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Attachments		Total Number of Pages
Attachment I: Baseline Population by RadGrid Cells, 2003 – 2075		10
Attachment II: Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075		10
Attachment III: Electronic File Used for the Analysis		2
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DISCLAIMER

The calculations contained in this document were developed by Bechtel SAIC Company, LLC, (BSC) and are intended solely for the use of BSC in its work for the Yucca Mountain Project (YMP).

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Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

ACRONYMS

BSC	Bechtel SAIC Company, LLC
CBER	Center for Business and Economic Research
EIS	Environmental Impact Statement
NRC	U.S. Nuclear Regulatory Commission
NSDO	Nevada State Demographer's Office
NTOC	National Transportation Operations Center
RadGrid	Radiological Monitoring Grid
RCC	Railroad Control Center
YMP	Yucca Mountain Project

1. PURPOSE

This analysis projects to the year 2075 the human population in the Radiological Monitoring Grid (RadGrid) by grid sector. The RadGrid is a circle with a center within the North Portal Pad and divided into sectors by radial spokes every 22.5 degrees and by inner circles with an innermost circle of 4 km (approximately 2.5 mi.) radius, and 10 additional circles, each circle successively increasing in radius by 8 km (approximately 5 mi.). The final circle has a radius of 84 km (52 mi.). A description of the RadGrid and its cells is presented in *Yucca Mountain Project Summary of Socioeconomic Data Analyses Conducted in Support of the Radiological Monitoring Program, During FY 2003* (BSC 2003, Section 4.1). A graphic representation of the RadGrid also is presented in BSC 2003, Figure 1. In this analysis, population projections within the RadGrid area are developed both for a baseline (the projected population assuming no changes in the regional population as a result of the repository) and also for the region assuming the repository will be constructed and operated. These latter projections are developed by incorporating estimated population changes that may occur as a result of the construction and operation of a repository and an associated railroad from Caliente, Nevada, to the repository. Projections are made for each decade beginning with 2010 and ending with 2075. Projections also are provided for 2017, the first year of operation (Sproat 2006) and 2067, 50 years after initiation of emplacement, where 50 years is the minimum period after initiation of emplacement before repository closure (10 CFR 63.111(e)(1)). This analysis projects to 2075 to allow for a later initiation of emplacement, should it be necessary.

The work scope of this analysis also describes the population distribution in the RadGrid area, in accordance with technical guidelines set forth by the U.S. Nuclear Regulatory Commission (NRC) in Regulatory Guide 4.2 (Section 2.1.2.2), *Preparation of Environmental Reports for Nuclear Power Stations* (1976) Revision 2, for the following 3 age groups:

- 0 through 11 years
- 12 through 18 years
- 19 years and older

The age distribution is described for the year 2042, which is the midpoint of the 50 year period of 2017-2067, 50 years being the minimum period after initiation of emplacement before repository closure (10 CFR 63.111(e)(1)).

This analysis supports Chapter 1 of the Safety Analysis Report, Section 1.1.2, *Regional Demography*. The outputs of the analysis provide information in accordance with the guidance of NUREG-1804, *Yucca Mountain Review Plan*, Final Rev 2, Section 2.1.1.1.2, Review Method 2, "Description of Regional Demography" (NRC 2003).

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- 2.1.3 EG-DSK-3003, Rev 7, *Desktop Information for Format of Calculations and Analyses and Treatment of Inputs and Assumptions*. Las Vegas, Nevada. Bechtel SAIC Company. ACC: ENG.20070709.0006.

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- 2.3.1 10 CFR 63. 2002. Energy: Disposal of High-Level Radioactive Wastes in a Geologic Repository at Yucca Mountain, Nevada. TIC: 253816. [DIRS 158535]
- 2.3.2 NRC (U.S. Nuclear Regulatory Commission) 2003. *Yucca Mountain Review Plan, Final Report*. NUREG-1804, Rev. 2. Washington, D.C.: U.S. Nuclear Regulatory Commission, Office of Nuclear Material Safety and Safeguards. TIC: 254568. [DIRS 163274]
- 2.3.3 Regulatory Guide 4.2, Rev. 2. 1976. *Preparation of Environmental Reports for Nuclear Power Stations*. Washington, D.C.: U.S. Nuclear Regulatory Commission. ACC: HQS.19880517.2783. [DIRS 103570]

2.4 ANALYSIS OUTPUTS

- 2.4.1 MO0708PPRM0375.000. "Population Projections in Radiological Monitoring Grid Cells, 2003-2075." Submittal Date: August 28, 2007.

3. ASSUMPTIONS

3.1 ASSUMPTIONS REQUIRING VERIFICATION

None

3.2 ASSUMPTIONS NOT REQUIRING VERIFICATION

In the development of the baseline population for each of the three counties which have populations in the RadGrid, it is necessary to make certain assumptions that allow the projection of county populations to 2075. These assumptions are:

3.2.1 Nye County Baseline Projections

Nye County population projections to 2026 are made by the Nevada State Demographer's Office (NSDO) (Hardcastle 2006). Population growth in Nye County during the period 2027-2075 is assumed to increase at a constant rate equal to the average annual growth rate (approximately 1.4%) of the last 3 years projected by the Demographer. Because the annual growth rates during the 2006-2026 period (see Table 1) show a trend of growth rates that increase at a decreasing rate, holding growth rates constant will lead to higher population projections than the established trend, which is a conservative assumption when analyzing for total radiological dose to resident populations.

3.2.2 Clark County Baseline Projections

Clark County population projections to 2035 are made by the Center for Business and Economic Research (CBER) at the University of Nevada Las Vegas (CBER 2006, Table 1). Clark County population during the period 2036-2075 is assumed to increase at a constant rate equal to the average annual growth rate (approximately 1.08 percent) of the last 3 years projected by CBER. Because the annual growth rates during the 2006-2035 period (see Table 3) show a trend of growth rates that increase at a decreasing rate, holding growth rates constant will lead to higher population projections than the established trend, which is a conservative assumption when analyzing for total radiological dose to resident populations.

3.2.3 Inyo County Baseline Projections

Inyo County population projections are made for each decade from 2000 to 2050 by the Demographic Research Unit of the California State Department of Finance (2004). Three assumptions are made to establish the baseline to 2075.

- The first assumption is that annual changes in population are in equal amounts over the years between each decade. Because the projections of decade to decade change are always small – a projected decline of only 357 from 2030 to 2040 (1.96% over the decade) and a projected decline of only 200 from 2040 to 2050 (1.12% over the decade) (see Table 5), are the largest changes – this is a reasonable assumption.

Because the projections (California State Department of Finance 2004) show a decrease in population in Inyo County after 2020, two additional assumptions are used in this analysis to extend the projections from 2050 to 2075:

- Assume that from 2050 to 2060 the population will continue to decline, but at a rate only 50% of the Demographic Research Unit's declining rate from 2040 to 2050.
- Assume that for the period 2060 to 2075, the rate of decline is zero and that the period of 2060 to 2075 is assumed to have no change in population.

The Demographic Research Unit population projections establish a long-term trend of declining population. These last two assumptions for Inyo County, first halving the rate of decline (from 2050 to 2060) and then stopping further declines (after 2060), will lead to higher population projections than the established trend. This is a conservative assumption when analyzing for total radiological dose to resident populations. See Table 5.

3.2.4 Baseline Population Projections for RadGrid Cells

An assumption is made that the population in each radiological monitoring grid cell grows (or declines) at the same rate as population changes of the county. Because Nye and Clark Counties are growing faster in more urban areas such as Pahrump and Las Vegas (NSDO [n.d.]), that are outside or on the edge of the RadGrid, this will assign higher than otherwise expected growth rates to the not highly populated cells close to the repository. This is a conservative assumption when analyzing for total radiological dose to resident populations.

3.2.5 Population in RadGrid Cells in Esmeralda and Lincoln Counties

There will be no population in RadGrid cells in either Esmeralda County or Lincoln County in future years. This assumption is based on the condition that RadGrid cells in both counties are devoid of population (BSC 2003, Table 1).

3.2.6 Inclusion of YMP Induced Population Changes in RadGrid Cells

Construction and operation of the repository and the associated railroad from Caliente to the repository will require additional employees and related expenditures in excess of YMP current levels within Nevada and this expansion by the YMP will result in increases in the regional population in general and within the RadGrid in particular. An assumption is made that distributions of revised county populations that incorporate changes as a result of the construction and operation of the repository and the associated railroad should be made to the RadGrid cells in the same manner as the distribution of county baseline populations to the RadGrid cells. That is, population distributions that include YMP induced population changes are assumed to be the same, percentage wise, as population distributions in the county baselines. The rationale for this assumption is the same as for Assumption 3.2.4.

4. METHODOLOGY

4.1 QUALITY ASSURANCE

Development of this report involves analysis of data to support the Safety Analysis Report for the License Application. The outputs of this activity are not important to either waste isolation or safety; the work is not a quality affecting activity.

4.2 USE OF SOFTWARE

The only software used during this analysis was the commercial off-the-shelf product Excel (Version 2003 – 11.8120.8122, SP2) using the Windows XP operating system on a Dell Laptop personal computer. Standard Excel functions of addition, multiplication, division, and averaging were used to calculate parameter values, as described in this analysis.

4.3 CALCULATION OF POPULATIONS IN RADIOLOGICAL MONITORING GRID

4.3.1 Baseline County Population Projections

In Nye County, baseline projections to 2026 are from Hardcastle (2006). The baseline projections for 2027 - 2075 are made by using a constant factor equal to the average annual rate of growth of the last 3 years of projections by Hardcastle (Assumption 3.2.1). In Clark County, baseline projections to 2035 are from CBER (2006). The baseline projections for 2036 - 2075 are made by using a constant factor equal to the average annual rate of growth of the last 3 years of projections by CBER (Assumption 3.2.2). In Inyo County, decennial projections to 2050 are from the California State Department of Finance (2004). Population projections for interdecennial years are calculated by adding (or subtracting as appropriate) one-tenth of the difference between the decennial projections (Assumption 3.2.3). Projections beyond 2050 are calculated as discussed in the assumptions in Section 3.2.3.

4.3.2 Baseline Radiological Monitoring Grid Cell Population Projections

From the starting point of population by grid cell in 2003 (BSC 2003, Table 1), population by year in each grid cell is calculated through application of the same annual growth (or decline) rates as the baseline projections for the county in which each respective cell lies (Assumption 3.2.4).

4.3.3 County Population Projections Including YMP Induced Population Changes

The construction and operation of the Yucca Mountain Repository and an associated railroad will lead to increases in populations in Nevada, generally, and Nye and Clark Counties, specifically. County population projections including induced population changes resulting from the construction and operations of the repository and an associated railroad are developed by adding those induced populations to the county baseline populations.

Induced population changes as a result of construction and operation of the repository are identified in Bland (2007a).

Induced population changes as a result of construction and operation of the railroad from Caliente to the repository are identified in Bland (2007b) and Bland (2007c).

4.3.4 Radiological Monitoring Grid Cell Population Projections Including YMP Induced Population Changes

Induced population changes are added to the baseline populations and annual rates of growth are determined for each county. From the starting point of population by grid cell in 2003 (BSC 2003, Table 1), population by year in each grid cell is calculated through application of the same annual growth (or decline) rates as the population projections (including induced changes) for the county in which each respective cell lies (Assumption 3.2.6).

4.3.5 Baseline Age Distribution in Midpoint Year of 2042

Baseline populations for RadGrid Cells for the midyear point of 2042 are developed through the methodology discussed in Section 4.3.2. Population distributions are developed for the 3 relevant age groups (0 through 11, 12 through 18, and 19 and older) from the Census Bureau's projections of the United States population for 2042 (U.S. Census Bureau 2004) and applied to each cell.

4.3.6 Age Distribution in Midpoint Year of 2042 Including YMP Induced Population Changes

Populations, including YMP induced population changes, for RadGrid Cells for the midyear point of 2042 are developed through the methodology discussed in Section 4.3.4. Population distributions are developed for the 3 relevant age groups (0 through 11, 12 through 18, and 19 and older) from the Census Bureau's projections of the United States population for 2042 (U.S. Census Bureau 2004) and applied to each cell.

5. LIST OF ATTACHMENTS

Attachment 1: Baseline Population by RadGrid Cells, 2003 – 2075

Attachment 2: Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075

Attachment 3: Electronic File Used for the Analysis

6. BODY OF ANALYSIS

6.1 BASELINE POPULATION PROJECTIONS FOR COUNTIES

Baseline population projections are based on published information from state and local government agencies. Projections in Nevada are made for Nye and Clark counties, and projections in California are made for Inyo County. Baseline population projections are made without consideration of potential population changes caused by construction and operation of the Yucca Mountain repository or associated transportation options.

6.1.1 Nye County Baseline Population, 2003-2075

In Nye County, projections are from the NSDO's report, "Nevada County Population Projections 2006 to 2026" (Hardcastle 2006). The Nye County baseline projections to 2026 are presented in Table 1. The NSDO is assigned by the State of Nevada responsibility for conducting annual population estimates for Nevada's counties, cities, and towns, and also for developing population projections. The NSDO data are documented and substantiated in electronic databases on the internet and in publications and are considered established fact suitable for use in this analysis.

Table 1. Nye County Baseline Population Estimates, Projections and Annual Rates of Growth, 2003-2026^{ab}

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Nye Population	36,651	38,181	41,302	43,570	45,737	47,875	49,948	51,971	53,908
Rate of Change	N/A ^c	4.17%	8.17%	5.49%	4.97%	4.67%	4.33%	4.05%	3.73%
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Nye Population	55,762	57,533	59,210	60,803	62,323	63,782	65,161	66,467	67,707
Rate of Change	3.44%	3.18%	2.91%	2.69%	2.50%	2.34%	2.16%	2.00%	1.87%
	2021	2022	2023	2024	2025	2026	--	--	--
Nye Population	68,888	70,020	71,107	72,148	73,155	74,125	--	--	--
Rate of Change	1.74%	1.64%	1.55%	1.46%	1.40%	1.33%	--	--	--

Source: ^a NSDO 2006; historical estimates 2003-2005.

^b Hardcastle 2006; projections 2006-2026

^c Not applicable

For Nye County, baseline population is assumed to grow at a constant rate for all years after the end of the NSDO projections. This constant rate, approximately 1.40 percent, is the average of the final 3 years of the NSDO projections. Nye County baseline projections and annual rates of growth for 2026 to 2075 are presented in Table 2.

6.1.2 Clark County Baseline Population, 2003-2075

In Clark County, population projections are made annually to 2035 by the Center for Business and Economic Research (CBER) of the University of Nevada, Las Vegas (UNLV) (CBER 2006, Table 1). The Clark County baseline projections to 2035 are presented in Table 3. These projections are made for, and in conjunction with, the Clark County Department of Comprehensive Planning, the Regional Transportation Commission of Southern Nevada, and the Southern Nevada Water Authority, all local government agencies. The CBER data are

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documented and substantiated in electronic databases on the internet and in publications and are considered established fact suitable for use in this analysis.

Table 2. Nye County Baseline Population Projections and Annual Rates of Growth, 2026-2075^{ab}

	2026	2027	2028	2029	2030	2031	2032	2033	2034
Nye Population	74,125	75,159	76,208	77,271	78,349	79,442	80,551	81,675	82,814
Rate of Change	1.33%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%
	2035	2036	2037	2038	2039	2040	2041	2042	2043
Nye Population	83,970	85,141	86,329	87,534	88,755	89,993	91,249	92,522	93,813
Rate of Change	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%
	2044	2045	2046	2047	2048	2049	2050	2051	2052
Nye Population	95,122	96,449	97,795	99,159	100,543	101,945	103,368	104,810	106,272
Rate of Change	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%
	2053	2054	2055	2056	2057	2058	2059	2060	2061
Nye Population	107,755	109,258	110,783	112,329	113,896	115,485	117,096	118,730	120,387
Rate of Change	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%
	2062	2063	2064	2065	2066	2067	2068	2069	2070
Nye Population	122,066	123,769	125,496	127,247	129,022	130,823	132,648	134,499	136,375
Rate of Change	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%	1.40%
	2071	2072	2073	2074	2075	--	--	--	--
Nye Population	138,278	140,207	142,163	144,147	146,158	--	--	--	--
Rate of Change	1.40%	1.40%	1.40%	1.40%	1.40%	--	--	--	--

Source: ^a 2026 data from Table 1.

^b Rate of change after 2026 held constant at a rate equal to the average rate of change for the final 3 years of the projections by NSDO (2006).

Table 3. Clark County Baseline Population Estimates, Projections and Annual Rates of Growth, 2003-2035^{ab}

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Clark Population	1,641,529	1,747,025	1,815,700	1,904,443	1,990,481	2,079,953	2,169,475	2,258,748	2,344,992
Rate of Change	N/A ^c	6.43%	3.93%	4.89%	4.52%	4.49%	4.30%	4.11%	3.82%
	2012	2013	2014	2015	2016	2017	2018	2019	2020
Clark Population	2,428,325	2,507,120	2,581,691	2,652,070	2,718,315	2,780,538	2,839,052	2,894,224	2,946,350
Rate of Change	3.55%	3.24%	2.97%	2.73%	2.50%	2.29%	2.10%	1.94%	1.80%
	2021	2022	2023	2024	2025	2026	2027	2028	2029
Clark Population	2,995,616	3,042,287	3,086,692	3,129,112	3,169,797	3,209,063	3,247,267	3,284,694	3,321,683
Rate of Change	1.67%	1.56%	1.46%	1.37%	1.30%	1.24%	1.19%	1.15%	1.13%
	2030	2031	2032	2033	2034	2035	--	--	--
Clark Population	3,358,456	3,395,163	3,431,993	3,469,112	3,506,569	3,544,362	--	--	--
Rate of Change	1.11%	1.09%	1.08%	1.08%	1.08%	1.08%	--	--	--

Source: ^a CBER 2006, Table 1.

^b Note: 2003-2005 are historical estimates

^c Not applicable

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

After 2035, projections are made for Clark County by holding the rate of change constant, equal to the average annual rate of change, approximately 1.08 percent, for the last three years of the CBER (2006) projections. These baseline projections and annual rates of change for the remainder of the period to 2075 are shown in Table 4.

Table 4. Clark County Baseline Population Projections and Annual Rates of Growth, 2035-2075^{a,b}

	2035	2036	2037	2038	2039	2040	2041	2042	2043
Clark Population	3,544,362	3,582,630	3,621,311	3,660,410	3,699,931	3,739,879	3,780,258	3,821,073	3,862,329
Rate of Change	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%
	2044	2045	2046	2047	2048	2049	2050	2051	2052
Clark Population	3,904,030	3,946,181	3,988,787	4,031,854	4,075,385	4,119,387	4,163,863	4,208,820	4,254,262
Rate of Change	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%
	2053	2054	2055	2056	2057	2058	2059	2060	2061
Clark Population	4,300,195	4,346,624	4,393,554	4,440,990	4,488,939	4,537,406	4,586,395	4,635,914	4,685,968
Rate of Change	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%
	2062	2063	2064	2065	2066	2067	2068	2069	2070
Clark Population	4,736,561	4,787,702	4,839,394	4,891,644	4,944,459	4,997,843	5,051,804	5,106,348	5,161,481
Rate of Change	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%	1.08%
	2071	2072	2073	2074	2075	--	--	--	--
Clark Population	5,217,209	5,273,538	5,330,476	5,388,029	5,446,202	--	--	--	--
Rate of Change	1.08%	1.08%	1.08%	1.08%	1.08%	--	--	--	--

Source: ^a 2035 data from Table 3.

^b Rate of change after 2035 held constant at a rate equal to the average rate of change for the final 3 years of the projections by CBER (2006).

6.1.3 Inyo County Baseline Population, 2000-2075

Inyo County population projections are made by the California State Department of Finance, Demographic Research Unit, which is established by California as the official source of population projections. Inyo County projections are made for each decade from 2000 to 2050 (California State Department of Finance 2004) and are presented in Table 5. The California State Department of Finance data are documented and substantiated in electronic databases on the internet and in publications and are considered established fact suitable for use in this analysis.

The projections for Inyo County to 2075 are made by examining the previous rates of growth per decade, as projected by the California State Department of Finance. Those rates include negative growth after 2020, rates which decrease at an increasing rate through 2040. During the final decade of the projection, 2040-2050, the rate of decrease is less (-1.12% for the decade). For the 2060 population estimate, this analysis assumes that population will continue to decrease in Inyo County, but that the rate of decrease from 2050 to 2060 will continue to diminish. The assumption is that the rate of change from 2050-2060 will be -0.56% for the decade, half the rate of change from 2040-2050. After 2060, the population is assumed to decrease no further and the rate of change is held at zero percent. The results are shown in Table 6.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 5. Inyo County Baseline Population Projections and Annual Rates of Growth, 2000-2050^{a b}

	2000	2001	2002	2003	2004	2005	2006	2007	2008
Inyo Population	18,257	18,271	18,285	18,299	18,313	18,327	18,340	18,354	18,368
Rate of Change	N/A ^c	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%
	2009	2010	2011	2012	2013	2014	2015	2016	2017
Inyo Population	18,382	18,396	18,397	18,398	18,398	18,399	18,400	18,401	18,402
Rate of Change	0.08%	0.08%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2018	2019	2020	2021	2022	2023	2024	2025	2026
Inyo Population	18,402	18,403	18,404	18,389	18,374	18,360	18,345	18,330	18,315
Rate of Change	0.00%	0.00%	0.00%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%	-0.08%
	2027	2028	2029	2030	2031	2032	2033	2034	2035
Inyo Population	18,300	18,286	18,271	18,256	18,220	18,185	18,149	18,113	18,078
Rate of Change	-0.08%	-0.08%	-0.08%	-0.08%	-0.20%	-0.20%	-0.20%	-0.20%	-0.20%
	2036	2037	2038	2039	2040	2041	2042	2043	2044
Inyo Population	18,042	18,006	17,970	17,935	17,899	17,879	17,859	17,839	17,819
Rate of Change	-0.20%	-0.20%	-0.20%	-0.20%	-0.20%	-0.11%	-0.11%	-0.11%	-0.11%
	2045	2046	2047	2048	2049	2050	--	--	--
Inyo Population	17,799	17,779	17,759	17,739	17,719	17,699	--	--	--
Rate of Change	-0.11%	-0.11%	-0.11%	-0.11%	-0.11%	-0.11%	--	--	--

Source: ^a California State Department of Finance 2004.

^b Inter-decennial populations are calculated by adding (or subtracting, as appropriate) one-tenth of the difference between projected decennial populations.

^c Not applicable

Table 6. Inyo County Baseline Population Projections and Annual Rates of Growth, 2050-2075^{ab}

	2050	2051	2052	2053	2054	2055	2056	2057	2058
Inyo Population	17,699	17,689	17,679	17,669	17,659	17,650	17,640	17,630	17,620
Rate of Change	-0.11%	-0.06%	-0.06%	-0.06%	-0.06%	-0.06%	-0.06%	-0.06%	-0.06%
	2059	2060	2061	2062	2063	2064	2065	2066	2067
Inyo Population	17,610	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600
Rate of Change	-0.06%	-0.06%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	2068	2069	2070	2071	2072	2073	2074	2075	
Inyo Population	17,600	17,600	17,600	17,600	17,600	17,600	17,600	17,600	
Rate of Change	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	

Source: ^a 2050 data from Table 5.

^b Inter-decennial populations are calculated by adding (or subtracting, as appropriate) one-tenth of the difference between projected decennial populations.

6.2 BASELINE RADIOLOGICAL MONITORING GRID CELL PROJECTIONS

Projections for RadGrid cells begin with 2003, the last year for which population estimates have been made for the cells. A description of the RadGrid and its cells, and the development of the 2003 estimates is presented in BSC (2003, Section 4). A graphic representation of the RadGrid also is presented in BSC (2003, Figure 1). The 2003 population estimates for the RadGrid are presented in Table 7. The percentage distribution of each cell's population within its subregion is also presented.

6.2.1 Baseline Population in Nye County Radiological Monitoring Grid Cells

The populations in RadGrid cells in Nye County are assumed (Assumption 3.2.4) to grow at the same rate as Nye County as a whole. The annual rates of population growth in Nye County, which are applied to the Nye County RadGrid cells from 2004-2026, are shown in Table 1. As discussed in Section 6.1.1, the annual rate of population growth in Nye County from 2027-2075, which is applied to the Nye County RadGrid cells during the 2027-2075 period, is assumed to be approximately 1.40 percent (Table 2). The growth rates in Tables 1 and 2 are applied to the estimated 2003 populations of Nye County RadGrid cells shown in Table 7. RadGrid cell population estimates are presented for each decade, starting with 2010 and ending with 2075. Additionally, the estimates are presented for 2017, the initial year of emplacement (Sproat 2006), 2067, 50 years after initiation of emplacement, and the midpoint year of 2042. These are shown in Table 8.

6.2.2 Baseline Population in Clark County Radiological Monitoring Grid Cells

The populations in RadGrid cells in Clark County are assumed (Assumption 3.2.4) to grow at the same rate as Clark County as a whole. The annual rates of population growth in Clark County, which are applied to the RadGrid cells in the Indian Springs area from 2004-2035, are shown in Table 3. As discussed in Section 6.1.2, the annual rate of population growth in Clark County from 2036-2075, which is applied to the Clark County RadGrid cells during the period 2036-2075, is assumed to be approximately 1.08 percent (Table 4). The growth rates in Tables 3 and 4 are applied to the estimated 2003 populations of Clark County RadGrid cells shown in Table 7. RadGrid cell population estimates for Clark County are presented for the same years as Nye County. These are shown in Table 8.

6.2.3 Baseline Population in Inyo County Radiological Monitoring Grid Cells

The populations in RadGrid cells in Inyo County are assumed (Assumption 3.2.4) to grow at the same rate as Inyo County as a whole. The annual rates of population growth in Inyo County, which are applied to the Inyo County RadGrid cells from 2004-2050, are shown in Table 5. The annual rates of population growth in Inyo County, which are applied to the Inyo County RadGrid cells from 2051-2075, are shown in Table 6. The growth rates in Tables 5 and 6 are applied to the estimated 2003 populations of Inyo County RadGrid cells shown in Table 7. RadGrid cell population estimates for Inyo County are presented for the same years as Nye County. These are shown in Table 8.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 7. Estimated Population for 2003 in RadGrid Cells ^a

Area	Grid Cell	Percent	Population
Nye County, Nevada			
Amargosa Valley Area	Grid Cell 309 (Lathrop Wells)	0.78%	11
Amargosa Valley Area	Grid Cell 408 (Amargosa Valley)	21.94%	310
Amargosa Valley Area	Grid Cell 409 (Amargosa Valley)	19.80%	279
Amargosa Valley Area	Grid Cell 508 (Amargosa Valley)	4.85%	69
Amargosa Valley Area	Grid Cell 509 (Amargosa Valley)	33.39%	471
Amargosa Valley Area	Grid Cell 510 (Crystal)	1.46%	21
Amargosa Valley Area	Grid Cell 609 (Stateline)	7.96%	112
Amargosa Valley Area	Grid Cell 610 (Crystal)	8.47%	120
Amargosa Valley Area	Grid Cell 710 (Ash Meadows)	1.36%	19
Total Amargosa Valley in the RadGrid		100.0%	1,412
Beatty Area	Grid Cell 304 (Hot Springs)	2.88%	34
Beatty Area	Grid Cell 403 (Hot Springs)	1.62%	19
Beatty Area	Grid Cell 404 (Beatty)	57.84%	690
Beatty Area	Grid Cell 405 (Beatty)	34.95%	417
Beatty Area	Grid Cell 505 (Rhyolite)	0.72%	9
Beatty Area	Grid Cell 903 (Scotty's Junction)	1.98%	24
Total Beatty in the RadGrid		100.0%	1,193
Pahrump Area	Grid Cell 711 (Johnnie)	0.14%	25
Pahrump Area	Grid Cell 810 (Pahrump)	0.26%	48
Pahrump Area	Grid Cell 811 (Pahrump)	0.01%	2
Pahrump Area	Grid Cell 910 (Pahrump)	31.97%	5,951
Pahrump Area	Grid Cell 911 (Pahrump)	0.02%	5
Pahrump Area	Grid Cell 1010 (Pahrump)	67.60%	12,581
Total Pahrump in the RadGrid		100.0%	18,611
Total Nye County in the RadGrid			21,216
Clark County, Nevada			
Indian Springs	Grid Cell 912 (Indian Springs & Cactus Springs)	88.65%	1,325
Indian Springs	Grid Cell 1011 (Cold Creek)	11.35%	170
Total Indian Springs in the RadGrid		100.0%	1,494
Total Nevada in the RadGrid			22,711
Inyo County, California			
Death Valley Area	Grid Cell 707 (Furnace Creek)	76.84%	361
Death Valley Area	Grid Cell 807 (Timbisha)	3.49%	16
Death Valley Area	Grid Cell 808 (Ryan)	0.39%	2
Death Valley Area	Grid Cell 809 (Death Valley Junction)	0.39%	2
Death Valley Area	Grid Cell 906 (Stovepipe Wells)	13.23%	62
Death Valley Area	Grid Cell 1004 (Scotty's Castle)	2.56%	12
Death Valley Area	Grid Cell 1010 (Stewart Valley, CA)	3.10%	15
Total Death Valley in the RadGrid		100.0%	469
Total Population in the RadGrid			23,180

Source: DTN: MO0311SPARPTTB.000

^a Totals may not be exact due to rounding.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 8. Baseline Population by RadGrid Cells for Key Dates ^a

	2010	2017	2020	2030	2040	2042	2050	2060	2067	2070	2075
Amargosa Valley Area, Nye County											
Grid Cell 309 (Lathrop Wells)	16	19	20	23	27	28	31	36	39	41	44
Grid Cell 408 (Amargosa Valley)	439	539	572	662	760	782	873	1,003	1,105	1,152	1,235
Grid Cell 409 (Amargosa Valley)	396	486	516	597	686	706	788	905	998	1,040	1,115
Grid Cell 508 (Amargosa Valley)	97	119	127	146	168	173	193	222	245	255	273
Grid Cell 509 (Amargosa Valley)	668	820	871	1,007	1,157	1,190	1,329	1,527	1,682	1,754	1,879
Grid Cell 510 (Crystal)	29	36	38	44	51	52	58	67	74	77	82
Grid Cell 609 (Stateline)	159	195	208	240	276	284	317	364	401	418	448
Grid Cell 610 (Crystal)	169	208	221	256	293	302	337	387	427	445	477
Grid Cell 710 (Ash Meadows)	27	33	35	41	47	48	54	62	68	71	76
Total Amargosa Valley in the RadGrid	2,002	2,456	2,608	3,017	3,466	3,563	3,981	4,573	5,038	5,252	5,629
Beatty Area, Nye County											
Grid Cell 304 (Hot Springs)	49	60	64	74	84	87	97	111	123	128	137
Grid Cell 403 (Hot Springs)	27	34	36	41	48	49	55	63	69	72	77
Grid Cell 404(Beatty)	979	1,201	1,275	1,475	1,695	1,742	1,946	2,236	2,463	2,568	2,752
Grid Cell 405 (Beatty)	591	726	771	892	1,024	1,053	1,176	1,351	1,489	1,552	1,663
Grid Cell 505 (Rhyolite)	12	15	16	18	21	22	24	28	31	32	34
Grid Cell 903 (Scotty's Junction)	34	41	44	51	58	60	67	77	84	88	94
Total Beatty in the RadGrid	1,692	2,077	2,204	2,551	2,930	3,012	3,365	3,866	4,259	4,440	4,758
Pahrump Area, Nye County											
Grid Cell 711 (Johnnie)	36	44	47	54	62	64	71	82	90	94	100
Grid Cell 810 (Pahrump)	68	84	89	103	118	121	136	156	172	179	192
Grid Cell 811 (Pahrump)	3	4	4	5	6	6	6	7	8	9	9
Grid Cell 910 (Pahrump)	8,438	10,355	10,993	12,720	14,611	15,022	16,782	19,277	21,240	22,141	23,730
Grid Cell 911 (Pahrump)	6	8	8	10	11	12	13	15	16	17	18
Grid Cell 1010 (Pahrump)	17,839	21,894	23,241	26,894	30,891	31,759	35,482	40,755	44,906	46,812	50,170
Total Pahrump in the RadGrid	26,391	32,388	34,382	39,786	45,699	46,983	52,490	60,291	66,432	69,251	74,219
Total Nye County in the RadGrid	30,084	36,921	39,193	45,354	52,094	53,558	59,836	68,729	75,729	78,943	84,606
Indian Springs Area, Clark County											
Grid Cell 912 (Indian Springs & Cactus Springs)	1,823	2,244	2,378	2,711	3,019	3,084	3,361	3,742	4,034	4,166	4,396
Grid Cell 1011(Cold Creek)	233	287	304	347	386	395	430	479	516	533	563
Total Clark County in the RadGrid	2,056	2,531	2,682	3,058	3,405	3,479	3,791	4,221	4,550	4,699	4,958
Total Nevada in the RadGrid	32,141	39,453	41,876	48,412	55,499	57,037	63,627	72,950	80,279	83,642	89,565

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Table 8. Baseline Population by RadGrid Cells for Key Dates (continued)

	2010	2017	2020	2030	2040	2042	2050	2060	2067	2070	2075
Death Valley Area, Inyo County, CA											
Grid Cell 707 (Furnace Creek)	362	363	363	360	353	352	349	347	347	347	347
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	61	61	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	15	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	472	472	472	468	459	458	454	451	451	451	451
Total Population in the RadGrid	32,613	39,925	42,348	48,880	55,958	57,495	64,081	73,401	80,731	84,094	90,016

Sources: Rates of change in Tables 1-6 applied to Table 7.

^a Totals may not be exact due to rounding.

6.3 PROJECTIONS FOR RADIOLOGICAL MONITORING GRID INCLUDING YMP INDUCED POPULATION CHANGES

The construction and operation of the repository and an associated railroad from Caliente, Nevada to the repository will change the population within Nevada, generally, and within the RadGrid region, specifically.

Projected population changes as a result of changing YMP employment and expenditures (Bland 2007a, 2007b, 2007c) were projected using the *Policy Insight* economic-demographic model configured for the YMP by Regional Economic Models, Inc. (REMI Policy Insight V9.0.3. 2007. Windows XP. STN: 611543-9.0.3-00.). Similar versions of the YMP *Policy Insight* model were used by both the Nevada State Demographer's Office and the Center for Business and Economic Research to make the population projections that form the basis for the Nye and Clark County baseline projections. Outputs from the YMP *Policy Insight* model are, therefore, appropriate for use to identify population changes from the baseline in the event of the construction and operation of the repository and an associated railroad.

The *Policy Insight* model provides outputs only until 2050. After 2050, population was projected forward by using a constant factor equal to the average annual growth of the final six years of the baseline projections, 2045-2050. For Nye County, the factor would be approximately 1.40 percent, and for Clark County it would be approximately 1.08 percent. These factors are found in Bland (2007c, p. 2).

Induced population changes to 2075 as a result of construction and operation of the repository are identified in Bland (2007a).

Induced population changes to 2067 as a result of construction and operation of the railroad from Caliente to the repository are identified in Bland (2007b). For the projected population after 2067 for the construction and operation of the railroad from Caliente to the repository, this analysis uses the same constant factors to extend the projections to 2075 as found in Bland (2007c, p. 2).

Induced population changes to 2067 as a result of construction and operation of the Nevada Railroad's Railroad Control Center (RCC) / National Transportation Operations Center (NTOC) in Nye County are presented in Bland (2007c). For the projected population after 2067 for the construction and operation of the RCC/NTOC in Nye County, this analysis uses the same constant factors to extend the projections to 2075 as found in Bland (2007c, p. 2).

Projected population changes for Nye and Clark Counties as a result of the construction and operation of the repository, the Nevada Railroad from Caliente, and the RCC/NTOC in Nye County are shown in Tables 9 and 10, respectively. These population changes are added to the county baseline projections for Nye and Clark Counties (Tables 1-4), and distributed among the RadGrid cells in accordance with the methodology described in Section 4.3.4. The populations of RadGrid cells for key dates are presented in Table 11.

There are no expected changes in Inyo County as a result of construction and operation of either the repository or the railroad from Caliente. This is consistent with historical information collected regarding places of residence of YMP employees, that there have been no identified

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

YMP workers who resided in Inyo County (BSC 2005, Table 3-21). The population projections for Inyo County and the RadGrid cells in Inyo County remain unchanged from the baseline.

Table 9. Projected Changes to Nye County Population Caused by Construction and Operations of the YMP Repository and Associated Railroad

Activity / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Repository ^a	--	--	22	53	91	120	150	211	289
Railroad ^b	62	73	105	132	136	143	148	154	158
RCC/NTOC ^{cd}	0	0	1	3	4	5	6	7	7
Total ^e	62	73	128	188	231	268	304	372	454
Activity / Year	2019	2020	2021	2022	2023	2024	2025	2026	2027
Repository ^a	362	432	499	565	626	681	730	774	813
Railroad ^b	162	166	170	174	177	180	184	186	189
RCC/NTOC ^{cd}	8	9	9	10	10	10	11	11	11
Total ^e	532	607	678	749	813	871	925	971	1,013
Activity / Year	2028	2029	2030	2031	2032	2033	2034	2035	2036
Repository ^a	850	882	912	939	964	987	1,008	1,025	1,031
Railroad ^b	191	194	196	198	200	202	204	206	208
RCC/NTOC ^{cd}	12	12	12	12	13	13	13	13	13
Total ^e	1,053	1,088	1,120	1,149	1,177	1,202	1,225	1,244	1,252
Activity / Year	2037	2038	2039	2040	2041	2042	2043	2044	2045
Repository ^a	1,037	1,044	1,048	1,045	1,028	966	913	867	827
Railroad ^b	210	212	214	217	219	221	223	226	228
RCC/NTOC ^{cd}	13	13	14	14	14	14	14	14	14
Total ^e	1,260	1,269	1,276	1,276	1,261	1,201	1,150	1,107	1,069
Activity / Year	2046	2047	2048	2049	2050	2051	2052	2053	2054
Repository ^a	793	764	739	718	700	710	720	730	740
Railroad ^b	231	234	237	239	242	246	249	253	256
RCC/NTOC ^{cd}	15	15	15	15	15	15	16	16	16
Total ^e	1,039	1,013	991	972	957	971	985	999	1,012
Activity / Year	2055	2056	2057	2058	2059	2060	2061	2062	2063
Repository ^a	750	761	771	782	793	804	816	827	839
Railroad ^b	260	263	267	271	275	278	282	286	290
RCC/NTOC ^{cd}	16	17	17	17	17	18	18	18	18
Total ^e	1,026	1,041	1,055	1,070	1,085	1,100	1,116	1,131	1,147
Activity / Year	2064	2065	2066	2067	2068	2069	2070	2071	2072
Repository ^a	850	862	874	887	899	911	924	937	950
Railroad ^b	294	298	303	307	311	315	319	323	328
RCC/NTOC ^{cd}	19	19	19	19	19	19	19	19	19
Total ^e	1,163	1,179	1,196	1,213	1,229	1,245	1,262	1,279	1,297
Activity / Year	2073	2074	2075	--	--	--	--	--	--
Repository ^a	964	977	991	--	--	--	--	--	--
Railroad ^b	333	338	343	--	--	--	--	--	--
RCC/NTOC ^{cd}	19	19	19	--	--	--	--	--	--
Total ^e	1,316	1,334	1,353	--	--	--	--	--	--

Sources: ^a Bland 2007a

^b Bland 2007b

^c Bland 2007c

^d Population changes in Bland 2007b and Bland 2007c were only projected until 2067. They are extended in this report to 2075 by using a same constant rate of change, approximately 1.40 percent (Bland 2007c, p. 2).

^e Totals may not be exact due to rounding.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 10. Projected Changes to Clark County Population Caused by Construction and Operations of the YMP Repository and Associated Railroad

Activity / Year	2010	2011	2012	2013	2014	2015	2016	2017	2018
Repository ^a	--	--	42	151	306	441	551	634	733
Railroad ^b	395	730	1,044	1,142	1,123	1,005	895	793	702
RCC/NTOC ^{cd}	0	0	1	4	5	9	12	14	17
Total ^e	395	730	1,087	1,297	1,434	1,455	1,458	1,441	1,452
Activity / Year	2019	2020	2021	2022	2023	2024	2025	2026	2027
Repository ^a	840	926	1,007	1,051	1,092	1,126	1,152	1,172	1,189
Railroad ^b	623	554	496	447	406	371	341	315	291
RCC/NTOC ^{cd}	19	21	22	24	25	26	27	28	29
Total ^e	1,482	1,501	1,525	1,522	1,523	1,523	1,520	1,515	1,509
Activity / Year	2028	2029	2030	2031	2032	2033	2034	2035	2036
Repository ^a	1,203	1,215	1,226	1,235	1,243	1,251	1,259	1,258	1,232
Railroad ^b	271	252	236	221	209	199	191	186	182
RCC/NTOC ^{cd}	30	30	31	31	31	32	32	33	33
Total ^e	1,504	1,497	1,493	1,487	1,483	1,482	1,482	1,477	1,447
Activity / Year	2037	2038	2039	2040	2041	2042	2043	2044	2045
Repository ^a	1,210	1,192	1,172	1,139	1,071	885	698	534	393
Railroad ^b	179	179	181	184	187	192	198	205	212
RCC/NTOC ^{cd}	32	33	33	33	33	34	34	34	35
Total ^e	1,421	1,404	1,386	1,356	1,291	1,111	930	773	640
Activity / Year	2046	2047	2048	2049	2050	2051	2052	2053	2054
Repository ^a	273	172	88	20	-36	-37	-37	-37	-38
Railroad ^b	221	229	238	246	253	256	258	261	264
RCC/NTOC ^{cd}	35	35	35	36	36	37	37	37	38
Total ^e	529	436	361	302	253	256	258	261	264
Activity / Year	2055	2056	2057	2058	2059	2060	2061	2062	2063
Repository ^a	-38	-39	-39	-39	-40	-40	-41	-41	-42
Railroad ^b	267	270	273	276	279	282	285	288	291
RCC/NTOC ^{cd}	38	39	39	39	40	40	41	41	42
Total ^e	267	270	273	276	279	282	285	288	291
Activity / Year	2064	2065	2066	2067	2068	2069	2070	2071	2072
Repository ^a	-42	-42	-43	-43	-44	-44	-45	-45	-46
Railroad ^b	294	297	300	304	307	311	314	317	320
RCC/NTOC ^{cd}	42	42	43	43	43	43	43	43	43
Total ^e	294	297	300	304	306	310	312	315	317
Activity / Year	2073	2074	2075	--	--	--	--	--	--
Repository ^a	-46	-47	-47	--	--	--	--	--	--
Railroad ^b	323	326	330	--	--	--	--	--	--
RCC/NTOC ^{cd}	43	43	43	--	--	--	--	--	--
Total ^e	320	322	326	--	--	--	--	--	--

Sources: ^a Bland 2007a

^b Bland 2007b

^c Bland 2007c

^d Population changes in Bland 2007b and Bland 2007c were only projected until 2067. They are extended in this report to 2075 by using a same constant rate of change, approximately 1.08 percent (Bland 2007c, p. 2).

^e Totals may not be exact due to rounding.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 11. Population, Including YMP Induced Population Changes, by RadGrid Cells for Key Dates ^a

	2010	2017	2020	2030	2040	2042	2050	2060	2067	2070	2075
Amargosa Valley Area, Nye County											
Grid Cell 309 (Lathrop Wells)	16	19	20	24	27	28	31	36	39	41	44
Grid Cell 408 (Amargosa Valley)	440	542	577	671	771	792	881	1,012	1,115	1,163	1,246
Grid Cell 409 (Amargosa Valley)	397	489	521	606	696	715	796	914	1,007	1,050	1,125
Grid Cell 508 (Amargosa Valley)	97	120	128	149	171	175	195	224	247	257	276
Grid Cell 509 (Amargosa Valley)	669	825	878	1,022	1,174	1,205	1,341	1,541	1,698	1,770	1,897
Grid Cell 510 (Crystal)	29	36	38	45	51	53	59	67	74	77	83
Grid Cell 609 (Stateline)	159	197	209	244	280	287	320	367	405	422	452
Grid Cell 610 (Crystal)	170	209	223	259	298	306	340	391	431	449	481
Grid Cell 710 (Ash Meadows)	27	34	36	42	48	49	55	63	69	72	77
Total Amargosa Valley in the RadGrid	2,004	2,471	2,631	3,061	3,515	3,609	4,018	4,615	5,085	5,301	5,681
Beatty Area, Nye County											
Grid Cell 304 (Hot Springs)	49	60	64	75	86	88	98	112	124	129	138
Grid Cell 403 (Hot Springs)	27	34	36	42	48	49	55	63	70	73	78
Grid Cell 404(Beatty)	980	1,208	1,286	1,496	1,719	1,765	1,964	2,256	2,486	2,592	2,778
Grid Cell 405 (Beatty)	592	730	777	904	1,039	1,067	1,187	1,364	1,503	1,566	1,679
Grid Cell 505 (Rhyolite)	12	15	16	19	21	22	24	28	31	32	35
Grid Cell 903 (Scotty's Junction)	34	41	44	51	59	60	67	77	85	89	95
Total Beatty in the RadGrid	1,694	2,089	2,224	2,587	2,971	3,051	3,397	3,901	4,299	4,481	4,803
Pahrump Area, Nye County											
Grid Cell 711 (Johnnie)	36	44	47	55	63	64	72	82	91	95	101
Grid Cell 810 (Pahrump)	68	84	90	104	120	123	137	157	173	181	194
Grid Cell 811 (Pahrump)	3	4	4	5	6	6	7	7	8	9	9
Grid Cell 910 (Pahrump)	8,448	10,416	11,091	12,902	14,818	15,217	16,938	19,455	21,437	22,346	23,949
Grid Cell 911 (Pahrump)	7	8	9	10	11	12	13	15	16	17	18
Grid Cell 1010 (Pahrump)	17,861	22,021	23,449	27,278	31,329	32,171	35,810	41,132	45,322	47,245	50,634
Total Pahrump in the RadGrid	26,422	32,577	34,690	40,354	46,346	47,592	52,976	60,850	67,048	69,892	74,906
Total Nye County in the RadGrid	30,120	37,137	39,545	46,002	52,833	54,253	60,390	69,366	76,431	79,674	85,390
Indian Springs Area, Clark County											
Grid Cell 912 (Indian Springs & Cactus Springs)	1,823	2,245	2,379	2,712	3,020	3,085	3,361	3,742	4,034	4,166	4,396
Grid Cell 1011(Cold Creek)	233	287	305	347	386	395	430	479	516	533	563
Total Clark County in the RadGrid	2,057	2,533	2,684	3,059	3,406	3,480	3,791	4,221	4,550	4,699	4,959
Total Nevada in the RadGrid	32,177	39,670	42,229	49,061	56,239	57,733	64,181	73,587	80,982	84,373	90,348

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 11. Population, Including YMP Induced Population Changes, by RadGrid Cells for Key Dates (continued)

	2010	2017	2020	2030	2040	2042	2050	2060	2067	2070	2075
Death Valley Area, Inyo County, CA											
Grid Cell 707 (Furnace Creek)	362	363	363	360	353	352	349	347	347	347	347
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	61	61	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	15	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	472	472	472	468	459	458	454	451	451	451	451
Total Population in the RadGrid	32,649	40,141	42,701	49,529	56,698	58,191	64,635	74,038	81,433	84,825	90,800

^a Totals may not be exact due to rounding.

6.4 COUNTY POPULATION DISTRIBUTIONS BY AGE GROUPS IN 2042

This section identifies distributions for three age groups in 2042. The analysis then applies those distributions to the 2042 RadGrid cell populations in accordance with the guidance of NRC's Regulatory Guide 4.2, *Preparation of Environmental Reports for Nuclear Power Stations* (1976). The age groups are:

- Ages 0 through 11
- Ages 12 through 18
- Ages 19 and over

Regulatory Guide 4.2 (1976), Section 2.1.2.2 and Appendix D, provides guidance on the use of United States population data in the determination of age distribution percentages. Specifically, Appendix D states that "The distribution by age of the U. S. population may be used provided there is no knowledge that the area within a radius of 50 miles of the site has a significantly different distribution." Appendix D further states that "The test of significance is to be made by a determination of whether the age distribution in the county in which the proposed station is to be located varied more than 10 percent from the U. S. population in the 1970 decennial census."

Regulatory Guide 4.2, Rev. 2, was issued in 1976. Therefore, in examining whether the United States' age distribution can be used for the RadGrid area, the case for significance in this analysis examines the Census 2000 age group distributions for the United States against those of Clark, Nye, and Inyo counties. These distributions are provided in Table 12.

Table 12. Census 2000 Population Distributions by Age Groups for the United States, and Clark, Nye, and Inyo Counties

Age Group	United States^a		Clark County^b		Nye County^c		Inyo County^d	
	Population	Percent	Population	Percent	Population	Percent	Population	Percent
Ages 0-11	48,114,452	17.10%	246,618	17.93%	5,083	15.65%	2,687	14.97%
Ages 12-18	28,230,958	10.03%	121,796	8.85%	2,976	9.16%	1,900	10.59%
Ages 19+	205,076,496	72.87%	1,007,351	73.22%	24,426	75.19%	13,358	74.44%
Total	281,421,906		1,375,765		32,485		17,945	

Sources:^a Bureau of the Census 2004a

^b Bureau of the Census 2004b

^c Bureau of the Census 2004c

^d Bureau of the Census 2004d

Table 13 tests for significance by subtracting the percentage for each age group for each county from the percentage for the United States for the respective age group. As can be seen, the percent difference from the United States' distribution percentages is well less than 10 percent for all age groups in all three counties, thus the differences are not significant. The analysis uses, therefore, the United States' distribution.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 13. United States Age Distribution Percentages Minus Clark, Nye, and Inyo County Age Distribution Percentages for Decennial Census of 2000

	Difference from United States' Percentage		
	Clark County	Nye County	Inyo County
Ages 0-11	-0.83%	1.45%	2.12%
Ages 12-18	1.18%	0.87%	-0.56%
Ages 19+	-0.35%	-2.32%	-1.57%

Source: Table 12

The age group distributions used in this analysis are from the United States Bureau of the Census projection for the year 2042 (U.S. Census Bureau 2004). These data are contained in the YMP Record Information System. The age group distributions are shown in Table 14.

Table 14. Bureau of the Census Population Projections by Age Groups for the United States in 2042 ^a

Age Group	Population	Percent
Ages 0-11	62,848,220	15.8%
Ages 12-18	35,214,077	8.9%
Ages 19+	299,456,604	75.3%
Total	397,518,901	100.0%

Source: ^a U.S. Census Bureau 2004

These age group distributions are applied to the RadGrid cell populations of 2042 in Tables 8 and 11 to obtain the RadGrid populations by age groups for baseline conditions (Table 15) and for populations including YMP induced population changes (Table 16), respectively.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 15. Baseline Age Group Distribution of Population in RadGrid Cells, 2042^{abc}

	Total	Ages 0-11	Ages 12-18	Ages 19 +
Percentage distribution for each age group		15.8%	8.9%	75.3%
Amargosa Valley Area, Nye County, NV				
Grid Cell 309 (Lathrop Wells)	28	4	2	21
Grid Cell 408 (Amargosa Valley)	782	123	70	589
Grid Cell 409 (Amargosa Valley)	706	111	63	531
Grid Cell 508 (Amargosa Valley)	173	27	15	130
Grid Cell 509 (Amargosa Valley)	1,190	188	106	896
Grid Cell 510 (Crystal)	52	8	5	39
Grid Cell 609 (Stateline)	284	45	25	214
Grid Cell 610 (Crystal)	302	48	27	227
Grid Cell 710 (Ash Meadows)	48	8	4	36
Total Amargosa Valley in the RadGrid	3,563	563	317	2,683
Beatty Area, Nye County, NV				
Grid Cell 304 (Hot Springs)	87	14	8	65
Grid Cell 403 (Hot Springs)	49	8	4	37
Grid Cell 404 (Beatty)	1,742	275	155	1,312
Grid Cell 405 (Beatty)	1,053	166	94	793
Grid Cell 505 (Rhyolite)	22	3	2	16
Grid Cell 903 (Scotty's Junction)	60	9	5	45
Total Beatty in the RadGrid	3,012	476	268	2,268
Pahrump Area, Nye County, NV				
Grid Cell 711 (Johnnie)	64	10	6	48
Grid Cell 810 (Pahrump)	121	19	11	91
Grid Cell 811 (Pahrump)	6	1	1	4
Grid Cell 910 (Pahrump)	15,022	2,373	1,337	11,311
Grid Cell 911 (Pahrump)	12	2	1	9
Grid Cell 1010 (Pahrump)	31,759	5,018	2,827	23,914
Total Pahrump in the RadGrid	46,983	7,423	4,181	35,378
Total Nye County in the RadGrid	53,558	8,462	4,767	40,329
Indian Springs Area, Clark County, NV				
Grid Cell 912 (Indian Springs & Cactus Springs)	3,084	487	274	2,322
Grid Cell 1011 (Cold Creek)	395	62	35	297
Total Clark County in the RadGrid	3,479	550	310	2,620
Total Nevada in the RadGrid	57,037	9,012	5,076	42,949
Death Valley Area, Inyo County, CA				
Grid Cell 707 (Furnace Creek)	352	56	31	265
Grid Cell 807 (Timbisha)	16	3	1	12
Grid Cell 808 (Ryan)	2	0	0	1
Grid Cell 809 (Death Valley Junction)	2	0	0	1
Grid Cell 906 (Stovepipe Wells)	61	10	5	46
Grid Cell 1004 (Scotty's Castle)	12	2	1	9
Grid Cell 1010 (Stewart Valley, CA)	14	2	1	11
Total Inyo County in the RadGrid	458	72	41	345
Total Population in the RadGrid	57,495	9,084	5,117	43,294

Sources: ^a U.S. Census Bureau 2004

^b Table 8

^c Totals may not be exact due to rounding.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table 16. Age Group Distribution of Population in RadGrid Cells, Including YMP Induced Changes,
2042^{abc}

	Total	Ages 0-11	Ages 12-18	Ages 19 +
Percentage distribution for each age group		15.8%	8.9%	75.3%
Amargosa Valley Area, Nye County, NV				
Grid Cell 309 (Lathrop Wells)	28	4	2	21
Grid Cell 408 (Amargosa Valley)	792	125	70	596
Grid Cell 409 (Amargosa Valley)	715	113	64	538
Grid Cell 508 (Amargosa Valley)	175	28	16	132
Grid Cell 509 (Amargosa Valley)	1,205	190	107	907
Grid Cell 510 (Crystal)	53	8	5	40
Grid Cell 609 (Stateline)	287	45	26	216
Grid Cell 610 (Crystal)	306	48	27	230
Grid Cell 710 (Ash Meadows)	49	8	4	37
Total Amargosa Valley in the RadGrid	3,609	570	321	2,718
Beatty Area, Nye County, NV				
Grid Cell 304 (Hot Springs)	88	14	8	66
Grid Cell 403 (Hot Springs)	49	8	4	37
Grid Cell 404(Beatty)	1,765	279	157	1,329
Grid Cell 405 (Beatty)	1,067	169	95	803
Grid Cell 505 (Rhyolite)	22	3	2	17
Grid Cell 903 (Scotty's Junction)	60	10	5	46
Total Beatty in the RadGrid	3,051	482	272	2,298
Pahrump Area, Nye County, NV				
Grid Cell 711 (Johnnie)	64	10	6	49
Grid Cell 810 (Pahrump)	123	19	11	93
Grid Cell 811 (Pahrump)	6	1	1	4
Grid Cell 910 (Pahrump)	15,217	2,404	1,354	11,458
Grid Cell 911 (Pahrump)	12	2	1	9
Grid Cell 1010 (Pahrump)	32,171	5,083	2,863	24,225
Total Pahrump in the RadGrid	47,592	7,520	4,236	35,837
Total Nye County in the RadGrid	54,253	8,572	4,829	40,853
Indian Springs Area, Clark County, NV				
Grid Cell 912 (Indian Springs & Cactus Springs)	3,085	487	275	2,323
Grid Cell 1011(Cold Creek)	395	62	35	297
Total Clark County in the RadGrid	3,480	550	310	2,620
Total Nevada in the RadGrid	57,733	9,122	5,138	43,473
Death Valley Area, Inyo County, CA				
Grid Cell 707 (Furnace Creek)	352	56	31	265
Grid Cell 807 (Timbisha)	16	3	1	12
Grid Cell 808 (Ryan)	2	0	0	1
Grid Cell 809 (Death Valley Junction)	2	0	0	1
Grid Cell 906 (Stovepipe Wells)	61	10	5	46
Grid Cell 1004 (Scotty's Castle)	12	2	1	9
Grid Cell 1010 (Stewart Valley, CA)	14	2	1	11
Total Inyo County in the RadGrid	458	72	41	345
Total Population in the RadGrid	58,191	9,194	5,179	43,818

Sources: ^a U.S. Census Bureau 2004

^b Table 11

^c Totals may not be exact due to rounding.

7. RESULTS AND CONCLUSIONS

This analysis shows the following results:

- Baseline population projections by RadGrid cells for key dates are shown in Table 8. The projections for all years are shown in Attachment 1.
- Population projections, including YMP induced population changes, by RadGrid cells for key dates are shown in Table 11. The projections for all years are shown in Attachment 2.
- Baseline projected population distributions in 2042 for required age groups by RadGrid cells are shown in Table 15.
- Projected population distributions in 2042, including YMP induced changes, for required age groups by RadGrid cells are shown in Table 16.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

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ATTACHMENT I. BASELINE POPULATION BY RADGRID CELLS, 2003 – 2075Table I-1. Baseline Population by RadGrid Cells, 2003 – 2075 ^a

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Amargosa Valley Area, Nye County									
Grid Cell 309 (Lathrop Wells)	11	11	12	13	14	14	15	16	16
Grid Cell 408 (Amargosa Valley)	310	323	349	368	386	404	422	439	455
Grid Cell 409 (Amargosa Valley)	279	291	315	332	349	365	381	396	411
Grid Cell 508 (Amargosa Valley)	69	71	77	81	85	89	93	97	101
Grid Cell 509 (Amargosa Valley)	471	491	531	560	588	616	642	668	693
Grid Cell 510 (Crystal)	21	21	23	25	26	27	28	29	30
Grid Cell 609 (Stateline)	112	117	127	134	140	147	153	159	165
Grid Cell 610 (Crystal)	120	125	135	142	149	156	163	169	176
Grid Cell 710 (Ash Meadows)	19	20	22	23	24	25	26	27	28
Total Amargosa Valley in the RadGrid	1,412	1,470	1,591	1,678	1,761	1,844	1,924	2,002	2,076
Beatty Area, Nye County									
Grid Cell 304 (Hot Springs)	34	36	39	41	43	45	47	49	51
Grid Cell 403 (Hot Springs)	19	20	22	23	24	25	26	27	28
Grid Cell 404(Beatty)	690	719	778	820	861	902	941	979	1015
Grid Cell 405 (Beatty)	417	435	470	496	521	545	568	591	613
Grid Cell 505 (Rhyolite)	9	9	10	10	11	11	12	12	13
Grid Cell 903 (Scotty's Junction)	24	25	27	28	30	31	32	34	35
Total Beatty in the RadGrid	1,193	1,243	1,345	1,419	1,489	1,559	1,626	1,692	1,755
Pahrump Area, Nye County									
Grid Cell 711 (Johnnie)	25	26	28	30	31	33	34	36	37
Grid Cell 810 (Pahrump)	48	50	54	57	60	63	66	68	71
Grid Cell 811 (Pahrump)	2	2	3	3	3	3	3	3	3
Grid Cell 910 (Pahrump)	5,951	6,199	6,706	7,074	7,426	7,773	8,109	8,438	8,752
Grid Cell 911 (Pahrump)	5	5	5	5	6	6	6	6	7
Grid Cell 1010 (Pahrump)	12,581	13,106	14,177	14,956	15,700	16,433	17,145	17,839	18,504
Total Pahrump in the RadGrid	18,611	19,388	20,973	22,125	23,225	24,311	25,364	26,391	27,374
Total Nye County in the RadGrid	21,216	22,102	23,908	25,221	26,476	27,713	28,913	30,084	31,206
Indian Springs Area, Clark County									
Grid Cell 912 (Indian Springs & Cactus Springs)	1,325	1,410	1,465	1,537	1,607	1,679	1,751	1,823	1,893
Grid Cell 1011(Cold Creek)	170	180	188	197	206	215	224	233	242
Total Clark County in the RadGrid	1,494	1,591	1,653	1,734	1,812	1,894	1,975	2,056	2,135
Total Nevada in the RadGrid	22,711	23,692	25,561	26,955	28,288	29,607	30,888	32,141	33,341
Death Valley Area, Inyo County, CA									
Grid Cell 707 (Furnace Creek)	361	361	361	361	362	362	362	362	362
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	62	62	62	62	62
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	15	15	15	15	15	15
Total Inyo County in the RadGrid	469	470	470	470	471	471	471	472	472
Total Population in the RadGrid	23,180	24,162	26,031	27,425	28,759	30,078	31,360	32,613	33,812

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table I-1. Baseline Population by RadGrid Cells, 2003 – 2075 ^a (continued)

	2012	2013	2014	2015	2016	2017	2018	2019
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	17	17	18	18	19	19	19	20
Grid Cell 408 (Amargosa Valley)	471	486	500	514	526	539	550	561
Grid Cell 409 (Amargosa Valley)	425	439	452	464	475	486	497	507
Grid Cell 508 (Amargosa Valley)	104	108	111	114	116	119	122	124
Grid Cell 509 (Amargosa Valley)	717	740	761	782	801	820	838	855
Grid Cell 510 (Crystal)	31	32	33	34	35	36	37	37
Grid Cell 609 (Stateline)	171	176	181	186	191	195	200	204
Grid Cell 610 (Crystal)	182	188	193	198	203	208	213	217
Grid Cell 710 (Ash Meadows)	29	30	31	32	33	33	34	35
Total Amargosa Valley in the RadGrid	2,148	2,216	2,280	2,342	2,400	2,456	2,509	2,560
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	52	54	56	57	58	60	61	62
Grid Cell 403 (Hot Springs)	29	30	31	32	33	34	34	35
Grid Cell 404(Beatty)	1,050	1,083	1,115	1,145	1,174	1,201	1,227	1,252
Grid Cell 405 (Beatty)	635	655	674	692	709	726	742	756
Grid Cell 505 (Rhyolite)	13	13	14	14	15	15	15	16
Grid Cell 903 (Scotty's Junction)	36	37	38	39	40	41	42	43
Total Beatty in the RadGrid	1,815	1,873	1,928	1,980	2,029	2,077	2,121	2,164
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	38	40	41	42	43	44	45	46
Grid Cell 810 (Pahrump)	73	75	78	80	82	84	85	87
Grid Cell 811 (Pahrump)	3	4	4	4	4	4	4	4
Grid Cell 910 (Pahrump)	9,053	9,341	9,613	9,872	10,119	10,355	10,579	10,791
Grid Cell 911 (Pahrump)	7	7	7	8	8	8	8	8
Grid Cell 1010 (Pahrump)	19,141	19,749	20,324	20,871	21,393	21,894	22,367	22,815
Total Pahrump in the RadGrid	28,316	29,215	30,067	30,876	31,648	32,388	33,089	33,752
Total Nye County in the RadGrid	32,279	33,304	34,275	35,197	36,077	36,921	37,720	38,476
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	1,960	2,024	2,084	2,141	2,194	2,244	2,291	2,336
Grid Cell 1011(Cold Creek)	251	259	267	274	281	287	293	299
Total Clark County in the RadGrid	2,211	2,283	2,350	2,415	2,475	2,531	2,585	2,635
Total Nevada in the RadGrid	34,490	35,587	36,625	37,611	38,552	39,453	40,304	41,111
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	363	363	363	363	363	363	363	363
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	62	62	62	62
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	15	15	15	15	15
Total Inyo County in the RadGrid	472							
Total Population in the RadGrid	34,961	36,058	37,097	38,083	39,024	39,925	40,776	41,583

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table I-1. Baseline Population by RadGrid Cells, 2003 – 2075 ^a (continued)

	2020	2021	2022	2023	2024	2025	2026	2027
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	20	21	21	21	22	22	22	22
Grid Cell 408 (Amargosa Valley)	572	582	592	601	609	618	626	635
Grid Cell 409 (Amargosa Valley)	516	525	534	542	550	558	565	573
Grid Cell 508 (Amargosa Valley)	127	129	131	133	135	137	139	140
Grid Cell 509 (Amargosa Valley)	871	886	900	914	928	941	953	966
Grid Cell 510 (Crystal)	38	39	39	40	41	41	42	42
Grid Cell 609 (Stateline)	208	211	215	218	221	224	227	230
Grid Cell 610 (Crystal)	221	225	228	232	235	239	242	245
Grid Cell 710 (Ash Meadows)	35	36	37	37	38	38	39	39
Total Amargosa Valley in the RadGrid	2,608	2,653	2,697	2,738	2,779	2,817	2,855	2,895
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	64	65	66	67	68	69	70	71
Grid Cell 403 (Hot Springs)	36	36	37	38	38	39	39	40
Grid Cell 404 (Beatty)	1,275	1,297	1,318	1,339	1,359	1,378	1,396	1,415
Grid Cell 405 (Beatty)	771	784	797	809	821	833	844	855
Grid Cell 505 (Rhyolite)	16	16	16	17	17	17	17	18
Grid Cell 903 (Scotty's Junction)	44	44	45	46	47	47	48	48
Total Beatty in the RadGrid	2,204	2,243	2,280	2,315	2,349	2,382	2,413	2,447
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	47	47	48	49	50	50	51	52
Grid Cell 810 (Pahrump)	89	90	92	93	95	96	97	99
Grid Cell 811 (Pahrump)	4	4	4	4	5	5	5	5
Grid Cell 910 (Pahrump)	10,993	11,184	11,368	11,545	11,714	11,877	12,035	12,203
Grid Cell 911 (Pahrump)	8	9	9	9	9	9	9	9
Grid Cell 1010 (Pahrump)	23,241	23,646	24,035	24,408	24,765	25,111	25,444	25,799
Total Pahrump in the RadGrid	34,382	34,981	35,556	36,108	36,637	37,148	37,641	38,166
Total Nye County in the RadGrid	39,193	39,877	40,532	41,162	41,764	42,347	42,909	43,507
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	2,378	2,418	2,456	2,491	2,526	2,558	2,590	2,621
Grid Cell 1011 (Cold Creek)	304	309	314	319	323	327	332	335
Total Clark County in the RadGrid	2,682	2,727	2,770	2,810	2,849	2,886	2,922	2,956
Total Nevada in the RadGrid	41,876	42,604	43,302	43,972	44,613	45,233	45,830	46,464
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	363	362	362	362	361	361	361	361
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	62	62	62	62
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	15	15	15	15	15
Total Inyo County in the RadGrid	472	472	471	471	470	470	470	469
Total Population in the RadGrid	42,348	43,076	43,773	44,443	45,083	45,703	46,300	46,933

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table I-1. Baseline Population by RadGrid Cells, 2003 – 2075 ^a (continued)

	2028	2029	2030	2031	2032	2033	2034	2035
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	23	23	23	24	24	24	25	25
Grid Cell 408 (Amargosa Valley)	644	653	662	671	680	690	700	709
Grid Cell 409 (Amargosa Valley)	581	589	597	606	614	623	631	640
Grid Cell 508 (Amargosa Valley)	142	144	146	148	151	153	155	157
Grid Cell 509 (Amargosa Valley)	980	994	1,007	1,022	1,036	1,050	1,065	1,080
Grid Cell 510 (Crystal)	43	43	44	45	45	46	47	47
Grid Cell 609 (Stateline)	234	237	240	244	247	250	254	257
Grid Cell 610 (Crystal)	249	252	256	259	263	266	270	274
Grid Cell 710 (Ash Meadows)	40	40	41	42	42	43	43	44
Total Amargosa Valley in the RadGrid	2,935	2,976	3,017	3,059	3,102	3,145	3,189	3,234
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	72	73	74	75	76	77	78	79
Grid Cell 403 (Hot Springs)	40	41	41	42	43	43	44	44
Grid Cell 404 (Beatty)	1,435	1,455	1,475	1,496	1,517	1,538	1,559	1,581
Grid Cell 405 (Beatty)	867	879	892	904	917	929	942	956
Grid Cell 505 (Rhyolite)	18	18	18	19	19	19	19	20
Grid Cell 903 (Scotty's Junction)	49	50	51	51	52	53	53	54
Total Beatty in the RadGrid	2,481	2,516	2,551	2,586	2,622	2,659	2,696	2,734
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	52	53	54	55	55	56	57	58
Grid Cell 810 (Pahrump)	100	101	103	104	106	107	109	110
Grid Cell 811 (Pahrump)	5	5	5	5	5	5	5	5
Grid Cell 910 (Pahrump)	12,373	12,545	12,720	12,898	13,078	13,260	13,445	13,633
Grid Cell 911 (Pahrump)	10	10	10	10	10	10	10	10
Grid Cell 1010 (Pahrump)	26,159	26,524	26,894	27,269	27,650	28,035	28,427	28,823
Total Pahrump in the RadGrid	38,698	39,238	39,786	40,341	40,904	41,474	42,053	42,640
Total Nye County in the RadGrid	44,114	44,730	45,354	45,987	46,628	47,279	47,939	48,607
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	2,651	2,681	2,711	2,740	2,770	2,800	2,830	2,861
Grid Cell 1011 (Cold Creek)	339	343	347	351	355	358	362	366
Total Clark County in the RadGrid	2,990	3,024	3,058	3,091	3,125	3,158	3,192	3,227
Total Nevada in the RadGrid	47,105	47,754	48,412	49,078	49,753	50,437	51,131	51,834
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	360	360	360	359	358	358	357	356
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	62	62	61	61
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	14	14	14	14	14
Total Inyo County in the RadGrid	469	469	468	467	466	465	464	464
Total Population in the RadGrid	47,574	48,223	48,880	49,545	50,219	50,903	51,596	52,298

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table I-1. Baseline Population by RadGrid Cells, 2003 – 2075 ^a (continued)

	2036	2037	2038	2039	2040	2041	2042	2043
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	25	26	26	27	27	27	28	28
Grid Cell 408 (Amargosa Valley)	719	729	739	750	760	771	782	793
Grid Cell 409 (Amargosa Valley)	649	658	667	677	686	696	706	715
Grid Cell 508 (Amargosa Valley)	159	161	164	166	168	171	173	175
Grid Cell 509 (Amargosa Valley)	1,095	1,110	1,126	1,141	1,157	1,173	1,190	1,206
Grid Cell 510 (Crystal)	48	49	49	50	51	51	52	53
Grid Cell 609 (Stateline)	261	265	268	272	276	280	284	288
Grid Cell 610 (Crystal)	278	282	285	289	293	298	302	306
Grid Cell 710 (Ash Meadows)	45	45	46	46	47	48	48	49
Total Amargosa Valley in the RadGrid	3,279	3,325	3,371	3,418	3,466	3,514	3,563	3,613
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	80	81	82	83	84	86	87	88
Grid Cell 403 (Hot Springs)	45	46	46	47	48	48	49	50
Grid Cell 404 (Beatty)	1,603	1,626	1,648	1,671	1,695	1,718	1,742	1,767
Grid Cell 405 (Beatty)	969	982	996	1,010	1,024	1,038	1,053	1,068
Grid Cell 505 (Rhyolite)	20	20	21	21	21	21	22	22
Grid Cell 903 (Scotty's Junction)	55	56	56	57	58	59	60	61
Total Beatty in the RadGrid	2,772	2,811	2,850	2,890	2,930	2,971	3,012	3,054
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	59	59	60	61	62	63	64	64
Grid Cell 810 (Pahrump)	112	113	115	116	118	120	121	123
Grid Cell 811 (Pahrump)	5	5	5	6	6	6	6	6
Grid Cell 910 (Pahrump)	13,823	14,016	14,212	14,410	14,611	14,815	15,022	15,231
Grid Cell 911 (Pahrump)	11	11	11	11	11	11	12	12
Grid Cell 1010 (Pahrump)	29,225	29,633	30,046	30,466	30,891	31,322	31,759	32,202
Total Pahrump in the RadGrid	43,235	43,838	44,450	45,070	45,699	46,336	46,983	47,638
Total Nye County in the RadGrid	49,286	49,973	50,670	51,377	52,094	52,821	53,558	54,305
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	2,892	2,923	2,954	2,986	3,019	3,051	3,084	3,117
Grid Cell 1011 (Cold Creek)	370	374	378	382	386	391	395	399
Total Clark County in the RadGrid	3,262	3,297	3,333	3,369	3,405	3,442	3,479	3,516
Total Nevada in the RadGrid	52,547	53,270	54,003	54,746	55,499	56,263	57,037	57,822
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	355	355	354	353	353	352	352	352
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	61	61	61	61	61	61	61	61
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	463	462	461	460	459	458	458	457
Total Population in the RadGrid	53,010	53,732	54,464	55,206	55,958	56,721	57,495	58,279

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table I-1. Baseline Population by RadGrid Cells, 2003 – 2075 ^a (continued)

	2044	2045	2046	2047	2048	2049	2050	2051
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	28	29	29	30	30	30	31	31
Grid Cell 408 (Amargosa Valley)	804	815	826	838	849	861	873	885
Grid Cell 409 (Amargosa Valley)	725	735	746	756	767	777	788	799
Grid Cell 508 (Amargosa Valley)	178	180	183	185	188	191	193	196
Grid Cell 509 (Amargosa Valley)	1,223	1,240	1,258	1,275	1,293	1,311	1,329	1,348
Grid Cell 510 (Crystal)	53	54	55	56	57	57	58	59
Grid Cell 609 (Stateline)	292	296	300	304	308	312	317	321
Grid Cell 610 (Crystal)	310	315	319	323	328	332	337	342
Grid Cell 710 (Ash Meadows)	50	50	51	52	53	53	54	55
Total Amargosa Valley in the RadGrid	3,663	3,714	3,766	3,819	3,872	3,926	3,981	4,036
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	89	91	92	93	94	96	97	98
Grid Cell 403 (Hot Springs)	50	51	52	52	53	54	55	55
Grid Cell 404(Beatty)	1,791	1,816	1,842	1,867	1,893	1,920	1,946	1,974
Grid Cell 405 (Beatty)	1,083	1,098	1,113	1,128	1,144	1,160	1,176	1,193
Grid Cell 505 (Rhyolite)	22	23	23	23	24	24	24	25
Grid Cell 903 (Scotty's Junction)	61	62	63	64	65	66	67	68
Total Beatty in the RadGrid	3,097	3,140	3,184	3,228	3,273	3,319	3,365	3,412
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	65	66	67	68	69	70	71	72
Grid Cell 810 (Pahrump)	125	127	128	130	132	134	136	138
Grid Cell 811 (Pahrump)	6	6	6	6	6	6	6	7
Grid Cell 910 (Pahrump)	15,444	15,659	15,878	16,099	16,324	16,551	16,782	17,017
Grid Cell 911 (Pahrump)	12	12	12	12	13	13	13	13
Grid Cell 1010 (Pahrump)	32,651	33,107	33,569	34,037	34,512	34,993	35,482	35,977
Total Pahrump in the RadGrid	48,303	48,977	49,660	50,353	51,055	51,768	52,490	53,222
Total Nye County in the RadGrid	55,063	55,831	56,610	57,400	58,201	59,013	59,836	60,671
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	3,151	3,185	3,219	3,254	3,289	3,325	3,361	3,397
Grid Cell 1011(Cold Creek)	403	408	412	417	421	426	430	435
Total Clark County in the RadGrid	3,554	3,593	3,632	3,671	3,710	3,750	3,791	3,832
Total Nevada in the RadGrid	58,617	59,424	60,242	61,071	61,911	62,763	63,627	64,503
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	351	351	350	350	350	349	349	349
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	60	60	60	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	457	456	456	455	455	454	454	454
Total Population in the RadGrid	59,074	59,880	60,698	61,526	62,366	63,218	64,081	64,957

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table I-1. Baseline Population by RadGrid Cells, 2003 – 2075 ^a (continued)

	2052	2053	2054	2055	2056	2057	2058	2059
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	32	32	33	33	34	34	35	35
Grid Cell 408 (Amargosa Valley)	898	910	923	936	949	962	976	989
Grid Cell 409 (Amargosa Valley)	810	822	833	845	857	869	881	893
Grid Cell 508 (Amargosa Valley)	199	201	204	207	210	213	216	219
Grid Cell 509 (Amargosa Valley)	1,367	1,386	1,405	1,425	1,444	1,465	1,485	1,506
Grid Cell 510 (Crystal)	60	61	61	62	63	64	65	66
Grid Cell 609 (Stateline)	326	330	335	340	344	349	354	359
Grid Cell 610 (Crystal)	347	351	356	361	366	371	377	382
Grid Cell 710 (Ash Meadows)	56	56	57	58	59	60	60	61
Total Amargosa Valley in the RadGrid	4,093	4,150	4,208	4,266	4,326	4,386	4,448	4,510
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	100	101	103	104	105	107	108	110
Grid Cell 403 (Hot Springs)	56	57	58	58	59	60	61	62
Grid Cell 404(Beatty)	2,001	2,029	2,057	2,086	2,115	2,145	2,175	2,205
Grid Cell 405 (Beatty)	1,209	1,226	1,243	1,261	1,278	1,296	1,314	1,333
Grid Cell 505 (Rhyolite)	25	25	26	26	26	27	27	27
Grid Cell 903 (Scotty's Junction)	69	70	71	71	72	73	75	76
Total Beatty in the RadGrid	3,460	3,508	3,557	3,607	3,657	3,708	3,760	3,812
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	73	74	75	76	77	78	79	80
Grid Cell 810 (Pahrump)	139	141	143	145	147	149	152	154
Grid Cell 811 (Pahrump)	7	7	7	7	7	7	7	7
Grid Cell 910 (Pahrump)	17,254	17,495	17,739	17,986	18,237	18,492	18,750	19,011
Grid Cell 911 (Pahrump)	13	13	14	14	14	14	14	15
Grid Cell 1010 (Pahrump)	36,479	36,988	37,504	38,027	38,557	39,095	39,641	40,194
Total Pahrump in the RadGrid	53,965	54,718	55,481	56,255	57,040	57,836	58,643	59,461
Total Nye County in the RadGrid	61,518	62,376	63,246	64,129	65,023	65,931	66,851	67,783
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	3,434	3,471	3,508	3,546	3,584	3,623	3,662	3,702
Grid Cell 1011(Cold Creek)	439	444	449	454	459	464	469	474
Total Clark County in the RadGrid	3,873	3,915	3,957	4,000	4,043	4,087	4,131	4,176
Total Nevada in the RadGrid	65,391	66,291	67,204	68,129	69,067	70,018	70,982	71,959
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	348	348	348	348	348	347	347	347
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	60	60	60	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	453	453	453	453	452	452	452	452
Total Population in the RadGrid	65,844	66,744	67,656	68,581	69,519	70,470	71,433	72,410

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table I-1. Baseline Population by RadGrid Cells, 2003 – 2075 ^a (continued)

	2060	2061	2062	2063	2064	2065	2066	2067
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	36	36	37	37	38	38	39	39
Grid Cell 408 (Amargosa Valley)	1,003	1,017	1,031	1,046	1,060	1,075	1,090	1,105
Grid Cell 409 (Amargosa Valley)	905	918	931	944	957	970	984	998
Grid Cell 508 (Amargosa Valley)	222	225	228	231	235	238	241	245
Grid Cell 509 (Amargosa Valley)	1,527	1,548	1,570	1,591	1,614	1,636	1,659	1,682
Grid Cell 510 (Crystal)	67	68	69	70	71	72	73	74
Grid Cell 609 (Stateline)	364	369	374	379	385	390	395	401
Grid Cell 610 (Crystal)	387	393	398	404	409	415	421	427
Grid Cell 710 (Ash Meadows)	62	63	64	65	66	67	68	68
Total Amargosa Valley in the RadGrid	4,573	4,636	4,701	4,767	4,833	4,901	4,969	5,038
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	111	113	115	116	118	119	121	123
Grid Cell 403 (Hot Springs)	63	64	64	65	66	67	68	69
Grid Cell 404(Beatty)	2,236	2,267	2,299	2,331	2,363	2,396	2,430	2,463
Grid Cell 405 (Beatty)	1,351	1,370	1,389	1,409	1,428	1,448	1,468	1,489
Grid Cell 505 (Rhyolite)	28	28	29	29	29	30	30	31
Grid Cell 903 (Scotty's Junction)	77	78	79	80	81	82	83	84
Total Beatty in the RadGrid	3,866	3,919	3,974	4,030	4,086	4,143	4,201	4,259
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	82	83	84	85	86	87	89	90
Grid Cell 810 (Pahrump)	156	158	160	162	165	167	169	172
Grid Cell 811 (Pahrump)	7	8	8	8	8	8	8	8
Grid Cell 910 (Pahrump)	19,277	19,546	19,818	20,095	20,375	20,659	20,948	21,240
Grid Cell 911 (Pahrump)	15	15	15	15	16	16	16	16
Grid Cell 1010 (Pahrump)	40,755	41,323	41,900	42,485	43,077	43,678	44,288	44,906
Total Pahrump in the RadGrid	60,291	61,132	61,985	62,850	63,727	64,616	65,518	66,432
Total Nye County in the RadGrid	68,729	69,688	70,660	71,646	72,646	73,659	74,687	75,729
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	3,742	3,782	3,823	3,864	3,906	3,948	3,991	4,034
Grid Cell 1011(Cold Creek)	479	484	489	495	500	505	511	516
Total Clark County in the RadGrid	4,221	4,266	4,312	4,359	4,406	4,454	4,502	4,550
Total Nevada in the RadGrid	72,950	73,954	74,973	76,005	77,052	78,113	79,189	80,279
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	347	347	347	347	347	347	347	347
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	60	60	60	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	451							
Total Population in the RadGrid	73,401	74,406	75,424	76,456	77,503	78,564	79,640	80,731

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Table I-1. Baseline by RadGrid Cells, 2003 – 2075 ^a (continued)

	2068	2069	2070	2071	2072	2073	2074	2075
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	40	40	41	41	42	43	43	44
Grid Cell 408 (Amargosa Valley)	1,121	1,136	1,152	1,168	1,184	1,201	1,218	1,235
Grid Cell 409 (Amargosa Valley)	1,011	1,026	1,040	1,054	1,069	1,084	1,099	1,115
Grid Cell 508 (Amargosa Valley)	248	251	255	258	262	266	269	273
Grid Cell 509 (Amargosa Valley)	1,706	1,729	1,754	1,778	1,803	1,828	1,854	1,879
Grid Cell 510 (Crystal)	75	76	77	78	79	80	81	82
Grid Cell 609 (Stateline)	407	412	418	424	430	436	442	448
Grid Cell 610 (Crystal)	433	439	445	451	457	464	470	477
Grid Cell 710 (Ash Meadows)	69	70	71	72	73	74	75	76
Total Amargosa Valley in the RadGrid	5,109	5,180	5,252	5,325	5,400	5,475	5,551	5,629
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	125	126	128	130	132	133	135	137
Grid Cell 403 (Hot Springs)	70	71	72	73	74	75	76	77
Grid Cell 404(Beatty)	2,498	2,533	2,568	2,604	2,640	2,677	2,714	2,752
Grid Cell 405 (Beatty)	1,510	1,531	1,552	1,574	1,596	1,618	1,640	1,663
Grid Cell 505 (Rhyolite)	31	32	32	32	33	33	34	34
Grid Cell 903 (Scotty's Junction)	86	87	88	89	90	92	93	94
Total Beatty in the RadGrid	4,319	4,379	4,440	4,502	4,565	4,628	4,693	4,758
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	91	92	94	95	96	98	99	100
Grid Cell 810 (Pahrump)	174	176	179	181	184	187	189	192
Grid Cell 811 (Pahrump)	8	8	9	9	9	9	9	9
Grid Cell 910 (Pahrump)	21,536	21,837	22,141	22,450	22,764	23,081	23,403	23,730
Grid Cell 911 (Pahrump)	17	17	17	17	18	18	18	18
Grid Cell 1010 (Pahrump)	45,532	46,168	46,812	47,465	48,127	48,799	49,479	50,170
Total Pahrump in the RadGrid	67,359	68,298	69,251	70,217	71,197	72,191	73,198	74,219
Total Nye County in the RadGrid	76,786	77,857	78,943	80,045	81,162	82,294	83,442	84,606
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	4,077	4,121	4,166	4,211	4,256	4,302	4,349	4,396
Grid Cell 1011(Cold Creek)	522	528	533	539	545	551	557	563
Total Clark County in the RadGrid	4,599	4,649	4,699	4,750	4,801	4,853	4,905	4,958
Total Nevada in the RadGrid	81,385	82,506	83,642	84,795	85,963	87,147	88,348	89,565
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	347	347	347	347	347	347	347	347
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	60	60	60	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	451							
Total Population in the RadGrid	81,836	82,957	84,094	85,246	86,414	87,598	88,799	90,016

^a Totals may not be exact due to rounding.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

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ATTACHMENT II. POPULATION, INCLUDING YMP INDUCED POPULATION CHANGES, BY RADGRID CELLS, 2003 – 2075

Table II-1: Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 ^a

	2003	2004	2005	2006	2007	2008	2009	2010	2011
Amargosa Valley Area, Nye County									
Grid Cell 309 (Lathrop Wells)	11	11	12	13	14	14	15	16	16
Grid Cell 408 (Amargosa Valley)	310	323	349	368	386	404	422	440	456
Grid Cell 409 (Amargosa Valley)	279	291	315	332	349	365	381	397	412
Grid Cell 508 (Amargosa Valley)	69	71	77	81	85	89	93	97	101
Grid Cell 509 (Amargosa Valley)	471	491	531	560	588	616	642	669	694
Grid Cell 510 (Crystal)	21	21	23	25	26	27	28	29	30
Grid Cell 609 (Stateline)	112	117	127	134	140	147	153	159	165
Grid Cell 610 (Crystal)	120	125	135	142	149	156	163	170	176
Grid Cell 710 (Ash Meadows)	19	20	22	23	24	25	26	27	28
Total Amargosa Valley in the RadGrid	1,412	1,470	1,591	1,678	1,761	1,844	1,924	2,004	2,079
Beatty Area, Nye County									
Grid Cell 304 (Hot Springs)	34	36	39	41	43	45	47	49	51
Grid Cell 403 (Hot Springs)	19	20	22	23	24	25	26	27	28
Grid Cell 404 (Beatty)	690	719	778	820	861	902	941	980	1,016
Grid Cell 405 (Beatty)	417	435	470	496	521	545	568	592	614
Grid Cell 505 (Rhyolite)	9	9	10	10	11	11	12	12	13
Grid Cell 903 (Scotty's Junction)	24	25	27	28	30	31	32	34	35
Total Beatty in the RadGrid	1,193	1,243	1,345	1,419	1,489	1,559	1,626	1,694	1,757
Pahrump Area, Nye County									
Grid Cell 711 (Johnnie)	25	26	28	30	31	33	34	36	37
Grid Cell 810 (Pahrump)	48	50	54	57	60	63	66	68	71
Grid Cell 811 (Pahrump)	2	2	3	3	3	3	3	3	3
Grid Cell 910 (Pahrump)	5,951	6,199	6,706	7,074	7,426	7,773	8,109	8,448	8,764
Grid Cell 911 (Pahrump)	5	5	5	5	6	6	6	7	7
Grid Cell 1010 (Pahrump)	12,581	13,106	14,177	14,956	15,700	16,433	17,145	17,861	18,529
Total Pahrump in the RadGrid	18,611	19,388	20,973	22,125	23,225	24,311	25,364	26,422	27,412
Total Nye County in the RadGrid	21,216	22,102	23,908	25,221	26,476	27,713	28,913	30,120	31,248
Indian Springs Area, Clark County									
Grid Cell 912 (Indian Springs & Cactus Springs)	1,325	1,410	1,465	1,537	1,607	1,679	1,751	1,823	1,893
Grid Cell 1011 (Cold Creek)	170	180	188	197	206	215	224	233	242
Total Clark County in the RadGrid	1,494	1,591	1,653	1,734	1,812	1,894	1,975	2,057	2,136
Total Nevada in the RadGrid	22,711	23,692	25,561	26,955	28,288	29,607	30,888	32,177	33,384
Death Valley Area, Inyo County, CA									
Grid Cell 707 (Furnace Creek)	361	361	361	361	362	362	362	362	362
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	62	62	62	62	62
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	15	15	15	15	15	15
Total Inyo County in the RadGrid	469	470	470	470	471	471	471	472	472
Total Population in the RadGrid	23,180	24,162	26,031	27,425	28,759	30,078	31,360	32,649	33,855

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 (continued)

	2012	2013	2014	2015	2016	2017	2018	2019
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	17	17	18	18	19	19	20	20
Grid Cell 408 (Amargosa Valley)	472	488	502	516	529	542	554	566
Grid Cell 409 (Amargosa Valley)	426	440	453	466	478	489	500	511
Grid Cell 508 (Amargosa Valley)	104	108	111	114	117	120	123	125
Grid Cell 509 (Amargosa Valley)	719	742	764	785	805	825	844	862
Grid Cell 510 (Crystal)	31	32	33	34	35	36	37	38
Grid Cell 609 (Stateline)	171	177	182	187	192	197	201	205
Grid Cell 610 (Crystal)	182	188	194	199	204	209	214	219
Grid Cell 710 (Ash Meadows)	29	30	31	32	33	34	34	35
Total Amargosa Valley in the RadGrid	2,152	2,223	2,289	2,352	2,412	2,471	2,527	2,580
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	52	54	56	57	59	60	62	63
Grid Cell 403 (Hot Springs)	30	30	31	32	33	34	35	35
Grid Cell 404(Beatty)	1,052	1,087	1,119	1,150	1,179	1,208	1,236	1,262
Grid Cell 405 (Beatty)	636	657	676	695	713	730	747	762
Grid Cell 505 (Rhyolite)	13	14	14	14	15	15	15	16
Grid Cell 903 (Scotty's Junction)	36	37	38	39	40	41	42	43
Total Beatty in the RadGrid	1,820	1,879	1,935	1,988	2,039	2,089	2,136	2,181
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	38	40	41	42	43	44	45	46
Grid Cell 810 (Pahrump)	73	76	78	80	82	84	86	88
Grid Cell 811 (Pahrump)	3	4	4	4	4	4	4	4
Grid Cell 910 (Pahrump)	9,074	9,371	9,651	9,915	10,168	10,416	10,653	10,878
Grid Cell 911 (Pahrump)	7	7	7	8	8	8	8	8
Grid Cell 1010 (Pahrump)	19,185	19,813	20,404	20,963	21,497	22,021	22,523	22,998
Total Pahrump in the RadGrid	28,381	29,311	30,184	31,012	31,802	32,577	33,319	34,022
Total Nye County in the RadGrid	32,353	33,413	34,409	35,352	36,253	37,137	37,982	38,784
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	1,961	2,025	2,085	2,142	2,195	2,245	2,293	2,337
Grid Cell 1011(Cold Creek)	251	259	267	274	281	287	293	299
Total Clark County in the RadGrid	2,212	2,284	2,352	2,416	2,476	2,533	2,586	2,636
Total Nevada in the RadGrid	34,565	35,697	36,760	37,768	38,729	39,670	40,569	41,420
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	363	363	363	363	363	363	363	363
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	62	62	62	62
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	15	15	15	15	15
Total Inyo County in the RadGrid	472							
Total Population in the RadGrid	35,037	36,168	37,232	38,240	39,201	40,141	41,040	41,892

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 (continued)

	2020	2021	2022	2023	2024	2025	2026	2027
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	20	21	21	22	22	22	22	23
Grid Cell 408 (Amargosa Valley)	577	588	598	608	617	626	634	643
Grid Cell 409 (Amargosa Valley)	521	530	540	548	557	565	573	581
Grid Cell 508 (Amargosa Valley)	128	130	132	134	136	138	140	142
Grid Cell 509 (Amargosa Valley)	878	895	910	925	939	953	966	979
Grid Cell 510 (Crystal)	38	39	40	40	41	42	42	43
Grid Cell 609 (Stateline)	209	213	217	220	224	227	230	233
Grid Cell 610 (Crystal)	223	227	231	235	238	242	245	248
Grid Cell 710 (Ash Meadows)	36	36	37	38	38	39	39	40
Total Amargosa Valley in the RadGrid	2,631	2,679	2,725	2,770	2,812	2,853	2,892	2,934
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	64	65	66	68	69	70	70	71
Grid Cell 403 (Hot Springs)	36	37	37	38	39	39	40	40
Grid Cell 404(Beatty)	1,286	1,310	1,333	1,354	1,375	1,395	1,414	1,434
Grid Cell 405 (Beatty)	777	792	805	818	831	843	855	867
Grid Cell 505 (Rhyolite)	16	16	17	17	17	17	18	18
Grid Cell 903 (Scotty's Junction)	44	45	46	46	47	48	48	49
Total Beatty in the RadGrid	2,224	2,265	2,304	2,342	2,377	2,412	2,445	2,480
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	47	48	49	49	50	51	52	52
Grid Cell 810 (Pahrump)	90	91	93	94	96	97	99	100
Grid Cell 811 (Pahrump)	4	4	4	4	5	5	5	5
Grid Cell 910 (Pahrump)	11,091	11,294	11,490	11,677	11,855	12,027	12,192	12,367
Grid Cell 911 (Pahrump)	9	9	9	9	9	9	9	10
Grid Cell 1010 (Pahrump)	23,449	23,879	24,292	24,687	25,064	25,428	25,777	26,147
Total Pahrump in the RadGrid	34,690	35,326	35,936	36,521	37,079	37,618	38,134	38,680
Total Nye County in the RadGrid	39,545	40,270	40,966	41,632	42,268	42,883	43,471	44,094
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	2,379	2,419	2,457	2,493	2,527	2,560	2,591	2,622
Grid Cell 1011(Cold Creek)	305	310	314	319	323	328	332	336
Total Clark County in the RadGrid	2,684	2,729	2,771	2,812	2,850	2,887	2,923	2,958
Total Nevada in the RadGrid	42,229	42,998	43,737	44,444	45,119	45,770	46,394	47,051
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	363	362	362	362	361	361	361	361
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	62	62	62	62
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	15	15	15	15	15
Total Inyo County in the RadGrid	472	472	471	471	470	470	470	469
Total Population in the RadGrid	42,701	43,470	44,208	44,915	45,589	46,240	46,863	47,521

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 (continued)

	2028	2029	2030	2031	2032	2033	2034	2035
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	23	23	24	24	24	25	25	25
Grid Cell 408 (Amargosa Valley)	653	662	671	681	690	700	710	720
Grid Cell 409 (Amargosa Valley)	589	598	606	615	623	632	641	650
Grid Cell 508 (Amargosa Valley)	144	146	149	151	153	155	157	159
Grid Cell 509 (Amargosa Valley)	993	1,008	1,022	1,036	1,051	1,066	1,081	1,096
Grid Cell 510 (Crystal)	43	44	45	45	46	47	47	48
Grid Cell 609 (Stateline)	237	240	244	247	251	254	258	261
Grid Cell 610 (Crystal)	252	256	259	263	267	270	274	278
Grid Cell 710 (Ash Meadows)	40	41	42	42	43	43	44	45
Total Amargosa Valley in the RadGrid	2,975	3,018	3,061	3,104	3,147	3,192	3,237	3,282
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	73	74	75	76	77	78	79	80
Grid Cell 403 (Hot Springs)	41	41	42	43	43	44	44	45
Grid Cell 404 (Beatty)	1,455	1,476	1,496	1,518	1,539	1,561	1,582	1,605
Grid Cell 405 (Beatty)	879	892	904	917	930	943	956	970
Grid Cell 505 (Rhyolite)	18	18	19	19	19	19	20	20
Grid Cell 903 (Scotty's Junction)	50	51	51	52	53	53	54	55
Total Beatty in the RadGrid	2,515	2,551	2,587	2,624	2,661	2,698	2,736	2,774
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	53	54	55	55	56	57	58	59
Grid Cell 810 (Pahrump)	101	103	104	106	107	109	110	112
Grid Cell 811 (Pahrump)	5	5	5	5	5	5	5	5
Grid Cell 910 (Pahrump)	12,544	12,722	12,902	13,085	13,269	13,456	13,644	13,835
Grid Cell 911 (Pahrump)	10	10	10	10	10	10	11	11
Grid Cell 1010 (Pahrump)	26,520	26,897	27,278	27,664	28,054	28,448	28,847	29,250
Total Pahrump in the RadGrid	39,233	39,791	40,354	40,924	41,501	42,085	42,675	43,271
Total Nye County in the RadGrid	44,724	45,360	46,002	46,652	47,310	47,975	48,648	49,328
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	2,652	2,682	2,712	2,742	2,771	2,801	2,831	2,862
Grid Cell 1011 (Cold Creek)	339	343	347	351	355	359	362	366
Total Clark County in the RadGrid	2,992	3,026	3,059	3,092	3,126	3,160	3,194	3,228
Total Nevada in the RadGrid	47,716	48,385	49,061	49,744	50,436	51,134	51,841	52,556
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	360	360	360	359	358	358	357	356
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	62	62	62	62	62	62	61	61
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	15	15	15	14	14	14	14	14
Total Inyo County in the RadGrid	469	469	468	467	466	465	464	464
Total Population in the RadGrid	48,185	48,854	49,529	50,211	50,902	51,600	52,306	53,019

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 (continued)

	2036	2037	2038	2039	2040	2041	2042	2043
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	26	26	27	27	27	28	28	28
Grid Cell 408 (Amargosa Valley)	730	740	750	761	771	782	792	802
Grid Cell 409 (Amargosa Valley)	659	668	677	687	696	705	715	724
Grid Cell 508 (Amargosa Valley)	161	164	166	168	171	173	175	177
Grid Cell 509 (Amargosa Valley)	1,111	1,126	1,142	1,158	1,174	1,190	1,205	1,221
Grid Cell 510 (Crystal)	49	49	50	51	51	52	53	53
Grid Cell 609 (Stateline)	265	268	272	276	280	284	287	291
Grid Cell 610 (Crystal)	282	286	290	294	298	302	306	310
Grid Cell 710 (Ash Meadows)	45	46	46	47	48	48	49	50
Total Amargosa Valley in the RadGrid	3,327	3,373	3,420	3,467	3,515	3,563	3,609	3,657
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	81	82	83	85	86	87	88	89
Grid Cell 403 (Hot Springs)	46	46	47	48	48	49	49	50
Grid Cell 404(Beatty)	1,627	1,649	1,672	1,695	1,719	1,742	1,765	1,788
Grid Cell 405 (Beatty)	983	997	1,011	1,025	1,039	1,053	1,067	1,081
Grid Cell 505 (Rhyolite)	20	21	21	21	21	22	22	22
Grid Cell 903 (Scotty's Junction)	56	57	57	58	59	60	60	61
Total Beatty in the RadGrid	2,813	2,852	2,891	2,931	2,971	3,012	3,051	3,092
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	59	60	61	62	63	64	64	65
Grid Cell 810 (Pahrump)	113	115	117	118	120	121	123	125
Grid Cell 811 (Pahrump)	5	5	6	6	6	6	6	6
Grid Cell 910 (Pahrump)	14,026	14,221	14,418	14,617	14,818	15,020	15,217	15,418
Grid Cell 911 (Pahrump)	11	11	11	11	11	12	12	12
Grid Cell 1010 (Pahrump)	29,655	30,066	30,482	30,904	31,329	31,755	32,171	32,597
Total Pahrump in the RadGrid	43,870	44,478	45,094	45,718	46,346	46,976	47,592	48,222
Total Nye County in the RadGrid	50,010	50,703	51,405	52,116	52,833	53,551	54,253	54,971
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	2,893	2,924	2,956	2,987	3,020	3,052	3,085	3,118
Grid Cell 1011(Cold Creek)	370	374	378	382	386	391	395	399
Total Clark County in the RadGrid	3,263	3,298	3,334	3,370	3,406	3,443	3,480	3,517
Total Nevada in the RadGrid	53,273	54,001	54,739	55,486	56,239	56,994	57,733	58,488
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	355	355	354	353	353	352	352	352
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	61	61	61	61	61	61	61	61
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	463	462	461	460	459	458	458	457
Total Population in the RadGrid	53,736	54,463	55,200	55,946	56,698	57,452	58,191	58,946

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 (continued)

	2044	2045	2046	2047	2048	2049	2050	2051
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	29	29	30	30	30	31	31	32
Grid Cell 408 (Amargosa Valley)	813	824	835	846	858	869	881	894
Grid Cell 409 (Amargosa Valley)	734	744	754	764	774	785	796	807
Grid Cell 508 (Amargosa Valley)	180	182	185	187	190	192	195	198
Grid Cell 509 (Amargosa Valley)	1,237	1,254	1,271	1,288	1,306	1,323	1,341	1,360
Grid Cell 510 (Crystal)	54	55	56	56	57	58	59	59
Grid Cell 609 (Stateline)	295	299	303	307	311	315	320	324
Grid Cell 610 (Crystal)	314	318	322	327	331	336	340	345
Grid Cell 710 (Ash Meadows)	50	51	52	52	53	54	55	55
Total Amargosa Valley in the RadGrid	3,706	3,756	3,806	3,858	3,910	3,964	4,018	4,074
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	90	92	93	94	95	97	98	99
Grid Cell 403 (Hot Springs)	51	51	52	53	54	54	55	56
Grid Cell 404(Beatty)	1,812	1,836	1,861	1,886	1,912	1,938	1,964	1,992
Grid Cell 405 (Beatty)	1,095	1,110	1,125	1,140	1,155	1,171	1,187	1,204
Grid Cell 505 (Rhyolite)	23	23	23	24	24	24	24	25
Grid Cell 903 (Scotty's Junction)	62	63	64	65	66	66	67	68
Total Beatty in the RadGrid	3,133	3,175	3,218	3,261	3,306	3,351	3,397	3,444
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	66	67	68	69	70	71	72	73
Grid Cell 810 (Pahrump)	126	128	130	131	133	135	137	139
Grid Cell 811 (Pahrump)	6	6	6	6	6	6	7	7
Grid Cell 910 (Pahrump)	15,623	15,833	16,046	16,264	16,485	16,709	16,938	17,174
Grid Cell 911 (Pahrump)	12	12	12	13	13	13	13	13
Grid Cell 1010 (Pahrump)	33,031	33,474	33,925	34,385	34,852	35,327	35,810	36,310
Total Pahrump in the RadGrid	48,865	49,520	50,188	50,867	51,559	52,261	52,976	53,716
Total Nye County in the RadGrid	55,704	56,450	57,212	57,986	58,775	59,576	60,390	61,233
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	3,152	3,186	3,220	3,255	3,290	3,325	3,361	3,397
Grid Cell 1011(Cold Creek)	403	408	412	417	421	426	430	435
Total Clark County in the RadGrid	3,555	3,593	3,632	3,671	3,711	3,751	3,791	3,832
Total Nevada in the RadGrid	59,259	60,043	60,844	61,658	62,485	63,326	64,181	65,065
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	351	351	350	350	350	349	349	349
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	60	60	60	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	457	456	456	455	455	454	454	454
Total Population in the RadGrid	59,716	60,500	61,300	62,113	62,940	63,781	64,635	65,519

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 (continued)

	2052	2053	2054	2055	2056	2057	2058	2059
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	32	33	33	33	34	34	35	35
Grid Cell 408 (Amargosa Valley)	906	919	932	945	958	971	985	998
Grid Cell 409 (Amargosa Valley)	818	829	841	853	864	877	889	901
Grid Cell 508 (Amargosa Valley)	200	203	206	209	212	215	218	221
Grid Cell 509 (Amargosa Valley)	1,379	1,398	1,418	1,438	1,458	1,478	1,499	1,520
Grid Cell 510 (Crystal)	60	61	62	63	64	65	66	66
Grid Cell 609 (Stateline)	329	333	338	343	347	352	357	362
Grid Cell 610 (Crystal)	350	355	360	365	370	375	380	385
Grid Cell 710 (Ash Meadows)	56	57	58	59	59	60	61	62
Total Amargosa Valley in the RadGrid	4,131	4,188	4,247	4,306	4,366	4,427	4,489	4,551
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	101	102	103	105	106	108	109	111
Grid Cell 403 (Hot Springs)	57	57	58	59	60	61	62	62
Grid Cell 404 (Beatty)	2,020	2,048	2,076	2,105	2,135	2,165	2,195	2,225
Grid Cell 405 (Beatty)	1,221	1,238	1,255	1,272	1,290	1,308	1,326	1,345
Grid Cell 505 (Rhyolite)	25	26	26	26	27	27	27	28
Grid Cell 903 (Scotty's Junction)	69	70	71	72	73	74	75	76
Total Beatty in the RadGrid	3,492	3,541	3,590	3,640	3,691	3,742	3,795	3,848
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	74	75	76	77	78	79	80	81
Grid Cell 810 (Pahrump)	141	143	145	147	149	151	153	155
Grid Cell 811 (Pahrump)	7	7	7	7	7	7	7	7
Grid Cell 910 (Pahrump)	17,414	17,657	17,903	18,153	18,406	18,663	18,923	19,187
Grid Cell 911 (Pahrump)	13	14	14	14	14	14	15	15
Grid Cell 1010 (Pahrump)	36,817	37,331	37,851	38,379	38,915	39,458	40,008	40,566
Total Pahrump in the RadGrid	54,465	55,225	55,995	56,777	57,569	58,372	59,187	60,012
Total Nye County in the RadGrid	62,088	62,954	63,832	64,723	65,626	66,541	67,470	68,411
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	3,434	3,471	3,508	3,546	3,585	3,623	3,662	3,702
Grid Cell 1011 (Cold Creek)	440	444	449	454	459	464	469	474
Total Clark County in the RadGrid	3,873	3,915	3,958	4,000	4,043	4,087	4,131	4,176
Total Nevada in the RadGrid	65,961	66,870	67,790	68,723	69,670	70,629	71,601	72,587
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	348	348	348	348	348	347	347	347
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	60	60	60	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	453	453	453	453	452	452	452	452
Total Population in the RadGrid	66,415	67,323	68,243	69,176	70,122	71,081	72,053	73,039

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 (continued)

	2060	2061	2062	2063	2064	2065	2066	2067
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	36	36	37	37	38	38	39	39
Grid Cell 408 (Amargosa Valley)	1,012	1,026	1,041	1,055	1,070	1,085	1,100	1,115
Grid Cell 409 (Amargosa Valley)	914	927	939	953	966	979	993	1,007
Grid Cell 508 (Amargosa Valley)	224	227	230	233	237	240	243	247
Grid Cell 509 (Amargosa Valley)	1,541	1,562	1,584	1,606	1,629	1,651	1,674	1,698
Grid Cell 510 (Crystal)	67	68	69	70	71	72	73	74
Grid Cell 609 (Stateline)	367	372	378	383	388	394	399	405
Grid Cell 610 (Crystal)	391	396	402	407	413	419	425	431
Grid Cell 710 (Ash Meadows)	63	64	64	65	66	67	68	69
Total Amargosa Valley in the RadGrid	4,615	4,679	4,745	4,811	4,878	4,946	5,015	5,085
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	112	114	116	117	119	121	122	124
Grid Cell 403 (Hot Springs)	63	64	65	66	67	68	69	70
Grid Cell 404 (Beatty)	2,256	2,288	2,320	2,352	2,385	2,418	2,452	2,486
Grid Cell 405 (Beatty)	1,364	1,383	1,402	1,422	1,441	1,462	1,482	1,503
Grid Cell 505 (Rhyolite)	28	29	29	29	30	30	31	31
Grid Cell 903 (Scotty's Junction)	77	78	79	81	82	83	84	85
Total Beatty in the RadGrid	3,901	3,956	4,011	4,067	4,124	4,181	4,240	4,299
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	82	84	85	86	87	88	89	91
Grid Cell 810 (Pahrump)	157	159	162	164	166	169	171	173
Grid Cell 811 (Pahrump)	7	8	8	8	8	8	8	8
Grid Cell 910 (Pahrump)	19,455	19,727	20,002	20,281	20,564	20,851	21,142	21,437
Grid Cell 911 (Pahrump)	15	15	15	16	16	16	16	16
Grid Cell 1010 (Pahrump)	41,132	41,707	42,288	42,878	43,477	44,083	44,698	45,322
Total Pahrump in the RadGrid	60,850	61,699	62,559	63,432	64,317	65,215	66,125	67,048
Total Nye County in the RadGrid	69,366	70,334	71,315	72,310	73,319	74,342	75,379	76,431
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	3,742	3,782	3,823	3,865	3,906	3,948	3,991	4,034
Grid Cell 1011 (Cold Creek)	479	484	489	495	500	505	511	516
Total Clark County in the RadGrid	4,221	4,267	4,313	4,359	4,406	4,454	4,502	4,550
Total Nevada in the RadGrid	73,587	74,600	75,628	76,669	77,725	78,796	79,881	80,982
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	347	347	347	347	347	347	347	347
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	60	60	60	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	451							
Total Population in the RadGrid	74,038	75,052	76,079	77,121	78,177	79,247	80,333	81,433

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

Population, Including YMP Induced Population Changes, by RadGrid Cells, 2003 – 2075 (continued)

	2068	2069	2070	2071	2072	2073	2074	2075
Amargosa Valley Area, Nye County								
Grid Cell 309 (Lathrop Wells)	40	41	41	42	42	43	44	44
Grid Cell 408 (Amargosa Valley)	1,131	1,147	1,163	1,179	1,195	1,212	1,229	1,246
Grid Cell 409 (Amargosa Valley)	1,021	1,035	1,050	1,064	1,079	1,094	1,109	1,125
Grid Cell 508 (Amargosa Valley)	250	254	257	261	264	268	272	276
Grid Cell 509 (Amargosa Valley)	1,721	1,745	1,770	1,795	1,820	1,845	1,871	1,897
Grid Cell 510 (Crystal)	75	76	77	78	80	81	82	83
Grid Cell 609 (Stateline)	410	416	422	428	434	440	446	452
Grid Cell 610 (Crystal)	437	443	449	455	461	468	474	481
Grid Cell 710 (Ash Meadows)	70	71	72	73	74	75	76	77
Total Amargosa Valley in the RadGrid	5,156	5,228	5,301	5,375	5,450	5,526	5,603	5,681
Beatty Area, Nye County								
Grid Cell 304 (Hot Springs)	126	127	129	131	133	135	137	138
Grid Cell 403 (Hot Springs)	71	72	73	74	75	76	77	78
Grid Cell 404(Beatty)	2,521	2,556	2,592	2,628	2,665	2,702	2,739	2,778
Grid Cell 405 (Beatty)	1,524	1,545	1,566	1,588	1,610	1,633	1,656	1,679
Grid Cell 505 (Rhyolite)	31	32	32	33	33	34	34	35
Grid Cell 903 (Scotty's Junction)	86	88	89	90	91	93	94	95
Total Beatty in the RadGrid	4,359	4,419	4,481	4,544	4,607	4,671	4,736	4,803
Pahrump Area, Nye County								
Grid Cell 711 (Johnnie)	92	93	95	96	97	99	100	101
Grid Cell 810 (Pahrump)	176	178	181	183	186	188	191	194
Grid Cell 811 (Pahrump)	8	8	9	9	9	9	9	9
Grid Cell 910 (Pahrump)	21,736	22,039	22,346	22,658	22,974	23,295	23,620	23,949
Grid Cell 911 (Pahrump)	17	17	17	17	18	18	18	18
Grid Cell 1010 (Pahrump)	45,954	46,595	47,245	47,904	48,572	49,250	49,937	50,634
Total Pahrump in the RadGrid	67,983	68,931	69,892	70,867	71,856	72,859	73,875	74,906
Total Nye County in the RadGrid	77,497	78,578	79,674	80,785	81,912	83,056	84,214	85,390
Indian Springs Area, Clark County								
Grid Cell 912 (Indian Springs & Cactus Springs)	4,078	4,122	4,166	4,211	4,257	4,303	4,349	4,396
Grid Cell 1011(Cold Creek)	522	528	533	539	545	551	557	563
Total Clark County in the RadGrid	4,600	4,649	4,699	4,750	4,801	4,853	4,906	4,959
Total Nevada in the RadGrid	82,097	83,227	84,373	85,535	86,714	87,909	89,120	90,348
Death Valley Area, Inyo County, CA								
Grid Cell 707 (Furnace Creek)	347	347	347	347	347	347	347	347
Grid Cell 807 (Timbisha)	16	16	16	16	16	16	16	16
Grid Cell 808 (Ryan)	2	2	2	2	2	2	2	2
Grid Cell 809 (Death Valley Junction)	2	2	2	2	2	2	2	2
Grid Cell 906 (Stovepipe Wells)	60	60	60	60	60	60	60	60
Grid Cell 1004 (Scotty's Castle)	12	12	12	12	12	12	12	12
Grid Cell 1010 (Stewart Valley, CA)	14	14	14	14	14	14	14	14
Total Inyo County in the RadGrid	451							
Total Population in the RadGrid	82,548	83,678	84,825	85,987	87,165	88,360	89,571	90,800

^a Totals may not be exact due to rounding.

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

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ATTACHMENT III. ELECTRONIC FILE USED FOR THE ANALYSIS

This attachment lists the electronic file generated for this analysis. The file is stored on a compact disk, titled *RadGrid Population Projections 2003-2075 for Yucca Mountain Repository*. One excel file was used in this analysis and is provided on the CD-ROM. The excel calculation functions used in the analysis (addition, multiplication, division, and average) are defined in the spreadsheet and the functions follow the methods described in Section 6 of this analysis. The file name, purpose, date and time last modified, and file size in kilobytes (kB) are provided here.

File name: RadGrid_population_projections_to_2075.xls
Purpose: Development of population projections to 2075 for the Radiological Monitoring Grid
Date and time: 8/29/2007; 11:00 am
File size: 799 kB

Population Projections to 2075 for the Yucca Mountain Radiological Monitoring Grid

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1. QA: N/A
Page 1 of 1

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2. Record Date 08/29/2007	3. Accession Number ATT. TO: ENG.20070905.0012
4. Author Name(s) JOHN BLAND	5. Authorization Organization BSC ES&H/AIA
6. Title/Description POPULATION PROJECTIONS TO 2075 FOR THE YUCCA MOUNTAIN RADIOLOGICAL MONITORING GRID (ATTACHMENT III)	
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MD5 Validation

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dir.txt

Volume in drive D is 070829_1104
Volume Serial Number is 8DCC-52DB

Directory of D:\

08/29/2007 11:00a 818,176 RadGrid_population_projections_to_2075.xls

Directory of D:\

08/29/2007 11:00a 818,176 RadGrid_population_projections_to_2075.xls

Directory of D:\

08/29/2007 11:00a 818,176 RadGrid_population_projections_to_2075.xls
3 File(s) 2,454,528 bytes

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0 Dir(s) 0 bytes free