinellas CTY HA	2,687	50	53.74	50	53.74	5.93	318.47
OH005	Dayton Metro HA	2,516	50	50.32	50	50.32	6.33	318.68
CT001	Bridgeport HA	2,473	50	49.46	51	48.49	6.44	312.24
IA020	Des Moines Municipal HA	2,289	50	45.78	50	45.78	6.95	318.27
VA003	Newport News Redev.& HSG	2,196	50	43.92	54	40.67	7.25	294.95
WI218	Milwaukee CTY HA	1,942	50	38.84	58	33.48	8.21	274.83
NJ915	NJ912-5190	1,830	50	36.60	50	36.60	8.70	318.55
PA012	Montgomery CTY HA	1,631	50	32.62	50	32.62	9.76	318.53
CT003	Hartford HA	1,565	50	31.30	50	31.30	10.17	318.38
TX434	Grand Prairie	1,332	50	26.64	50	26.64	11.96	318.57
KY130	Lexington-Fayette CTY HA	1,301	50	26.02	52	25.02	12.24	306.27
WA006	HA City of Everett	1,265	50	25.30	50	25.30	12.60	318.66
CA035	San Buenaventura HA	1,089	50	21.78	50	21.78	14.63	318.63
MI045	Plymouth HA	978	50	19.56	56	17.46	16.29	284.54
TX008	Corpus Christi HA	847	50	16.94	51	16.61	18.80	312.30
WI195	Kenosha HA	808	50	16.16	51	15.84	19.71	312.22

As indicated, these weights are based on the number of vouchers and certificates reserved in each PHA. Accordingly, for example, national estimates of success rates based on these weights estimate the expected success rate for a random sample of program slots. This will underestimate the success rate for the issuances needed to fill a random sample of slots, because slots in PHAs with lower success rates will require more issuances. We could adjust for this by estimating the average number of issuances per slot and then estimating the inverse of this to estimate the success rate per issuance. (This is the weighted harmonic mean of the PHA success rate). The difference between the two estimates is often small.

In addition, the actual number of issuances by a PHA in any particular time period may be quite different from its long-term average and even this long-term average may be different from average national turnover. Turnover rates may differ from month to month. PHAs may receive new allocations. PHAs may issue in anticipation of expected turnover and then reduce or increase issuances to compensate for deviation from expected turnover. It seemed to us more useful to calculate rates based on the more stable, size-based basis.

A.3 Imputation of Success Status for Voucher Holders with Unknown Final Status

A total of 65 voucher holders across 16 sites had unknown outcomes at the end of the study's data collection period. Some outcomes were unknown because the voucher holder had attempted to port out of the jurisdiction, but the sending PHA did not receive a final status from the receiving PHA (14 voucher holders).[4] Others were households that still had valid vouchers at the study's end (51 voucher holders). These were households that had extensions beyond beyond 7 months, and usually longer, since they were initially issued their vouchers. In order to calculate the national success rate, the percent successful was imputed for these households. These households are not included in the tables describing the characteristics of successful and unsuccessful households, because we cannot determine which particular not final households would have been successful or not. All we can do is impute a percentage successful to this group to be used in the national rate.

Three approaches were considered for imputation. The first approach was to assume that the success rate for households with known outcomes in each site would apply also to the households with unknown outcomes. However, this approach would likely overestimate the national success rate because it is likely that households searching for such a long period would have a lower probability of success than the overall population of voucher holders. The second approach was to assume that since these voucher holders had not succeeded at this point, they would ultimately not succeed. However, this approach would likely underestimate the national success rate because some voucher holders were succeeding after extremely long search times. The third approach, which was used, was to assume that the

---

[4]   In addition to these 14 voucher holders, 86 voucher holders in the study sample ported to another jurisdiction and successfully leased up in the receiving jurisdiction.

percent successful among those who had not succeeded within the first 120 days applied to the households with unknown outcomes. This was calculated for each site as:

Number of people who succeeded in more than 120 days
Number of people who succeeded in more than 120 days + unsuccessful households

Two sites that had households with unknown outcomes had no successful households that searched for more than 120 days. For these two sites (Syracuse, Hartford), the rate of successful households among all those who had not been successful in the first 120 days across the 14 other sites that had any searchers for over 120 days was used. This rate was 46.8 percent. Note that this imputation procedure barely changed the estimated national success rate: the success rate for only those with known outcomes was 68.3 percent, compared with a 68.1 percent imputation after success status was imputed for those with unknown final outcomes.

Appendix B

Data Collection Forms

Section 8 Success Study: PHA Data Coding Sheet

PHA Name:_____

PHA ID Number:_____

PHA contact person:_____

Abt/Quadel caller: _____   Date of call: _____

Section 8 Program

1. Jurisdiction of PHA (*We are interested in metropolitan area jurisdiction covered by study, so do not need to be concerned with rural areas that may be in their jurisdiction, but outside the scope of the study.)*

    1a. Primarily urban=1   Primarily suburban=2   Even mix of urban and Suburban=3
    1b. One city=1   More than one city=2
    1c. One county=1   More than one county=2

2. Estimated Annual Turnover Rate:_____% *[Notes: Turnover is the number of voucher that are returned per year (not movers) divided by average number under lease per year -- then multiplied by 100 to convert to percentage. May need to estimate from number of monthly turnovers or convert monthly turnover rate into annual rate by multiplying by 12.]*

Section 8 Briefing

3a. Initial Section 8 briefing conducted: Individual=1   Group=2   Both=3
        3b.   Typical size in group briefing: _____
        3c.   Typical length of briefing: _____ hours _____ minutes

4. Who conducts S8 Briefing: Staff take turns=1
                                 One-or two staff specialize=2
                                 Outside contractor=3
                                 Multiple staff do each briefing=4
                                 Other =5

5. Do you primarily use a video or other presentation device to ensure the S8 Briefing is the same each time?
        No=1   Video=2   Other visual device=3   Script/formal outline=4   Other=5

---

6. When did you update your Section 8 briefing packet?
within last few months=1   within last year=2   more than a year ago=3

7. Any other mandatory training sessions for voucher holders?   Y=1   N=0

Success Rates *(Success rate is the percentage of Section 8 households **issued** vouchers that are able to lease-up in the Program in the allotted search time.)*

8. Estimate of current success rate _____%

9. Monitor success rate ?   No=1   Monthly=2   Quarterly=3   Yearly=4   Less often=5

10. Success rates receive a...
High degree of emphasis=1   Moderate degree of emphasis=2   Low degree of emphasis=3

PHA Policies and Procedures

11a. Is waiting list currently.....
Completely closed =1
Open for some groups=2   (**11b**. If so, what groups? _____)
Completely open=3

  11c. If not completely open, most recent time completely open: ____ / _____
                                               mm   yyyy

12. How often is the waiting list completely open?

  All or most months=1   Every few months=2   Once a year=3   Every few years=4

13. Initial search time granted:_____
                          (Number of days)

14. Do you grant extensions for search time?   Y=1   N=0

15a. *(If no extensions granted, skip to next question)* Who can get extensions?

Anyone who requests an extension=1
Only people who document search effort=2
Only special categories of people/types of vouchers=3

  15b. How many days extended?   _____ days

15c. *(If not filled out above),* any additional search time for special categories of people/types of vouchers?   Y=1   N=0

15d. Describe program/participants that get extra search time:

16. Do you suspend the clock (i.e., toll) if family is not able to lease a unit for which they submit Request for Lease Approval *(RFLA or RLA)* ?
      Yes, in most or all cases =1   Yes, only in special circumstances=2   No, never =3

17. Selection Preferences in standard program?   Y=1   N=0 *(if no, skip next question)*

18a. Preferences for regular S8 program. *(Note we're interested in actual preferences used. Explain if too complicated to fit in box.)*	Y=1	N =0	**18b.** Priority if sequential preferences	**18c.** Points if cumulative preferences
a. Displaced (disaster or Gov. action)				
b. Domestic Violence				
c. Elderly/Handicapped				
d. Homelessness				
e. Income < 30% of Area Median				
f. High Rent Burden				
g. Resident				
h. In School or Training Program				
i. Substandard Housing				
j. Veteran				
k. Working				
l. Other (explain)				

19. In addition to preferences, do you deny assistance to *(otherwise eligible)* prospective tenants for...

        a. Drug or violent criminal convictions?   Y=1   N=0

        b. Drug or violent criminal arrests?   Y=1   N=0

        c. Other criminal convictions?   Y=1   N=0

        d. Other criminal arrests?   Y=1   N=0

        e. Debt to the housing authority?   Y=1   N=0

        f. Poor landlord references?   Y=1   N=0

        g. Poor housekeeping?   Y=1   N=0

        h. Bad credit history?   Y=1   N=0

Search Assistance Provided by PHA	**20.** Is this type of search assistance ...			**21.** *(If only available to special groups)* What groups?
	available to all enrollees? (=1)	available only in special programs or for special enrollees? (=2)	Not available. (=3)	
a. Provide list of vacant units				
b. Specific unit referrals				
c. Provide landlord list				
d. Housing search counseling				
e. Counseling for housing barriers *(e.g., credit repair)*				
f. Social service referrals				
g. Transportation assistance to search				
h. Child care assistance				
i. Relocation cash grants or loans *(e.g., Security Deposit, moving expenses...)*				
j. Help moving furniture/belongings...				

22. If PHA maintains list of vacancies (see above), frequency of updating:

       Daily=1   Weekly=2   Monthly=3   Less than monthly=4

23. Perception of landlord acceptance of Section 8?

High acceptance=1　　　　Moderate acceptance=2　　　　Little or no acceptance=3

24. If PHA maintains list of landlords (see above), frequency of updating:

Daily=1　　　Weekly=2　　　Monthly=3　　　Less than monthly=4

25. PHA active outreach to new or existing landlords.
Yes, at least once a month	=1
Yes, every few months	=2
Yes, at least once a year	=3
Less than once a year or never	=4

26. PHA role in rent negotiation:

Always involved	=1
Sometimes involved	=2
Occasionally involved	=3
Never or almost never involved	=4

Housing Market *(If have hard copy of payment standards, can fax rather than give over phone)*

# of BR	**27.** Fair Market Rent (in dollars)	**28.** Payment Standard *(BE CLEAR IF $ OR % of FMR)* *(base or typical PS if multiple PS)*	**29.** Any areas where you pay higher than typical PS? Y=1　　N=0 **30.** Rent in those areas *(BE CLEAR IF $ or % of FMR)* *(range if necessary, but put most common amount if possible)*
a) 0BR			
b) 1BR			
c) 2BR			
d) 3BR			
e) 4BR			
f) 5BR			

31. Estimated percent of jurisdiction where you have higher PS/Exception rents? _____ %

32a. Adequacy of PS: Too low=1   About right=2   Too high=3

   32b. (If too low), is it inadequate primarily because FMR is too low?   Y=1   N=0

33. PHA Perceptions of *Overall* Housing Market Tightness: *(This is vital to the study. Know what was said in recruiting call, but here we want more detail.)*

   Extremely tight   (<=2% vacancy rate) =1
   Tight   (2.1 to 4% vacancy rate)=2
   Moderate   (4.1 to 7% vacancy rate)=3
   Loose   (7.1 to 10% vacancy rate)=4
   Extremely loose   (>10% vacancy rate) =5

34. *Affordable* Housing Market Tightness:

   Extremely tight   (<=2% vacancy rate)=1
   Tight   (2.1 to 4% vacancy rate)=2
   Moderate   (4.1 to 7% vacancy rate)=3
   Loose   (7.1 to 10% vacancy rate)=4
   Extremely loose   (>10% vacancy rate)=5

35. Is *overall* housing market...
          Getting tighter=1   Staying about the same=2   Getting looser=3

36. Is *affordable* housing market ...
          Getting tighter=1   Staying about the same=2   Getting looser=3

37. In the last year, did *overall* housing rental rates...

   Increase rapidly=1   Increase moderately=2   Stay about the same=3   Decrease=4

38. In the last year, did *Affordable* housing rental rates...

   Increase rapidly=1   Increase moderately=2   Stay about the same=3   Decrease=4

39. We want to get several perspectives on the housing market. Any recommendations on other knowledgeable people we can call to discuss housing market conditions in this area *(e.g., a large realtor, someone at Community Development Dept., a Community Builder.... Record name, phone #, and affiliation if known)*?

40. Initial Move-in Inspections *(We do not want re-certification inspections, but just new inspections. Pass means pass HQS.)(We are looking for recent experiences-- e.g., last 100 or so units that were inspected.)*	Percent
a. Pass initial inspection	
b. Fail initial inspection, but eventually pass for that tenant	
c. Never pass inspection	
Total *(should equal 100%)*	

41. Percent of new units that **fail** rent reasonableness so unit is not leased up in Section 8 Program?

_____%

Characteristics of Section 8 Recipients *(Callers fill in with MTCS data and confirm with PHA that they are reasonably accurate.)*

42. Race of HH head/recipient	%
a. White	
b. Black/African-American	
c. American Indian/Alaska native	
d. Asian/Pacific Islander	
e. Other	
f. Unknown	
Total (Note: should equal 100%)	

43. Ethnicity of HH head/recipient	%
a. Hispanic	
b. Non-Hispanic	
c. Unknown	
Total (Note: should equal 100%)	

44. Gender of HH head/recipient	%
a. Male	
b. Female	
Total (Note: should be 100%)	

45. Household composition	%
a. Family	
b. Elderly	
c. Handicapped (not family or elderly)	
d. Other/unknown	
Total (should be 100%)	

Anti-Discrimination Laws

46. Type of state or local anti-discrimination laws.

source of income=1   source of rental payment=2   Neither=3

47. Anti-discrimination law coverage: entire jurisdiction=1   part of jurisdiction=2

Submarkets

48. Do S8 enrollees tend to search in areas where other Section 8 recipients are already located?

    Y=1   N=0

49. Do enrollees who look in traditional S8 areas have more success than other enrollees?

    Y=1   N=0

50. What types of enrollees tend to have more success when they look outside traditional S8 areas (race, age, family size, income, ... counseled)?

51. Why do these groups have more success?

Information Collected Earlier

The remaining information may have been gathered in the recruiting call (R) or from another source (O), but should be recorded here. If information not gathered in recruiting call, it needs to be collected at this time.

Section 8 Program
(Note that vouchers means all tenant-based certificates and vouchers.)

52a. (R) Total number of tenant-based vouchers under lease: _____
52b. (R) Total number of unused (but available) tenant-based vouchers: _____
52c. (R) Total number of vouchers (1a + 1b): _____

53. (R) Type of S8 Voucher *(Check yes or no. If yes, enter # of vouchers)*	YES=1	NO=0	**54.** # of Vouchers
a) Regular			
b) Family Unification			
c) Welfare-to-Work			
d) Section 8 opt out/Preservation			
e) Elderly Independence			
f) Mainstream Housing for Persons with Disabilities			
g) Mainstream Housing-Elderly Designation			
h) VASH (Veteran's Admin. Supportive Housing)			
i) HOPWA (Housing Opportunities People w/Aids) (Note, do not include these type in study sample)			
j) Shelter Plus Care (Note: do not include these type in study sample)			
k) Public Housing Relocation/demolition/disposition			
l) Litigation			
m) Other (explain_____)			
n) Total # of Vouchers *(Note: total here match #1c)*			

Exhibit B-2

Section 8
Housing Choice Voucher Program
Tracking System

Study on Section 8 Voucher Success Rates

Household Characteristics and Housing Search Process Data

Data Forms

These data are being collected under HUD contract C-OPC-18571 by Abt Associates Inc. and its subcontractors, Quadel Consulting Corporation and the QED Group, LLC. These forms can be used in conjunction with the *Section 8 Housing Choice Voucher Program Tracking System*, a computerized tracking system developed under this contract to facilitate data collection on the household characteristics and housing search process of Section 8 voucher recipients. Depending on PHA procedures, tracking system users may want to develop an alternate system of record logs to assist with data entry.

For information on the installation and operation of the *Section 8 Housing Choice Voucher Program Tracking System*, please refer to the ***Training/User's Guide***.

Each set of forms is designed to collect and organize data on one Section 8 program household. In case these pages become separated, to help identify enrollee data, please first enter the PHA/Agency name or number and the Section 8 Program enrollee's name and/or identifier at the top of each page.

Introduction

The U.S. Department of Housing and Urban Development is conducting research to calculate success rates of Section 8 voucher holders in large urban areas. The success rate is defined as the percentage of families that are provided vouchers who are able to lease a housing unit meeting program requirements within the allotted amount of time. This study will examine the factors associated with success rates in urban areas.

To facilitate data collection for this study, a computerized tracking system, the *Section 8 Housing Choice Voucher Program Tracking System*, has been developed for PHAs to install on a computer to record the household characteristics and housing search process of Section 8 voucher recipients. Data to be collected for this study include basic demographic information about the enrollee and household and the dates of key events in the Section 8 search and lease-up process. These data are already being recorded by PHAs for HUD and the Section 8 program. Although the primary purpose for the tracking software is for data collection for this study, it is also a prototype for a possible tracking system to be used regularly by PHAs who wish to track the housing search process of Section 8 enrollees and calculate success rates. In addition to collecting data on Section 8 enrollees, the tracking system can also produce output summarizing participant status and outcome. Because it is a prototype tracking system, we welcome feedback on its design and use.

Figure 1 shows a flowchart describing the process of participation in the Section 8 program. It begins with application to the Section 8 program, through the time allowed for the housing search, to the requests for lease approval (RFLA) and inspections, to whether or not a Section 8 contract is signed. The areas labeled A-E show the key events at which data are typically available for these forms and entry into the tracking system:
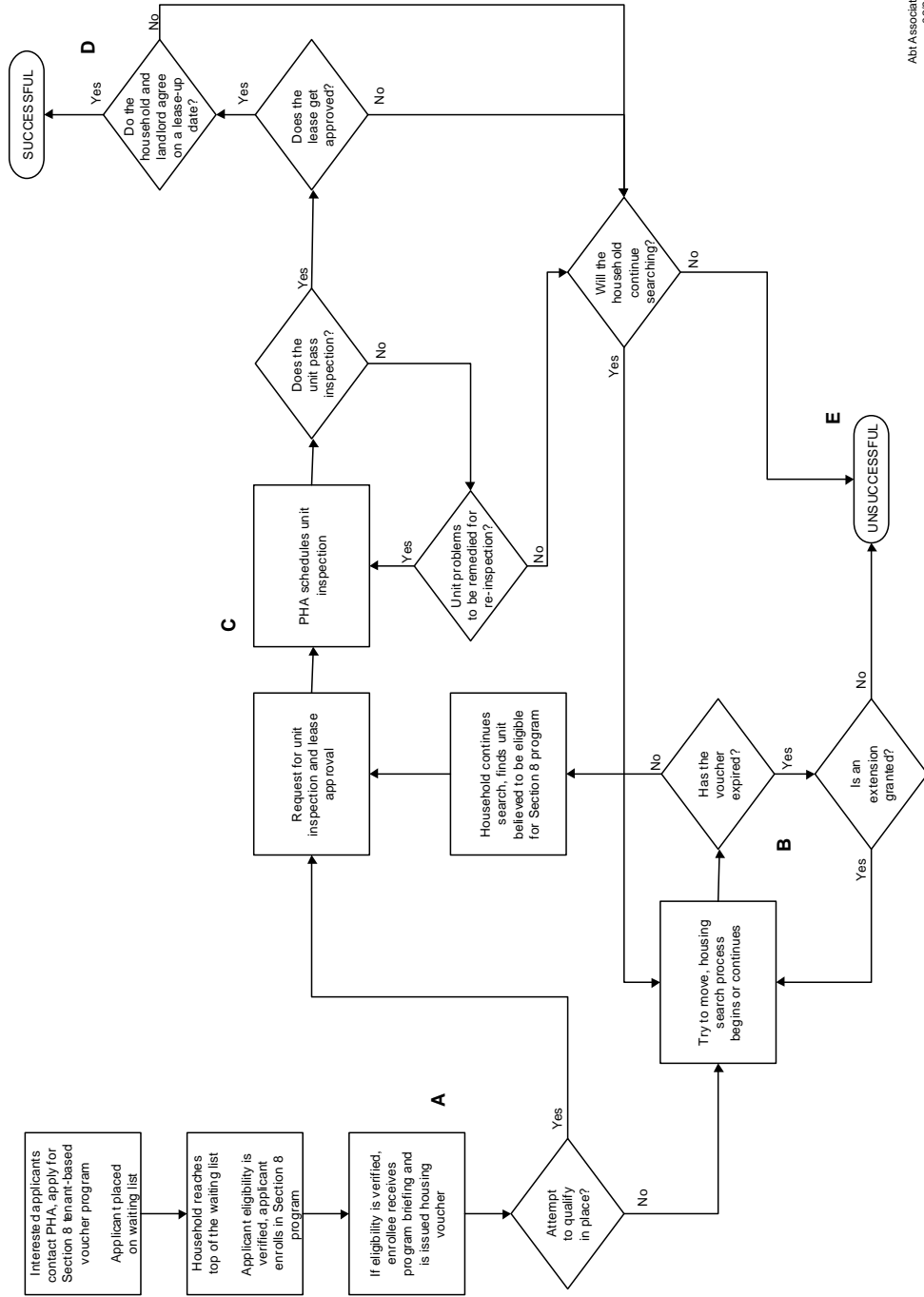
- **(A)** Enrollment Data – Information available at enrollment and issuance of the Section 8 voucher.
- **(B)** Extension Information – Time extensions to the search process requested and granted.
- **(C)** Inspection Data – Information on units for which enrollees submit an RFLA, including inspection outcomes.
- **(D)** Successful Lease-Up Data – Data on units successfully leased by enrollees in the Section 8 program.
- **(E)** Unsuccessful Enrollee Data – Information regarding enrollees unable to lease a unit through the Section 8 program.

Thank you participating in this very important study of the Section 8 Housing Choice Voucher Program.

If you have any questions regarding the use of these forms and the Section 8 Housing Choice Voucher Program Tracking System, please contact your designated contact at Abt Associates Inc. or Carissa Climaco of Abt Associates Inc. by phone at 617-349-2386 or by email at carissa_climaco@abtassoc.com. Questions may also be sent to Abt Associates Inc. at Success_Study@abtassoc.com.

Figure 1

Process of Household Participation in the Section 8 Program

Abt Associates Inc.
02/24/2000

Appendix B – Data Collection Forms

(A)   Enrollment Data

This section collects information typically available once a household is enrolled in the Section 8 Program. When entering data into the tracking system, the following data must be provided:

- Enrollee last name
- Enrollee first name
- Either the recipient ID (PHA-defined enrollee identifier) or the enrollee Social Security Number (SSN)
- Voucher issuance date
- Voucher initial expiration date

Enrollee Identifiers

Enrollee Name – Please enter the enrollee's (head of household's) last name, first name, and if available, middle name or initial.

Recipient ID – This is an identifier for the enrollee and household defined and specified by the housing authority. Depending on PHA procedures, this may be the enrollee's SSN, voucher number, or some other ID code used by the housing authority.

SSN – Please enter the Social Security Number for the enrollee.

Intake/Case Manager – When entering data under *Intake/Case Manager*, the size limit is 1-3 digits or characters. For example, you may use initials, a 3-letter name, or a 3-digit staff ID number. Please be consistent in identifying individual intake/case managers.

Program Information

Application Date – Date the enrollee applied for the Section 8 program or was placed on the Section 8 program waiting list.

Preference Categories – Please indicate any local preferences or special admission circumstances by which the enrollee was able to move up on the Section 8 program waiting list.

Type of Voucher Program – Please indicate whether the enrollee was receiving a Section 8 voucher through the regular or general waiting list or through enrollment in a special program.

Enrollment/Voucher Information

Issuance Date – Date the enrollee was issued a Section 8 voucher.

Initial Expiration Date – Date the Section 8 voucher was first set to expire.[1] Expiration dates that were the result of extensions should be recorded in the **Extension Information** section.

Voucher Number – Identification number for the Section 8 voucher. Depending on PHA procedures, this may be the same as the *Recipient ID*.

Unit Size Needed – Please indicate the unit size needed by the household.

Payment Standard – Please indicate the Payment Standard for the *Unit Size Needed* in the PHA's jurisdiction.

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[1]   If the initial expiration date changes as a result of a PHA's policy of **tolling** or the **suspension of terms**, please edit the initial expiration date to reflect the revised initial expiration date. For more information about how to record dates that have been affected by a tolling policy, please see section on **Extension Information**.

(A)   Enrollment Data

Enrollee:

Last Name*: _____   First Name*:_____   Middle Name/
Initial: _____

Recipient ID*: _____   SSN*: __ __ __ - __ __ - __ __ __ __   Intake/Case
Manager: _____

Program Information:

Application Date: __ __ / __ __ / __ __ __ __   *(mm/dd/yyyy)*

Preference Categories: *(check all that apply)*
- ☐   Substandard
- ☐   Displaced
- ☐   Rent Burden
- ☐   Veteran
- ☐   Resident
- ☐   Working
- ☐   Homeless
- ☐   Domestic Violence
- ☐   Other _____

Type of Voucher Program: *(check one)*
- ☐   General Waiting List (Regular)
- ☐   Disaster
- ☐   Elderly Independence
- ☐   Family Unification
- ☐   Litigation
- ☐   Mainstream Housing for the Disabled (Disabled-Mainstream Housing)
- ☐   Mainstream Housing for the Elderly (Elderly-Mainstream Housing)
- ☐   Public Housing Relocation/Demolition/Disposition
- ☐   Section 8 Opt Out/Preservation
- ☐   Vacancy Consolidation
- ☐   Veteran's Administration Supportive Housing (VASH)
- ☐   Welfare-to-Work
- ☐   Other _____

Enrollment/Voucher Information:

Issuance Date*: __ __ / __ __ / __ __ __ __   *(mm/dd/yyyy)*

Unit Size Needed: ☐ 0BR   ☐ 1BR   ☐ 2BR
☐ 3BR   ☐ 4BR   ☐ 5BR

Initial
Expiration Date*: __ __ / __ __ / __ __ __ __   *(mm/dd/yyyy)*

Voucher Number: _____

Payment Standard: $ _____

An asterisk (*) indicates data that must be entered into the tracking system for inclusion in the study. Either Recipient ID or SSN must be entered, and either may be left blank if the other is filled-in.

(A)   Enrollment Data (continued)

Enrollee Information

Pre-Program Unit Address – Please indicate the full address of the unit where the enrollee lived at the time of voucher issuance. Because data are being entered for new enrollees, this would be the current address of the enrollee.

Birthdate – Please indicate the birth date of the enrollee.

Pre-Program Unit Size – Please indicate the pre-program unit size.

Current unit in public housing – Please whether the pre-program unit is in public housing.

Gender, Race, Ethnicity – Please indicate the *Gender*, *Race*, and *Ethnicity* of the Section 8 enrollee or head of household.

Elderly – Please indicate whether the enrollee is considered elderly and eligible for elderly housing or allowances.

Household Information

Spouse present? – Please indicate whether or not the enrollee's spouse is present in the household.

Any member of the household disabled? – Please indicate whether the enrollee's household includes disabled members who may require an accessible housing unit.

Household size – Total household members, including the enrollee.

Number of Dependents – Total number of dependents, including youths under 18 years of age, full-time students 18 years of age or older, and other adults, but excluding the head of household, spouse, co-head, foster child/adult, or live-in aides.

Number of Children – Number of children under 18 years of age in the household.

Annual Income Information

When entering household income by source, please make sure to provide annual US dollar ($) amounts. For example, if the enrollee provides weekly wage information, first multiply that amount by 52 (weekly wage amount x 52), and if the enrollees provide monthly wage information, please first multiply that amount by 12 (weekly wage amount x 12). The income can be categorized according to income codes used in Form HUD-50058, **Family Report**.

Wages – Wage and salary income, including own business (B), military pay (M), Federal wage (F), HA wage (HA), and other wage (W).

Social Security, Pensions – Income from social security and pensions, pension (P), social security (SS), and child support (C).

Public Assistance – Public assistance income, including TANF (formerly AFDC) (T), general assistance (G), and SSI (S).

Asset Income – Final asset income, which is the anticipated asset income if the total cash value of assets is less than $5,000, or the larger of anticipated asset income or imputed asset income if the total cash value of assets is greater than $5,000.

Other Income – Income from other sources including unemployment benefits (U), Indian trust/per capita (I), and other nonwage sources (N).

Annual Income – Sum of all annual income amounts, i.e., *Wages + Social Security, Pensions + Public Assistance + Asset Income + Other Income*.

Income Adjustment – Amount of adjustments or allowable deductions to annual income.

Adjusted Income – Total annual family income minus adjustments, i.e., *Annual Income – Income Adjustment*.

Request for Portability – Please indicate whether the enrollee has made a request for portability.

(A) Enrollment Data (continued)

Enrollee Information:

Pre-Program Unit Address:

Street: _____

City: _____

State/Zip _____

Birthdate: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Pre-Program unit size: ☐ 0BR ☐ 1BR ☐ 2BR
☐ 3BR ☐ 4BR ☐ 5BR

Current unit in Public Housing: ☐ Yes
☐ No

Gender: ☐ Male ☐ Female

Race: ☐ White
☐ Black
☐ American Indian/Alaska Native
☐ Asian/Pacific Islander

Ethnicity: ☐ Hispanic
☐ Other Non-Hispanic

Elderly: ☐ Yes
☐ No

Household Information:

Spouse present?: ☐ Yes
☐ No

Any member of the household disabled?: ☐ Yes
☐ No

Household size: _____

Number of Dependents: _____

Number of Children: _____

Annual Income Information:

Wages: $ _____

+Social Security, Pensions: $ _____

+Public Assistance: $ _____

+Asset Income: $ _____

+Other Income: $ _____

=Annual Income: $ _____

-Income Adjustment: $ _____

=Adjusted Income: $ _____

Request for Portability ☐ Yes ☐ No

(B)   Extension Information

If the PHA allows for extensions to the initial Section 8 voucher, please indicate the key dates regarding the extension. Depending on PHA procedures, dates when extensions are requested and granted may not be available.

If the PHA has a **tolling** or **suspension of terms** policy, the PHA "stops the clock" on the search time allowed when a Request for Lease Approval (RFLA) has been submitted, then restarts the search time remaining if the unit does not get leased-up in the Section 8 program. If this happens to an enrollee, please do not consider the revised expiration date as a separate extension. However, please adjust the initial expiration date if tolling affects an enrollee's initial Section 8 search process. Similarly, please adjust an existing extension's expiration date if tolling affects an enrollee's extension to the Section 8 search process.

In other words, if the enrollee's expiration date is now later due to tolling, that is not considered an extension. However, the new expiration date does change either the initial expiration date or the expiration date of one of the enrollee's three extensions of the Section 8 voucher.

Extensions
The system includes room for recording up to three extension requests (Extension 1, Extension 2, Extension 3).

Date extension requested – Date the enrollee contacted the PHA to request an extension to the expiration date of the Section 8 voucher.
Date extension granted – Date the PHA approved an extension of the Section 8 voucher. Depending on PHA procedures, the *Date extension granted* may be the same as the *Date extension requested*.
Extension expiration date – Date Section 8 voucher expires given the extension.

(B)   Extension Information

Extension 1:

Date extension 1 requested: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Date extension 1 granted: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Extension 1 expiration date: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Extension 2:

Date extension 2 requested: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Date extension 2 granted: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Extension 2 expiration date: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Extension 3:

Date extension 3 requested: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Date extension 3 granted: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Extension 3 expiration date: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

(C)   Inspection Data

This section allows for information on the initial inspection and up to three re-inspections for up to three units associated with Requests for Lease Approval (RFLA).

Initial Inspection Information
Date RFLA submitted – Date the enrollee contacted the PHA with an RFLA and a request for a unit inspection.
Date of scheduled inspection – The initial date the inspection was scheduled to be completed.
Date inspection completed – Date the unit inspection was conducted.
Type of inspection – Please indicate whether the inspection being recorded was an **in-place** inspection of the pre-program unit (i.e., the unit in which the enrollee is living prior to receiving Section 8 assistance). If not, it is a **move-in** inspection (i.e., an inspection of a unit the household is looking to move to).
Street, City, State/Zip – Please indicate the unit address.
Unit Size – Please indicate the unit size.
Inspection result – Please indicate whether the unit passed or failed the initial inspection. Select **None** if no inspection was conducted.

Re-inspection Information
If the unit does not pass the initial inspection, the results of up to three re-inspections may be entered into the tracking system. For each completed re-inspection, please indicate the date the re-inspection was completed and whether the unit passed or failed the re-inspection. Select **None** if no scheduled re-inspection was conducted.

Unit Leased Up
Once the initial and all scheduled re-inspections have been completed, if the unit can pass HQS in either inspection or re-inspection, please indicate whether or not the unit was leased up. A leased up unit indicates that the enrollee and household will be residing in this unit and receiving Section 8 assistance. In the tracking system, checking that the unit has been leased up signals that successful lease-up information needs to be entered. The tracking system will offer to transfer the user to the enrollee's *Successful Lease Data* screen.

Reason Why Unit Was Not Leased Up
If the unit was not leased up, this section allows the user to indicate the reason.

Notes Regarding Landlord Negotiations
If there are special notes to record about the lease-up process including anything regarding negotiations with the landlord to participate in the Section 8 program, please enter them in the space provided.

(C)   Inspection Data

Unit 1:

Date RLA submitted: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Type of inspection: ☐ In-place
                                                                                                                                    ☐ Move-in

Date of scheduled inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Date inspection completed: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Street: _____   Unit Size:
                                                                                        ☐ 0BR   ☐ 1BR   ☐ 2BR
City: _____   ☐ 3BR   ☐ 4BR   ☐ 5BR

                                                                                        Inspection result: ☐ Pass
State/Zip: _____   ☐ Fail
                                                                                                                    ☐ None

First re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   First re-inspection result: ☐ Pass
                                                                                                                                      ☐ Fail

Second re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Second re-inspection result: ☐ Pass
                                                                                                                                      ☐ Fail

Third re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Third re-inspection result: ☐ Pass
                                                                                                                                      ☐ Fail

Unit leased up: If no, reason why unit was not leased-up:
        ☐ Yes   ☐ Unit failed inspection
        ☐ No   ☐ Didn't pass rent reasonableness
                                              ☐ Recipient couldn't pay security deposit
                                              ☐ Recipient refused
                                              ☐ Landlord refused
                                              ☐ TTP would be above 40 percent cap
                                              ☐ Other _____

Notes regarding landlord negotiations:

(C)   Inspection Data (continued)

For the RFLA of a second unit, follow the same instructions and descriptions on page vi for the first unit inspected.

(C)   Inspection Data (continued)

Unit 2:

Date RLA submitted: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Type of inspection: ☐ In-place
☐ Move-in

Date of scheduled inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Date inspection completed: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Street: _____   Unit Size:
☐ 0BR   ☐ 1BR   ☐ 2BR
City: _____   ☐ 3BR   ☐ 4BR   ☐ 5BR

State/Zip: _____   Inspection result: ☐ Pass
☐ Fail
☐ None

First re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   First re-inspection result: ☐ Pass
☐ Fail

Second re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Second re-inspection result: ☐ Pass
☐ Fail

Third re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Third re-inspection result: ☐ Pass
☐ Fail

Unit leased up: If no, reason why unit was not leased-up:
☐ Yes   ☐ Unit failed inspection
☐ No   ☐ Didn't pass rent reasonableness
☐ Recipient couldn't pay security deposit
☐ Recipient refused
☐ Landlord refused
☐ TTP would be above 40 percent cap
☐ Other _____

Notes regarding landlord negotiations:

(C)   Inspection Data (continued)

For the RFLA of a second unit, follow the same instructions and descriptions on page vi for the first unit inspected.

(C)   Inspection Data (continued)

Unit 3:

Date RLA submitted: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Type of inspection: ☐ In-place
                                                                                                ☐ Move-in

Date of scheduled inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Date inspection completed: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Street: _____   Unit Size:
                                                                        ☐ 0BR   ☐ 1BR   ☐ 2BR
City: _____   ☐ 3BR   ☐ 4BR   ☐ 5BR

State/Zip: _____   Inspection result: ☐ Pass
                                                                                    ☐ Fail
                                                                                    ☐ None

First re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   First re-inspection result: ☐ Pass
                                                                                                              ☐ Fail

Second re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Second re-inspection result: ☐ Pass
                                                                                                              ☐ Fail

Third re-inspection: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*   Third re-inspection result: ☐ Pass
                                                                                                              ☐ Fail

Unit leased up: If no, reason why unit was not leased-up:
    ☐ Yes   ☐ Unit failed inspection
    ☐ No   ☐ Didn't pass rent reasonableness
                                        ☐ Recipient couldn't pay security deposit
                                        ☐ Recipient refused
                                        ☐ Landlord refused
                                        ☐ TTP would be above 40 percent cap
                                        ☐ Other _____

Notes regarding landlord negotiations:

(D)   Successful Lease-Up Data

Once a unit has been inspected and the lease has been approved, this section collects data regarding the Section 8 or Housing Assistance Payments (HAP) Contract, including the monthly rent in US dollars ($). While the HAP contract indicates the enrollee is successfully leasing up in the Section 8 program, components of monthly rent to be entered in the tracking system may be more readily found under question 12 of Form HUD-50058, **Family Report**.

Section 8 Contract Data
Program Unit Address and Unit Size – Please indicate the contract unit address and number of
   bedrooms. This information should be the same as was entered for the unit in the **Inspection
   Data** section.
Effective date of lease-up – Effective start date of the lease, or the move-in date for the enrollee and
   household.

Monthly rent
Rent to owner – Please indicate the monthly rent to the owner for the contract unit. This includes
   both the Section 8 payment to the owner and the tenant paid rent.
Utility allowance – Please indicate the monthly utility allowance. If any utilities are already included
   in the *Rent to owner*, please subtract that amount from the utility allowance.
Gross rent – Please indicate the monthly gross rent. It is the sum of the *Rent to owner* and the *Utility
   allowance*.
TTP – Please indicate the monthly total tenant payment (TTP). This is *Rent to Owner* minus the
   Section 8 subsidy.

Successful outcome category
Please indicate whether the enrollee leased in place, moved within the jurisdiction, or used the Section 8 voucher to move outside of the PHA's jurisdiction (i.e., ported out).

(D)   Successful Lease-Up Data

Section 8 Contract Data:

Program Unit Address:

Street: _____

City: _____

State/Zip: _____

Unit Size: ☐ 0BR ☐ 1BR ☐ 2BR
☐ 3BR ☐ 4BR ☐ 5BR

Effective date of lease-up: __ __ / __ __ / __ __ __ __ *(mm/dd/yyyy)*

Monthly Rent:

Rent to owner: $ _____

Utility allowance: $ _____

Gross rent: $ _____

Total Tenant Payment (TTP): $ _____

Successful outcome category:
☐ Leased in place
☐ Leased by moving within jurisdiction
☐ Leased by porting out of jurisdiction

(E)   Unsuccessful Enrollee Data

This section records data regarding enrollees that were unsuccessful in leasing-up in the Section 8 program. With their vouchers expired or returned, unsuccessful enrollees are no longer searching for a unit in which they would receive Section 8 assistance.

Unsuccessful status – Please indicate whether the enrollee's voucher expired or was returned prior to expiring. If the voucher neither expired nor was returned, please check "Other" and briefly describe.

Reason for unsuccessful outcome – Please indicate one reason that best describes why the enrollee was unable to lease-up under the Section 8 program.

(E) Unsuccessful Enrollee Data

Unsuccessful status:
- ☐ Voucher expired
- ☐ Voucher returned
- ☐ Other _____

Reason for unsuccessful outcome: *(check one)*
- ☐ Unable to qualify in place, unable to search for unit
- ☐ Unable to find unit for inspection
- ☐ Turned down by landlord(s)
- ☐ Unable to complete inspection(s)
- ☐ Unit(s) found unable to pass inspection
- ☐ Unable to successfully negotiate lease
- ☐ Other _____

Appendix C

Success Status of Section 8 Voucher Holders in Sample, by PHA

Appendix C

Success Status of Section 8 Voucher Holders
in Sample, by PHA

Exhibit C-1 presents information on the percent of voucher holders that succeeded in leasing a unit for each PHA in the study. These site-specific results should be used with caution, because of the small sample sizes at each PHA (usually 50 voucher holders[1]). In most cases, these voucher holders represent a small share of the vouchers issued at each PHA during the course of the year, hence there are large standard errors associated with PHA-level estimates. For each estimate, we present the 95 percent confidence interval so that the reader can appreciate the uncertainty surrounding the PHA-level estimates. We also provide information on the type of vouchers issued to households in the study sample. At individual PHAs, the study sample may or may not represent the types of vouchers they issued during the course of the year or the types of households that are normally issued vouchers. A PHA success rate based on the entire population of voucher holders at a PHA could be much higher or lower than the success rate estimated from the PHA sample of voucher holders included in the study. At the national level, the success rate estimates are much more reliable (as reflected in the much smaller sampling error) because they are based on a large sample of over 2,600 voucher holders from 48 different PHAs. Random differences between the PHAs' sample success rate and population success rate offset each other in the national sample. That is, some PHA samples will have a higher success rate and some will have a lower success rate than would be found if they tracked all of their voucher holders, but these differences tend to average out across PHAs.

Exhibit C-2 compares success rate and vacancy for the study PHAs. Exhibit C-3 contains a map showing geographic patterns of above average success rates.

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[1]   The three largest sites had larger samples to ensure that the final sample represented the national population of voucher holders: NYC (239), the City of Los Angeles (125), and Chicago (85). See Appendix A for an explanation of the process used to determine the size of the voucher holder sample in these sites.

Exhibit C-1
Success Status of Section 8 Enrollees in Sample, by PHA

Housing Authority	Number of Section 8 Vouchers at PHA[A]	Sample Size	Successful	Unsuccessful	Port-out: Unknown Final Status[B]	Still Searching: Unknown Final Status[C]	Percent of Sample Successful	Post-Imputed Percent of Sample Successful[D]	95 Percent Confidence Interval	Type of Vouchers	Housing Market Conditions[E]
Phoenix, AZ	4,046	50	41	9	0	0	82%	82%	71-93%	All regular	moderate
Tucson, AZ	2,921	50	36	14	0	0	72%	72%	59-85%	All regular	moderate
LA County, CA	14,947	51	38	11	2	0	75%	77%	65-88%	Most regular	tight
Los Angeles, CA	37,251	125	58	65	2	0	46%	47%	38-56%	All regular	tight
Sacramento[F], CA	7,171	50	40	10	0	0	80%	80%	69-91%	All regular	tight
Fresno[F], CA	6,200	47	30	17	0	0	64%	64%	50-78%	All WtW	moderate
San Buenaventura, CA	1,089	50	24	26	0	0	48%	48%	34-62%	All regular	extremely tight
San Diego, CA	8,399	50	44	6	0	0	88%	88%	78-96%	Most regular	extremely tight
Alameda, CA	5,165	49	18	31	0	0	37%	37%	23-51%	All regular	extremely tight
Bridgeport, CT	2,473	51	24	27	0	0	47%	47%	33-61%	All regular	tight
Hartford, CT	1,565	50	44	5	0	1	88%	89%	80-98%	All regular	moderate
Washington DC	6,211	50	29	21	0	0	58%	58%	44-72%	All regular	extremely tight
Miami-Dade Cnty, FL	10,249	54	38	15	0	1	70%	71%	59-84%	All WtW	tight to moderate
Pinellas Cnty, FL	2,687	50	19	31	0	0	38%	38%	24-52%	All regular	tight
Atlanta, GA	9,658	50	30	20	0	0	60%	60%	46-74%	Mixed, 39 Family Unification	moderate
Des Moines, IA	2,289	50	33	17	0	0	66%	66%	52-80%	All regular	tight
Chicago, IL	25,233	85	65	13	1	6	76%	82%	75-90%	Regular and WtW	tight
Cook County, IL	10,117	50	32	13	4	1	64%	68%	55-80%	Most regular	tight
Indianapolis, IN	5,700	49	37	11	0	1	76%	76%	64-88%	Regular and S8 Opt Out	tight to moderate
Lexington-Fayette County, KY	1,301	52	33	19	0	0	63%	63%	50-77%	All regular	moderate to loose
New Orleans, LA	6,985	50	34	16	0	0	68%	68%	54-81%	Most Public Housing Relocation	moderate
Boston, MA	9,018	50	25	20	1	4	50%	53%	39-67%	Mixed	extremely tight
PG County, MD	3,230	50	39	11	0	0	78%	78%	66-89%	Most regular	tight
Baltimore Cnty, MD	4,515	50	28	21	0	1	56%	57%	42-71%	Most regular	tight
Detroit, MI	4,163	28	28	0	0	0	100%	100%	na	Mixed	moderate
Plymouth, MI	978	56	38	18	0	0	68%	68%	55-80%	Regular and Family Unification	tight to moderate
Metro Council, MN	5,381	50	31	19	0	0	62%	62%	48-76%	All regular	extremely tight
St. Louis Cnty, MO	4,589	50	26	24	0	0	52%	52%	38-66%	All regular	tight
Newark, NJ	2,728	50	37	0	0	13	74%	100%	na	WtW and PH	tight

Housing Authority	Number of Section 8 Vouchers at PHA[A]	Sample Size	Successful	Unsuccessful	Port-out: Unknown Final Status[B]	Still Searching: Unknown Final Status[C]	Percent of Sample Successful	Post-Imputed Percent of Sample Successful[D]	95 Percent Confidence Interval	Type of Vouchers	Housing Market Conditions[E]
Monmouth-Ocean Counties, NJ	1,830	50	46	3	0	1	92%	93%	87-100%	Relocation All regular	tight
Albuquerque, NM	2,767	49	49	0	0	0	100%	100%	na	Most WtW	moderate
Syracuse, NY	2,881	36	34	0	2	0	94%	97%	92-100%	Most regular	loose
New York City, NY	76,980	239	126	95	0	18	53%	56%	50-63%	Regular and WtW	extremely tight/tight[G]
Cuyahoga, OH	8,696	58	51	7	0	0	88%	88%	79-97%	WtW	moderate to loose
Dayton Metro, OH	2,516	50	30	20	0	0	60%	60%	46-74%	Most regular	loose
Akron, OH	3,613	50	29	21	0	0	60%	58%	44-72%	Most regular	moderate to loose
Oklahoma City, OK	3,120	51	29	22	0	0	57%	57%	43-71%	Most regular	moderate
Tulsa, OK	3,712	49	34	15	0	0	69%	69%	56-83%	Mixed	tight
Allegheny Cnty, PA	4,329	33	18	15	0	0	55%	55%	37-72%	All regular	moderate
Montgomery Cnty, PA	1,631	50	21	28	1	0	42%	42%	28-56%	Regular and WtW	tight
El Paso, TX	3,487	50	48	2	0	0	96%	96%	90-100%	Most regular	loose
Corpus Christi, TX	847	51	34	17	0	0	67%	67%	53-80%	All regular	loose to very loose
Dallas, TX	11,340	50	33	17	0	0	66%	66%	52-80%	Regular and PH relocation	tight to moderate
Grand Praire, TX	1,332	50	39	11	0	0	78%	78%	66-90%	Most regular	tight
Newport News, VA	2,196	54	37	16	1	0	69%	69%	57-82%	All regular	moderate
Everett, WA	1,265	48	42	6	0	0	88%	88%	78-97%	Most WtW	tight
Kenosha, WI	808	51	43	8	0	0	84%	84%	74-95%	Most WtW	extremely tight to tight
Milwaukee Cnty, WI	1,942	58	38	16	0	4	66%	69%	57-81%	All regular	moderate
Total		**2,674**	**1,780**	**829**	**14**	**51**	**67%**	**68%**	**64-72%**		

[A]　The number of Section 8 Vouchers is the number of reserved vouchers and certificates in each PHA as of the end of their most recent fiscal year according to HUDCAPS data provided by HUD on November 16, 1999.

[B]　PHAs were able to track down whether most port-outs were successful or not.

[C]　These enrollees were not final after a minimum elapsed time of 7 months since the issuance of their voucher.

[D]　Imputed success status to those with unknown final status.　See Appendix A (section A.3) for a description of imputation procedures.

[E]　Housing market conditions based on perceptions of housing market affordable to Section 8 recipients according to local experts called by Abt Associates staff in the fall of 2000.

[F]　Represents the combined city and county housing authorities.

[G]　Manhattan and Brooklyn have extremely tight market conditions: the Bronx has tight housing market conditions.

Exhibit C-2
PHAs by Housing Market Conditions and Percent of Voucher Holder Sample Successful

Percent of Sample Successful[1]	Market Tightness			
	Extremely Tight	**Tight**	**Moderate**	**Loose**
50% or less	Ventura Co. Alameda Co.	Los Angeles Bridgeport Pinellas Co. Montgomery Co. (PA)		
51-60%	Boston DC NYC (Manhattan and Brooklyn)	Baltimore Co. St. Louis Co.	Atlanta Akron Allegheny Co.	Dayton Oklahoma City
61-70%	Metro Council	Cook Co. Miami-Dade Des Moines Plymouth Tulsa Dallas NYC (Bronx)	Fresno Lexington New Orleans Newport News Milwaukee Co.	Corpus Christi
71-80%		Los Angeles Co. Sacramento Chicago Indianapolis Prince Georges Co. Grand Praire	Tucson	
81-90%	San Diego Kenosha	Everett	Phoenix Hartford Cuyahoga Co.	
91-100%		Monmouth-Ocean Co., NJ Newark	Detroit Albuquerque	Syracuse El Paso

[1] The percent of sample successful estimate is calculated as (number of known successful voucher holders) / (total number of voucher holders in sample).

Source: Abt Associates Composite Market Tightness Measure, Successful and Unsuccessful modules of Tracking System.
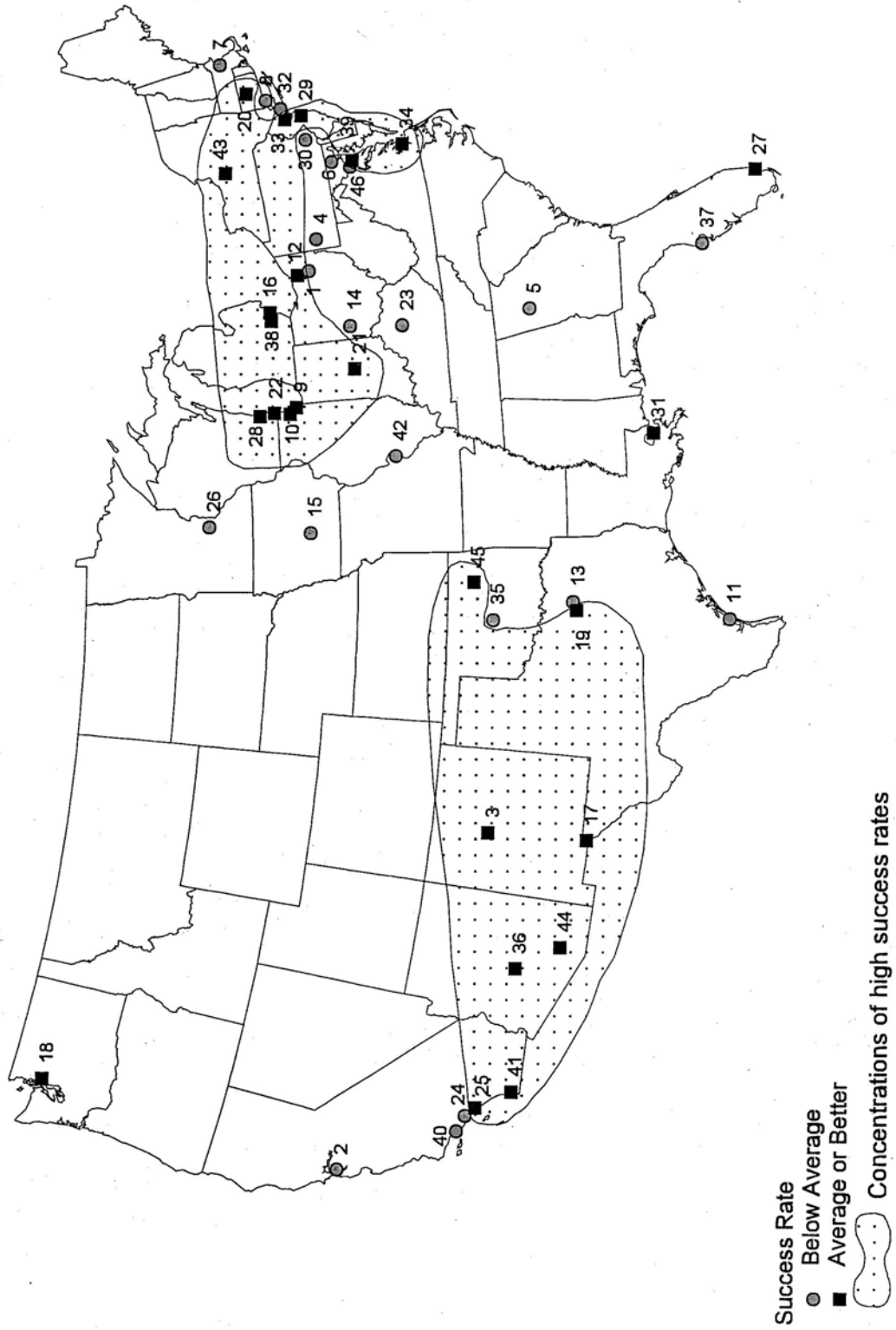
Sample Size: 48 PHAs (there are 49 observations because the Bronx was separated from the rest of NYC because of different market conditions). Most PHAs have about 50 voucher holders in their sample for a total of 2,674 voucher holders across all sites.

Exhibit C-3
Geographic Patterns of Above Average Success Rates

	Public Housing Agency	Success Rate
1	Akron	58
2	Alameda	37
3	Albuquerque	100
4	Allegheny County	55
5	Atlanta	60
6	Baltimore County	57
7	Boston	53
8	Bridgeport	47
9	Chicago	82
10	Cook County	68
11	Corpus Christi	67
12	Cuyahoga	88
13	Dallas	66
14	Dayton Metro	60
15	Des Moines	66
16	Detroit	100
17	El Paso	96
18	Everett	88
19	Grand Prairie	78
20	Hartford	89
21	Indianapolis	76
22	Kenosha	84
23	Lexington-Fayette County	63
24	Los Angeles City	47
25	Los Angeles County	77
26	Metro Council Minn/St Paul	62
27	Miami-Dade County	71
28	Milwaukee County	69
29	Monmouth-Ocean Counties	93
30	Montgomery County	42
31	New Orleans	68
32	New York City	56
33	Newark	100
34	Newport News	69
35	Oklahoma City	57
36	Phoenix	82
37	Pinellas County	38
38	Plymouth	68
39	Prince George's County	78
40	San Buenaventura	48
41	San Diego	88
42	St. Louis County	52
43	Syracuse	97
44	Tucson	72
45	Tulsa	69
46	Washington, DC	58

Exhibit C-3 (Continued)

Voucher Success Rates at Selected PHAs

Prepared by Dan Reagle for Robert Leonard
HUD Policy Development and Research

Success Rate
- Below Average
- ■ Average or Better
- ⬚ Concentrations of high success rates

Note: The national success rate (including LA City) is 68%
\# identifies the PHA on the previous page (Example: 7 is Boston)

Appendix D

Multivariate Analysis of Factors
Relating to Enrollee Success

Appendix D

Multivariate Analysis of Factors Relating to Enrollee Success

The regressions were run using the logistic specification. This model is used to fit a regression for binary (yes/no) responses. The coefficients produced by the regression fit a model that predicts the logit of the dependent variable. To translate the coefficients into explainers of the actual dependent variable (success or failure), they must be transformed back to non-logistic form.

The formula for translating the coefficients is given by:

$$Actual\ \Delta\bar{\pi} = Mean\left[\frac{\pi(1-\pi)(e^{\beta}-1)}{1+\pi(e^{\beta}-1)}\right]$$

For simplicity we evaluate the change at the mean success rate $\bar{\pi}$.

$$\frac{\bar{\pi}(1-\bar{\pi})(e^{\beta}-1)}{1+\bar{\pi}(e^{\beta}-1)} > Mean\ (because\ concave\ from\ below).$$

This over-estimates the true effect because the function is concave from below.

Exhibit D-1 presents the regression results. The estimates of the coefficients were produced in STATA using the SYVLOGIT procedure that took into account the weights and the two-stage sampling design for this study. Exhibit D-2 provides the estimate of the effect of the variable on the probability of success, estimated at the mean success rate for variables that are statistically significant at the 10 percent confidence level. Exhibit D-3 presents the odds ratios, which provide an alternative method to estimating the impacts of the dependent variables. The odds ratio is an estimate of the ratio of the probability of success under alternative scenarios (such as with and without a particular characteristic).

Several variables discussed in the text are not included in the final regression model. These variables were not statistically significant in any model specification. To avoid problems of multi-collinearity they were excluded from the final model.

Exhibit D-1
Coefficients from Regression Model

Dependent Variable; Success (1=yes, 0=no)
Survey logistic regression

pweight: indweigh	Number of obs	= 2605
Strata: stratas	Number of strata	= 6
PSU: clusters	Number of PSUs	= 563
	Population size	= 855219.02
	$F(40, 518)$	= .
	Prob > F	= .

S3	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
black	-.1718076	.1446187	-1.19	0.235	-.4558723	.1122571
hispanic	-.1660848	.1774359	-0.94	0.350	-.5146102	.1824405
othrace	.123814	.3164848	0.39	0.696	-.4978356	.7454636
unknown race	.4990443	.8197936	0.61	0.543	-1.11122	2.109309
age <25yr	.199726	.1434295	1.39	0.164	-.0820028	.4814548
age 4-<62	.1699558	.1585473	1.07	0.284	-.1414679	.4813794
age 62+	-.5857219	.2392093	-2.45	0.015	-1.055585	-.1158593
male	.0900561	.1305407	0.69	0.491	-.1663561	.3464682
neld, ndis, nkid	-.4848795	.1863205	-2.60	0.010	-.8508562	-.1189027
disabled, noeld	.0365853	.2493144	0.15	0.883	-.4531261	.5262967
hhsize ge5	-.3287423	.1308935	-2.51	0.012	-.5858474	-.0716372
inc=0	-.426607	.2475425	-1.72	0.085	-.9128379	.0596239
inc >30% median	-.6023511	.1311786	-4.59	0.000	-.8600163	-.344686
prim inc ss	-.1627876	.16789	-0.97	0.333	-.4925625	.1669874
prim inc welf	.0251765	.1282344	0.20	0.844	-.2267057	.2770586
prim inc othr	-.0406371	.2580314	-0.16	0.875	-.5474706	.4661963
pgm wtw	.3372989	.2319434	1.45	0.146	-.1182917	.7928895
pgm famunif	-.0985816	.248445	-0.40	0.692	-.5865854	.3894221
pgm reloc	.4618503	.3007669	1.54	0.125	-.1289256	1.052626
pgm othprog	.5201656	.2943131	1.77	0.078	-.0579336	1.098265
mkt = vtight	-.285946	.2309395	-1.24	0.216	-.7395646	.1676727
mkt = mod	.4301593	.243592	1.77	0.078	-.048312	.9086305
mkt = loose	.7877434	.405649	1.94	0.053	-.0090452	1.584532
ll accpt high	-.3213191	.2336459	-1.38	0.170	-.7802539	.1376157
ll accpt low	-2.359018	.3061853	-7.70	0.000	-2.960437	-1.757599
protect inc	1.02738	.4621167	2.22	0.027	.1196758	1.935085
protect both	.6730458	.4088256	1.65	0.100	-.1299826	1.476074
unknwn protect	.133019	.3557046	0.37	0.709	-.5656673	.8317053
PS too low	-.2786502	.1768232	-1.58	0.116	-.6259719	.0686716
PS <FMR	-1.008312	.2952337	-3.42	0.001	-1.588219	-.4284046
FMR<PS<11fmr	-.4228352	.2294663	-1.84	0.066	-.8735602	.0278898
PS>1.1FMR	-.3240732	.3303782	-0.98	0.327	-.9730127	.3248662
50-75% pass	.3286733	.2190769	1.50	0.134	-.1016445	.7589911
75%+ pass	.8613563	.2264913	3.80	0.000	.4164749	1.306238
unknown pass	-.1654823	.2172734	-0.76	0.447	-.5922576	.261293
ind brief	.8017013	.3558383	2.25	0.025	.1027523	1.50065
ind +grp brf	-.5042391	.2671546	-1.89	0.060	-1.028993	.0205147
group <30	-.4177755	.2589144	-1.61	0.107	-.9263434	.0907925

Exhibit D-1 *(Continued)*
Coefficients from Regression Model

S3	Coef.	Std. Err.	t	P>|t|	[95% Conf. Interval]	
LL outrch mon	.7414784	.2467274	3.01	0.003	.2568486	1.226108
LL outrch ann	.186118	.3659346	0.51	0.611	-.5326624	.9048984
LL outrch<ann	.6099087	.3496059	1.74	0.082	-.0767984	1.296616
LL outrch unk	-.3435215	.3918318	-0.88	0.381	-1.11317	.4261272
_cons	.4694083	.3582978	1.31	0.191	-.2343717	1.173188

.tab compare 5 [iweight=indweigh];

compare5	Freq.	Percent	Cum.
True pTrue	531892.932	62.19	62.19
False pFalse	66478.5929	7.77	69.97
True pFalse	52801.0616	6.17	76.14
False pTrue	204046.431	23.86	100.00
Total	855219.017	100.00	

Note: For this comparison, a voucher holder with given characteristics was predicted to be successful if the model estimated the probability of success was 50 percent or higher. Similarly, a voucher holder was predicted to be unsuccessful if the model estimated the probability of success was less than 50 percent.

Note: Not all variables in the regression are discussed in the text because the number of cases in the category are very small.

Exhibit D-2
Estimates of Effects of Significant Variables on Probability of Success

Variable	Coefficient	Estimated Effect
Age 62+	-0.5857	-0.1381
Not elderly, non disable, no kids	-0.4849	-0.1132
HH size >=5	-0.3287	-0.0753
Income = 0	-0.4266	-0.0989
Income >30% of median	-0.6024	-0.1422
Moderate market	0.4302	0.0857
Loose market	0.7877	0.1437
Nondisc based on both inc+S8	0.6730	0.1264
Nondisc based on income	1.0270	0.1758
PS<FMR	-1.0080	-0.2432
110%FMR>Ps>FMR	-0.4228	-0.0980
75%+ units pass on 1st try	0.8614	0.1541
Individual briefing	0.8017	0.1457
Ind + Group briefings	-0.5040	-0.1179
Group <30	-0.4178	-0.0968
Landlord outreach every few mnths	0.7415	0.1369
Landlord outreach <annually	0.6100	0.1164

Exhibit D-3
Odds Ratios from Regression Model

Dependent Variable; Success (1=yes, 0=no)
Survey logistic regression

pweight: indweigh			Number of obs	=	2605
Strata: stratas			Number of strata	=	6
PSU: clusters			Number of PSUs	=	563
			Population size	=	855219.02

S3	Odds Ratio	Std. Err.	t	P>|t|	[95% Conf. Interval]	
black	.8421412	.1217894	-1.19	0.235	.6338948	1.1188
hispanic	.8469744	.1502837	-0.94	0.350	.5977336	1.200143
othrace	1.131805	.3581992	0.39	0.696	.6078449	2.107418
unkrace	1.647146	1.35032	0.61	0.543	.329157	8.242544
age <25yr	1.221068	.1751372	1.39	0.164	.9212694	1.618427
age 44–61	1.185252	.1879185	1.07	0.284	.8680831	1.618305
age 62+	.5567038	.1331687	-2.45	0.015	.347989	.8906005
male	1.094236	.1428422	0.69	0.491	.8467447	1.414065
neld, ndis, nkid	.6157714	.1147309	-2.60	0.010	.4270491	.8878942
disabled, noeld	1.037263	.2586046	0.15	0.883	.635638	1.692652
hh size ge5	.7198285	.0942208	-2.51	0.012	.5566339	.9308685
inc = 0	.65272	.1615759	-1.72	0.085	.4013835	1.061437
inc >30%median	.5475228	.0718233	-4.59	0.000	.4231552	.7084428
prim inc. ss	.8497717	.1426682	-0.97	0.333	.6110585	1.181739
prim inc. welf	1.025496	.1315039	0.20	0.844	.7971554	1.319244
prim inc. other	.9601775	.2477559	-0.16	0.875	.578411	1.59392
pgm wtw	1.401158	.3249893	1.45	0.146	.8884368	2.209772
pgm famunif	.9061217	.2251214	-0.40	0.692	.5562233	1.476127
pgm reloc	1.587008	.4773193	1.54	0.125	.8790394	2.865166
pgm othprog	1.682306	.4951247	1.77	0.078	.9437126	2.998958
mkt = vtight	.7513032	.1735056	-1.24	0.216	.4773217	1.18255
mkt = mod.	1.537502	.3745233	1.77	0.078	.9528364	2.480923
mkt = loose	2.19843	.8917908	1.94	0.053	.9909955	4.877009
ll accept high	.7251918	.1694381	-1.38	0.170	.4582896	1.147535
ll accept low	.094513	.0289385	-7.70	0.000	.0517963	.1724584
protect inc.	2.793737	1.291033	2.22	0.027	1.127131	6.924631
protect both	1.960199	.8013794	1.65	0.100	.8781107	4.375733
unknwn protect	1.142272	.4063112	0.37	0.709	.567981	2.297233
PS too low	.7568046	.1338206	-1.58	0.116	.5347415	1.071084
PS < FMR	.3648343	.1077114	-3.42	0.001	.204289	.6515477
FMR<PS<=1.10fmr	.6551866	.1503432	-1.84	0.066	.4174627	1.028282
ps > 1.10 fmr	.7231973	.2389286	-0.98	0.327	.3779427	1.383846
50-75% pass	1.389124	.3043249	1.50	0.134	.9033506	2.13612
75%+ pass	2.366368	.5359616	3.80	0.000	1.516606	3.692256
unk pass	.8474849	.1841359	-0.76	0.447	.5530773	1.298608
ind brief	2.22933	.7932812	2.25	0.025	1.108217	4.484605
ind+ grp brf	.603965	.1613521	-1.89	0.060	.3573667	1.020727
group < 30	.6585101	.1704977	-1.61	0.107	.3959991	1.095042
LL out mon	2.099037	.5178898	3.01	0.003	1.292849	3.407941
LL out ann	1.204564	.4407917	0.51	0.611	.58704	2.471681
LL out < ann	1.840263	.643367	1.74	0.082	.9260766	3.6569
LL out unk	.7092683	.2779139	-0.88	0.381	.3285159	1.531315