

# INTERMOUNTAIN DEMOGRAPHICS

## TECHNICAL MEMORANDUM

TO: Bannock Planning Organization Technical Advisory Committee

FROM: Dale Rosebrock, INTERMOUNTAIN DEMOGRAPHICS

SUBJECT: Population, Housing Unit, and Employment Forecasts

DATE: March 30, 2007

The purpose of this memorandum is to provide you with population, housing unit, and employment forecasts for Bannock County, the Bannock Planning Organization (BPO), and traffic analysis zones in the BPO. Population forecasts also have been prepared for the Cities of Chubbuck and Pocatello. That information includes an inventory of 2005 conditions and forecasts for 2010, 2015, 2020, 2025, and 2030.

The general methodology being used in this analysis has been to forecast Bannock County population, housing units, and employment. Those forecasts have been “stepped down” to the BPO metropolitan area and then have been allocated to individual traffic zones within BPO’s boundaries. Population forecasts for Chubbuck and Pocatello have been compiled by totaling the population of all traffic zones within each city.

### BANNOCK COUNTY

#### Population and Housing Units

Bannock County’s population is estimated at about 79,100 in 2005, up from 75,500 persons counted in the 2000 census (Table 1). The county’s population is forecast to reach 83,800 in the short term by 2010. By 2035, the county’s population is expected to be more than 110,900 persons, a gain of 40 percent since 2005.

Table 1: 2005 to 2035 Bannock County Population and Housing Unit Forecast

Year	Population	Housing Units
2005	79,140	30,635
2010	83,793	32,067
2015	89,343	34,202
2020	94,959	36,448
2025	100,678	38,736
2030	105,933	40,838
2035	110,931	42,837

Source: INTERMOUNTAIN DEMOGRAPHICS

Bannock County’s housing stock has been estimated at slightly more than 30,600 units in 2005, up from 29,100 units in 2000. The total housing inventory is forecast at about 42,800 housing units by 2035.

The 2005 population estimate of Bannock County has been calculated from residential building permit activity recorded in the county and its incorporated areas from 2000 to 2005. The number of permits issued is factored by a completion rate to produce the 2005 housing unit estimate. A vacancy rate is applied to the number of housing units to produce the total number of households in the county in 2005. The number of county-wide households is converted to total population by using a persons per household rate. The 2005 population estimate of 79,140 used in this analysis is slightly greater than the census estimate of 78,155 persons.

Population forecasts for the county are prepared using the cohort-survival projection technique. In that technique a base population is divided into five year age groups, factored by a mortality rate, and placed into the next highest age group for each five year period in the population forecast. The number of births and persons moving to the county are included for each time period to complete the forecasts. Population forecasts in this analysis are based on specific birth, death, and migration rates for Bannock County.

Housing unit forecasts are based on population gains for each five year period. Each five year population gain is factored by persons per households and vacancy rates to determine the number of housing units gained in a forecast period. The five year change in housing units is added to the previous base to produce the total forecast.

### Employment

Bannock County’s total full and part-time employment is estimated at slightly more than 46,100 in 2005, including about 8,900 retail employees (Table 2). Total employment in 2005 is up about 3,400 since 2000, while retail employment has gained more than 400 in that same time period. Total county employment has been forecast at nearly 61,700 by 2035. Retail employment is expected to reach more than 12,500 employees that same year.

Table 2: 2005 to 2035 Bannock County Total and Retail Employment Forecast

Year	Total Employment	Retail Employment
2005	46,152	8,943
2010	48,346	9,429
2015	50,984	10,096
2020	53,564	10,730
2025	56,388	11,377
2030	59,364	11,970
2035	61,686	12,535

Source: INTERMOUNTAIN DEMOGRAPHICS

Employment forecasts for the county are based on a series of forecasts for each employment sector in the county's economy. Historical data are available for each sector and are used as a guide in the forecasting technique. Future national trends also are considered in preparing the forecast for each employment sector. Forecasts in the construction, retail trade, services, and government also are compared to county-wide population gains to produce the final forecast.

## BANNOCK PLANNING ORGANIZATION

Forecasts prepared for Bannock County are the basis of the forecasts for the Metropolitan Planning Organization (MPO). County-wide population, housing unit, and employment forecasts are used to determine the future in the urbanized portion of the county.

### Population and Housing Units

Population within the BPO is forecast to increase from about 70,500 in 2005 to more than 100,500 by 2035 (Table 3). That represents an increase of nearly 30,000 persons, a 42 percent gain. The short term forecast is for the BPO's population to reach about 74,700 persons by 2010, an increase of more than 4,000 persons.

The 30,000 person gain in population will require more than 11,000 housing units in the 2005 to 2035 time frame. By 2035, the housing inventory within the BPO will be about 39,200 units.

Table 3: 2005 to 2035 Bannock Planning Organization Population and Housing Unit Forecast

Year	Population	Housing Units
2005	70,554	27,847
2010	74,674	29,125
2015	81,094	31,389
2020	86,148	33,433
2025	91,295	35,515
2030	96,025	37,428
2035	100,523	39,247

Source: INTERMOUNTAIN DEMOGRAPHICS

Population and housing unit forecasts for the BPO area are based on the population and housing unit forecasts prepared for Bannock County. Traditionally the population and number of housing units in the metropolitan planning area has been about 90 percent of the Bannock County total. That BPO/Bannock County ratio has been used for the 2010 forecast and increased slightly for remaining years in the forecast period. The 2005 housing unit inventory has been provided by BPO using its residential building permit monitoring system. The 2005 population estimate has been provided by BPO, based on its monitoring and census bureau estimates.

## Employment

Total employment within the MPO is forecast to reach nearly 56,500 employees by 2035, a gain of more than 14,000 (Table 4). Total employment will be up by one-third over the 30 year forecast period. Retail employment is expected to increase by more than 3,000 employees and reach almost 12,000 employees by 2035.

Table 4: 2005 to 2035 Bannock Planning Organization Total and Retail Employment Forecast

Year	Total Employment	Retail Employment
2005	42,331	8,730
2010	44,330	9,144
2015	46,732	9,645
2020	49,158	10,201
2025	51,643	10,815
2030	54,347	11,378
2035	56,459	11,915

Source: INTERMOUNTAIN DEMOGRAPHICS

The 2005 employment inventory for the MPO area and individual traffic zones has been provided by BPO, based on employer and employee information maintained by the Idaho Department of Commerce and Labor. That employee data base only includes full time employees covered by unemployment compensation insurance. Part-time employment has been converted into total employment using data from the U. S. Bureau of Economic Analysis.

Employment forecasts in the MPO also are based on the employment forecasts prepared for Bannock County. The ratio of MPO total employment as compared to Bannock County total employment has been nearly constant (ranging from 88 to 90 percent) and is expected to be consistent during the forecast period to 2035. Retail employment forecasts within the MPO has been based on comparisons to total Bannock County retail employment and the ratio of retail to non-retail employment within the MPO. Both of those ratios also have been consistent and are expected to apply to future levels of retail employment in the MPO.

## 2005 TO 2035 DEMOGRAPHIC ALLOCATION

Table 5 shows the net change in population, housing units, and employment for the 2005 to 2035 forecast period within the BPO. Population within the area has been forecast to increase by almost 30,000 persons resulting in demand for more than 11,300 new housing units. Retail employment will increase by about 3,600 employees, while a gain of almost 11,000 employees will be seen in the non-retail sector.

Table 5: 2005 – 2035 Bannock Planning Organization Population, Housing Unit, and Employment Allocation

Variable	2005	2035	Allocation
Population	70,555	100,523	29,968
Housing Units	27,939	39,247	11,308
Retail Employment	8,943	12,535	3,592
Non-Retail Employment	33,601	44,554	10,954

Source: INTERMOUNTAIN DEMOGRAPHICS

## ALLOCATION METHODOLOGY & ASSUMPTIONS

### Population and Housing Units

The net change in housing units for 2005 to 2035 has been allocated to individual traffic zones based on the development priority maps submitted by Chubbuck and Pocatello personnel and the allocation assumptions discussed at the TAC meeting. Short term projects, long range development proposals, areas identified for future development in comprehensive plans, current zoning, and availability of vacant land are factors considered in the traffic zone allocation.

Housing units have been allocated to the high priority growth areas and then to the zones designated for low and medium growth. Residential density in the new zones has been assumed to be similar to densities in adjacent or similar zones. The population change in a zone has been calculated by factoring the number of new housing units by a persons per household ratio to determine new residents.

### Retail and Non-Retail Employment

The number of retail and non-retail employees in a zone in the base year (2005) has been increased by a factor of about 55 percent on the assumption that more than one-half of all new employment increases in an area will be the result of employment gains at existing employers. That assumption has been used in the past demographic updates for the BPO and is based on national research. The balance of retail and non-retail employment change for the forecast period has been based on the allocation shown on the development priority maps and discussions with the TAC.

## INTERVENING YEAR ALLOCATION

Population, housing unit, and employment forecasts also have been prepared for the interval years (2010, 2015, 2020, 2025, and 2030) in the forecast period. Forecasts for 2010 have been based on the assumption that existing projects in progress will be completed and that other approved projects will be started from 2007 to 2010. Some of those developments will be phased, with portions of the entire project being completed in the short term. Population, housing unit, and employment allocations have been based on a linear extrapolation for the balance of the forecast period (2010 – 2030).

## CHUBBUCK AND POCATELLO CITY FORECASTS

Population forecasts also have been prepared for the Cities of Chubbuck and Pocatello (Table 6). Population within the City of Chubbuck has been forecast to increase from about 11,850 persons in 2005 to nearly 26,300 by 2030. Chubbuck's total population is forecast to increase by approximately 14,400 persons, more than doubling in the forecast period.

The City of Pocatello's population will reach 64,100 persons by 2030, up from about 53,570 in 2005. Its population will increase by more than 10,500 persons, a change of about 20 percent. Population forecasts for each city are based on the population forecasts for each zone in the city. Those zonal forecasts have been aggregated to the city level of geographic detail.

Table 6: 2005 to 2030 City of Chubbuck and Pocatello Population Forecasts

Year	Chubbuck	Pocatello
2005	11,844	53,564
2010	14,582	55,048
2015	17,107	57,852
2020	19,868	59,274
2025	22,314	61,576
2030	24,259	62,871
2035	26,229	64,101

Source: INTERMOUNTAIN DEMOGRAPHICS