

WENDOVER CITY MODERATE INCOME HOUSING PLAN

Prepared for:

CITY OF WENDOVER
920 EAST WENDOVER BLVD.
WENDOVER, UTAH 84083



Prepared for Submission to:

The State of Utah Department of Community and Culture (DCC)
ATTN: Del L. Brady, MPA
324 South State Street, 5th Floor
Salt Lake City, Utah 84111

Prepared by:



December 2010

Table of Contents

Introduction	2
Purpose	2
Understanding Income Level Housing	3
Need for Affordable Housing	3
Opportunities, Incentives and Barriers	4
Funding Alternatives for Future Affordable Housing	5
Goals	7
Recommendations	7
Appendix A.....	8

WENDOVER CITY MODERATE INCOME HOUSING PLAN

INTRODUCTION

Housing that is safe and affordable provides stability for families across the country. As Wendover City, Utah continues to grow the demand for affordable housing will become an increasingly important issue in order to provide good, adequate housing for the varying income levels of the city's population. This is particularly true for areas that have larger families and need more living space. During a down economy, the need for affordable housing is imperative as several employed individuals are not receiving an increase in wages while the cost of living continues to stay the same.

As a result of the economic changes and recent housing trends, households continue to struggle to find affordable homes and are faced with challenges such as:

- The need to work two or more jobs or have two or more household wage earners
- Co-live with another family
- Live in poor or overcrowded conditions
- Pay a disproportionate share of their income for housing (more than 30%)

Wendover City is located along Interstate 80 on the Utah/Nevada border. According to the 2000 Census, the city had a population of 1,537 with 432 households residing in the city boundaries. The total number of housing units in the 2000 Census was 510. Given that the data collected for the 2000 Census was over ten years ago, additional resources have been referenced for the purpose of this housing plan to better reflect the current demographics and housing for Wendover City.

PURPOSE

The purpose of this plan is to develop ways to increase the number of affordable housing units suitable for low and moderate income households. The current percentage of low income housing is approximately 36% of the total population for Wendover City.

The goal is to meet the affordable housing demand within the next five to 10 years and maintain the demand to eliminate an affordable housing deficit. This effort will provide the community with new construction with a goal to stimulate a progressive movement towards updating and remodeling existing dwellings in the future.

UNDERSTANDING INCOME LEVEL HOUSING

The U.S. Department of Housing and Urban Development (HUD) established a baseline for the determination of affordable housing. This baseline sets the standard that for a family to live in a comfortable manner; no more than thirty percent (30%) of annual family gross household income should be dedicated and utilized for housing and utility expenses. Additionally, families with household incomes that are eighty percent (80%) or less of the area's median income are identified as those who may have difficulty finding adequate affordable housing that requires no more than thirty percent (30%) of the monthly gross income.

According to the *Affordable Housing Needs Analysis for Tooele County* prepared by James A. Wood, moderate income housing for Tooele County is identified as: "a statewide concern that requires municipalities and counties to propose a plan for moderate income housing as part of a general plan." Moderate income housing is defined as: "housing occupied or reserved for occupancy by households with a gross household income equal to or less than 80 percent of the median gross income of the county. In Tooele County the median income for a household of four was \$56,100 in 2006 (Source: U.S. Department of Housing and Urban Development). Moderate income housing is therefore defined as housing that is affordable (housing and utility costs, utility costs apply to renters only, do not exceed 30 percent of household income) for a household with an income of \$44,880."

For Wendover City, the median gross income according to the 2000 Census was \$31,196. The moderate income housing for Wendover is 80% of the median gross income, which would be \$24,956. Therefore, households generating \$24,956 (gross) or less annually would fall under the moderate to low income bracket.

Households falling below the eighty percent (80%) of median income are further divided into three levels:

1. Households between fifty percent (50%) and eighty percent (80%) of median income;
2. Households between thirty-one percent (30%) and fifty percent (50%) of median income; and,
3. Households below thirty percent (30%) of the area median income.

NEED FOR AFFORDABLE HOUSING

An affordable housing needs assessment was performed in August of 2010 for Wendover City by James Wood (See Appendix A). This needs assessment analyzed the need for affordable housing for moderate, low and very low income housing based on several factors such as:

- Population and Demographics
- Household Income
- Employment
- Existing Housing Inventory
- Physical Condition of Existing Housing
- Accessibility
- Affordability
- Characteristics of Rental Market

According to the 2007 Tooele County study by Woods, the surplus/deficit of affordable housing owner occupied units in 2006 for Wendover City is shown in the following table.

Category	Units
Total Housing Units	544
Occupied Units	496
Owner Occupied	221
Vacant Units	36
Renter Occupied Units	273
Vacant Units	12
Number of Affordable Owner Occupied Units	43
50% to 80% AMI	25
Deficit	-39
30% to 50% AMI	21
Deficit	-15
less than 30% AMI	4
Deficit	-47
Number of Affordable Renter Occupied Units	206
50% to 80% AMI	34
Deficit	-37
30% to 50% AMI	122
Surplus	58
less than 30% AMI	50
Deficit	-25

OPPORTUNITIES, INCENTIVES AND BARRIERS

Opportunities

Wendover City needs additional family sized units (3+ bedrooms) as well as single family (detached) units. In an effort to facilitate the need, Wendover City is exploring

development opportunities within the city boundaries and is working to develop an inventory of potential developable land.

Accessory Dwelling Units

Accessory dwelling units are becoming increasingly popular for many homeowners and renters, specifically low and moderate-income housing opportunities. Accessory dwelling units are typically small living spaces such as an apartment that is built on the same lot as an existing single-family home. These types of units can also be attached to the home and are considered mother-in-law apartments.

This type of dwelling is a benefit for the homeowner who may use the extra income towards their mortgage or upkeep of the property. Benefits for the renter include moderately priced rent in a single family neighborhood.

Incentives

The following are several ideas for incentives that Wendover could use to encourage development of affordable housing:

Zoning Modification – Performance Zoning

Performance Zoning allows more flexibility on the subject property, specifically density, as long as it does not negatively impact adjacent properties. These benefits may include:

- Increased density and cost efficiencies for municipalities and developers;
- Increased use of existing space limiting the need for expansion of the municipal infrastructure;
- Protecting and preserving the environment.

Barriers

A barrier to the development of quality affordable housing in Wendover City may be the ability to acquire adequate land and available funding. The City plans to explore funding alternatives over the next five years which is further explained in the following section.

FUNDING ALTERNATIVES FOR FUTURE AFFORDABLE HOUSING

In conjunction with affordable housing needs there are several organizations that have the mission to increase and improve the local supply of affordable housing. The following list identifies several programs and organizations that may be able to provide funding to the City. The City does not have the means to develop moderate-income

housing and will be completely dependent upon funding/housing development opportunities listed below if available.

Tooele County Housing Authority

The Tooele County Housing Authority provides housing assistance to people within the County. It would likely be used to administer funds provided by State agencies.

Olene Walker Housing Loan Fund (OWHLF)

Money from this fund is loaned to first time homebuyers, rural homeowners, builders, and developers. The OWHLF is a revolving loan fund. Payments made on these loans are returned to the fund allowing it to be used again for future projects. For multi-family projects, \$15 is leveraged from federal and other sources for each dollar contributed by the state.

Habitat for Humanity

Salt Lake Valley Habitat for Humanity encourages partnerships with the community to provide affordable housing and no-profit, zero-percent interest mortgages to our partner families. New homeowners and volunteers build homes under the supervision of trained homebuilders. Individuals, corporations and many others provide much needed financial support.

Rural Development

Rural Development provides affordable housing opportunities to very low, low and moderate-income households in the rural areas of Utah. Rural Development has established partnerships with local conventional lenders, non-profit organizations, and other federal and state agencies.

Low-Income Housing Tax Credit (LIHTC)

The Low-Income Housing Tax Credit (LIHTC) is a federal program that utilizes tax credits to create low-income housing. The State of Utah establishes that the Utah Housing Corporation (UHC), allocate these tax credits. Tax credits are allocated for acquisition with rehabilitation, new construction, or simply rehabilitation of low-income housing.

CRedit to OWN (CROWN HOMES)

The CROWN "lease-to-own" program was developed in 1993 by the UHC to increase the availability of affordable housing for lower income residents. Using the CROWN

program, a portion of the tenants' monthly rent payment is put towards the purchase price of the home, which can be purchased after the fifteen-year rental period expires.

GOALS

The Wendover City Moderate Income Housing Plan is intended to be an action oriented plan. The issues, data and situations described above form the foundation for the goals and policies outlined below. Private, not-for-profit and public (State, Federal and Local) organizations will need to work together to achieve the following goals:

- Provide higher quality affordable housing. This could be accomplished through new construction or remodeling of existing housing. It is anticipated that by providing higher quality housing at similar costs, it would force lower quality housing to make changes necessary to stay competitive, resulting in an overall increase in the quality of affordable housing. This may be accomplished through a 12 to 18 unit housing project.
- Increase supply of affordable housing with three or more bedrooms. Currently, large family (5 persons or more) renters account for 25% of the rental market. However, available housing with three or more bedrooms accounts for only 15% of available affordable housing.

RECOMMENDATIONS

Wendover City may pursue the following recommendations in order to help provide affordable, high quality housing to its residents if funding programs become available:

- A 12-18 multi-family unit development would provide new, quality housing for residents. Due to the lack of larger housing, these units should have at least three bedrooms. If property is available, the City has several options for funding a project of this type. These funding options include:
 - Rural Development, who can provide low interest loans
 - Tax Credits. A tax credit consultant should be retained to help with the application.
- It is anticipated that the construction of four to six CROWN homes through the UHC would provide a good opportunity for additional owner occupied units in the City. It is anticipated that this would increase the quality of housing. Funding for these homes may be provided by the LIHTC or the OWHLF.

Appendix A
Affordable Housing Needs Assessment for Wendover City
James Wood, 2010

AFFORDABLE HOUSING NEEDS ASSESSMENT FOR WENDOVER

**Prepared for
Wendover City**

**Prepared by
James Wood**

August 2010

TABLE OF CONTENTS

Study Recommendations	3
I. Determinants of Demand for Housing	4
Demographic Trends and Profile	4
Immigration and Hispanic Population.....	5
Age Structure of Population.....	5
Household Income	16
Employment	6
II. Conditions of Housing Supply	8
Housing Inventory	8
Physical Condition of Housing.....	10
Housing Accessibility.....	10
Housing Affordability.....	10
Characteristics of Rental Housing	15
Profile and Photographs of Selected Rental Housing.....	18
Appendix.....	20
VITA James Wood	21

Study Recommendations

¶ Wendover is an affordable housing market. The needs assessment shows that both the owner and renter markets have housing opportunities available for very low, low and moderate income households.

¶ However, the affordability of housing reflects the poor quality of much of the housing inventory in Wendover. Despite the affordability of the local housing market the Wendover housing inventory needs revitalization. Both the owner and renter markets need infusions of newer, higher quality, modern units.

¶ It is recommended that Wendover City pursue the development of four to six CROWN homes. The CROWN home program is administered by Utah Housing Corporation. CROWN homes are detached single-family homes for low income households. The homes are “lease to own” with a portion of the tenants rent going to the purchase of the home. Purchase can be made after fifteen years. CROWN homes have provided home ownership opportunities in many rural and urban communities in Utah. A three bedroom CROWN home at 40 percent AMI would rent for about \$600 and a four bedroom unit for about \$650. The use of tax credits keeps the rental rate low. Application for the CROWN home program would be initiated by the Tooele County Housing Authority. It is recommended that Wendover and the Tooele County Housing Authority approach the Olene Walker Housing Trust Fund for funding assistance, which would greatly improve the feasibility of the project. The addition of new CROWN homes would provide an opportunity for high quality, affordable, *owner occupied* housing in Wendover.

¶ It is also recommended that Wendover City pursue the development of a 12 to 18 unit tax credit apartment project. Newer, higher quality rental units are desperately needed. The project should not exceed 40 percent AMI rent targets, approximately \$525 for a two bedroom unit, \$600 for a three bedroom units and \$650 for a four bedroom unit. Given the high percent of large family (five persons or more) renters and the scarcity of three bedroom units, the proposed project should be primarily three bedroom units with the consideration of a few four bedroom units.

¶ There is a significant need in Wendover for the addition of CROWN homes and new rental units targeted for low income, large families.

AFFORDABLE HOUSING NEEDS ASSESSMENT FOR WENDOVER

I. DETERMINANTS OF DEMAND FOR HOUSING

Demographic Trends and Profile

The population of Wendover has increased from 1,537 in 2000 to 1,632 in 2009, an increase of 95 individuals and 34 households *Table 1*. The demand for housing is driven by changes in households. Since 2000 the annual increase in housing demand has averaged about 4 to 6 new housing units annually. The small increase in housing demand limits the need for additional units. It appears that the need for additional occupied housing units has been met by the availability of vacant units as well as a very modest level of new construction.

The demographic profile of Wendover provides estimates on population, income and special need populations *Table 2*.

Table 1
Population and Household Change in Wendover

	Population	Households	Chg. in Households
2000	1,537	432	
2001	1,563	440	8
2002	1,584	447	7
2003	1,587	450	2
2004	1,592	452	3
2005	1,582	451	-2
2006	1,595	456	5
2007	1,612	461	5
2008	1,632	466	6
2009	1,632	466	0
Total	---	---	34

Source: U.S. Census Bureau.

Table 2
Demographic Profile of Wendover - 2009

	Category
Population	1,632
Households	466
Household Size	3.5
Median Income for Four Person Household	\$35,150
Special Needs:	
Number of Elderly Handicapped	1
Number of Elderly Handicapped @ 80% AMI	1
Number of Elderly Handicapped @ 50% AMI	1
Number of Non-Elderly Handicapped	2
Number of Non-Elderly Handicapped @ 80% AMI	2
Number of Non-Elderly Handicapped @ 50% AMI	1
Number of Senior Households Renting	12
Senior Renters below 50% of AMI	2

Source: Governor's Office of Planning and Budget, U.S. Census Bureau, Utah Department of Workforce Services and James Wood.

Wendover is part of the larger West Wendover/Wendover population center. In 2009 the total population of the combined area was 6,800 *Table 3*. West Wendover accounts for about 75 percent of the combined population. West Wendover has been growing recently at about 3.4 percent annually compared to only 1.5 percent for Wendover City. Over the next ten years annual population growth in West Wendover will increase to 3.9 percent while in Wendover the growth is expected to remain stable at about 1.5 percent.

**Table 3
Population Trends and Projections for
Wendover and West Wendover**

	West Wendover	Wendover	Total
2005	4,548	1,582	6,130
2006	4,871	1,595	6,466
2007	4,958	1,612	6,570
2008	4,990	1,632	6,622
2009	5,184	1,632	6,816
2010	5,385	1,700	7,085
2020	7,879	1,966	9,845
AAGR			
2010-2020	3.9%	1.5%	3.3%

Source: West Wendover City, Utah Governor's Office of Planning and Budget.

Immigration and Hispanic Population

In 2000, 69 percent of the population of Wendover City was of Hispanic origin. That percentage is probably slightly higher in 2009. Consequently, the demographic characteristics of the Hispanic population dominate the population characteristics of Wendover City. Most prominent is the young age of the Hispanic population. The median age of the Hispanic population in Wendover in 2000 was 20.4 years. Overall the median age of the Wendover population was 23.7 years, one of the youngest population of any city in the state. The youngest population for a city in Utah was Eagle Mountain with a median age of 21.1 years.

Age Structure of Population

The young median age is a reflection of the high percentage of children in Hispanic families living in Wendover. One in four individuals in Wendover are under 10 years of age, compared to one in six statewide *Table 4*. The parents of these children 25-34 age groups comprise nearly 20 percent of the Wendover population compared to only 15 percent statewide. Most of these young Hispanic families are low income renter households with household size of at least four people.

Table 4
Age Structure of Total Population and Hispanic Origin
Population of Wendover - 2000

Age Group	Total Population		Hispanic Origin	
	Number	% Share	Number	% Share
Under 5 years	207	13.5%	165	15.6%
5 to 9 years	183	11.9%	144	13.6%
10 to 14 years	144	9.4%	110	10.4%
15 to 17 years	79	5.1%	59	5.6%
18 and 19 years	54	3.5%	43	4.1%
20 years	24	1.6%	16	1.5%
21 years	27	1.8%	21	2.0%
22 to 24 years	95	6.2%	66	6.3%
25 to 29 years	145	9.4%	104	9.9%
30 to 34 years	138	9.0%	103	9.8%
35 to 39 years	96	6.2%	62	5.9%
40 to 44 years	82	5.3%	49	4.6%
45 to 49 years	79	5.1%	45	4.3%
50 to 54 years	54	3.5%	21	2.0%
55 to 59 years	39	2.5%	19	1.8%
60 and 61 years	18	1.2%	9	0.9%
62 to 64 years	13	0.8%	4	0.4%
65 and 66 years	13	0.8%	5	0.5%
67 to 69 years	9	0.6%	0	0.0%
70 to 74 years	12	0.8%	2	0.2%
75 to 79 years	16	1.0%	5	0.5%
80 to 84 years	8	0.5%	2	0.2%
85 years and over	2	0.1%	1	0.1%
Total	1,537	100.0%	1,055	100.0%

Source: U.S. Census Bureau.

Household Income

The median household income in 1999 was \$31,196. Household income includes all income from members of the household. The Utah Department of Workforce Services reported the average wage per job in Wendover in 1999 was \$23,400. The average wage in 2008 was \$25,980. Over the nine year period the average wage increased by only 1.2 percent annually. Applying this growth rate to the median household income of \$31,196 in 1999 yields an estimated household income in 2009 of \$35,150.

Wendover City has one of the highest poverty rates of any city in Utah. One in four persons in Wendover was living below the poverty line in 2000. Of the 390 children under 10 years of age, one in four was also living in poverty.

Employment

In 2008 Wendover City had an estimated employment base of 232 jobs *Table 5*. The number of jobs has dropped in recent years due to the recession, falling from 291 jobs in 2003 to 232 in 2008. The government sector with 74 employees and retail trade, transportation and utilities sector with 65 employees are the largest employment sectors. Wendover City is part of the larger West Wendover/Wendover City employment market. The top ten ranked employers in West Wendover employed nearly 2,800 workers in 2009. The five casinos accounted for 86 percent of the jobs. The

casinos employed about 2,400 people. Since 2006 casino employment has dropped by nearly 300 jobs. Overall the West Wendover/Wendover market has an employment base of about 3,500 jobs in 2009.

Table 5
Nonfarm Employment in Wendover

Year	Employment
2003	291
2004	290
2005	282
2006	281
2007	NA
2008	232

Source: Utah Department of Workforce Services

Table 6
Nonfarm Employment by Sector - 2008

Sector	Employment
Mining	4
Construction	0
Manufacturing	0
Trade, Transportation & Util.	65
Information	15
Financial Activities	10
Professional and Business Services	0
Health Services	23
Leisure & Hospitality	38
Other Services	7
Government	74
Total	232

Source: Utah Department of Workforce Services

Table 7
Top Ten Employers in West Wendover - 2009

Employer	2006	2009	Change
Peppermill Hotel & Casino	720	600	-120
Rainbow Hotel & Casino	770	676	-94
Montego Bay Casino & Resort	600	560	-40
State Line Nugget	420	420	0
Red Garter Casino	193	149	-44
City of West Wendover	79	73	-6
West Wendover Recreation District	60	75	15
Smith Food	63	62	-1
Wendover Ambulance	41	42	1
Elko County School District (West Wendover)	124	125	1
Total	3,070	2,782	-288

Source: West Wendover City.

II. CONDITIONS OF HOUSING SUPPLY

Housing Inventory

In 2009 the estimated housing inventory in Wendover is 546 units *Table 8*. There are 466 occupied units and 80 vacant units. Wendover clearly has one of the highest ratios of renter occupied units to owner occupied units in the state. Fifty-eight percent of all occupied housing units in Wendover are rental units. Statewide the average is about 26 percent. High rental concentration cities such as Logan and Provo (due to student population) have about 55 percent of their occupied housing units in rental units. Wendover very likely has the highest concentration of rental units to owner occupied units of any city in the state.

The vacancy rate for the rental inventory has declined from nearly 19 percent in 2000 to about 16 percent in 2009. Most of the vacancy rental units are in detached manufactured or mobile homes. A survey of apartment projects from four-plexes to the largest project of 72 units at 100 East and Limestone indicated a relatively high occupancy rate for these more traditional apartment units.

The number of vacant owner occupied homes has risen from 17 to 27 units. The growth in the gaming industry during the early and middle part of the decade helped to absorb some of the vacant owner and rental vacant units but the economic downturn and layoffs at the casinos have contributed to a weaker housing market in recent years. Gaming revenues have fallen from \$189.2 million in 2007 to \$168.3 million in 2007, an 11 percent drop in two years. The impact of declining revenues has hurt the rental housing market.

The housing inventory in Wendover City is heavily dependent on mobile and/or manufactured homes. Overall about one-third of housing units are of this type *Table 9*. More detail characteristics of the Wendover housing market are provided in the profile, *Table 10*.

Table 8
Housing Inventory for Wendover

	2000	2009
Total Housing Units	510	546
Total Occupied Units	432	466
Total Vacant Units	78	80
Owner Units	185	221
Vacant	17	27
Occupied	168	194
Renter Units	325	325
Vacant	61	53
Occupied	264	272

Source: U.S. Census Bureau and James Wood.

**Table 9
Housing Units by Type of Structure**

	Number	% Share
Detached	117	24.3%
Attached	11	2.3%
2 units	11	2.3%
3 or 4	54	11.2%
5 to 9	27	5.6%
10 to 19	88	18.3%
20 to 49	6	1.2%
50 or more	0	0.0%
Mobile home	157	32.6%
RV, Van	10	2.1%
Total	481	100.0%

Source: U.S. Census Bureau.

**Table 10
Profile of Wendover Housing Inventory**

Total Dwelling Units	546
Total Vacant Units	80
Occupied Dwelling Units	466
Owner Units	221
Vacant Units	27
% of Households Owning Homes	41.6%
Renter Units	325
Vacant Units	61
% of Households Renting	58.4
Condition and Price of Housing:	
% Owner Occupied Units Built Since 2000	16.3
Median Age of Owner Occupied Units	32 yrs
% Renter Occupied Units Built Since 2000	0.00%
Median Age of Renter Occupied Units	31 years
Median Price of Home Sold (2005-2009)	104,500
Average Rental Rates	
One Bedroom	\$375
Two Bedroom	\$475
Three Bedroom	\$575
Characteristics of Owner Units: (Tooele County Assessor)	
Average Value Detached Single-Family Home	\$100,000
Median Value Detached Single-Family Home	\$65,050
% of Single Family Detached Homes with Value Greater than \$150,000	19
% of All Owner Units Single-Family Detached	79.6
Median Value of Mobile Home	NA
% of All Owner Units Mobile and Mudular Homes	43.4
Subsidized or Assisted Housing Units:	
Rural Developments Low Income Mortgage Assistance Program (502 Loans)	none
UHFA First Time Home Buyer and CHAMP Programs (Low Interest Mortgage Loans) Since 1977	none
Rental Units (Sponsoring Agency: Rural Development of USDA)	32

Source: Tooele County Assessor's Office, Bureau of Economic and Business Research, University of Utah, James Wood.

Physical Condition of Housing:

The median age of *owner* occupied units is 32 years and for *rental* occupied units it is 31 years. While the median age of rental units is not excessively old there have been no new units built in the past 20 years. Nearly 45 percent of the rental units in Wendover were built in the 1980s with the remainder built prior to 1980. Since 1990 there has been 67 new single family homes built in Wendover. The overall physical condition of much of the housing stock in Wendover is poor. Much of the housing stock is mobile or manufactured homes that are deteriorating.

**Table 11
Building Permits Issued for
Residential Construction in Wendover**

	Single-family homes	Apartments
1990	0	0
1991	1	0
1992	0	0
1993	0	0
1994	0	0
1995	20	0
1996	2	0
1997	7	0
1998	0	0
1999	0	0
2000	0	0
2001	0	0
2002	0	0
2003	33	0
2004	0	0
2005	0	0
2006	1	0
2007	0	0
2008	1	0
2009	1	0

*Source: Bureau of Economic and Business
Research, University of Utah.*

Housing Accessibility:

In Wendover, low income households are not excluded from affordable housing because of transportation, discrimination or attitudinal barriers. Nor do zoning ordinances prevent the development of affordable housing, modular homes and mobile home parks. A review of zoning ordinances showed that the city has no exclusionary zoning. Wendover is a community dominated by affordable housing. The zoning ordinances and political environment welcome all types of affordable housing; twin homes, mobile homes and modular homes.

Housing Affordability:

Wendover has among the lowest housing prices of any city in Utah's metropolitan counties. The average assessed value of all detached single-family homes in Wendover is \$100,000. The median value is significantly lower at \$65,050. About 18 percent of all homes have assessed values above \$150,000 percent. The source of the assessed values is the Tooele County Assessors Office database

which was accessible through the New Reach website. New Reach is a local real estate consulting

firm.

The affordability of a housing market is determined by comparing income levels to housing prices. Each year HUD publishes the median household income for a family of four by county. In 2009 the median income for a family of four in Tooele County was \$64,700. This estimate is commonly called the Area Median Income (AMI). From this median income estimates the income levels for moderate income (50%-80% AMI), low income (30%-50% AMI) and very low income families (less than 30% AMI) can be calculated *Table 12*.

Table 12
Household Income Levels by Selected AMI Level - 2009

Household Size	Household Income <30% AMI	Household Income at 30% - 50% AMI	Household Income at 50% - 80% AMI
1 person	<\$13,590	\$13,590 - \$22,650	\$22,650 - \$36,240
2 persons	<\$15,540	\$15,540 - \$25,900	\$25,900 - \$41,440
3 persons	<\$17,460	\$17,460 - \$29,100	\$29,100 - \$46,560
4 persons	<\$19,410	\$19,410 - \$32,350	\$32,350 - \$51,760
5 persons	<\$20,970	\$20,970 - \$34,950	\$34,950 - \$55,920

Source: HUD.

Once the income levels are established then the price range of affordable housing for each income group is calculated. The following assumptions are used; 30 percent of income devoted to mortgage payment, taxes, home insurance and mortgage insurance, prevailing mortgage rate is used and a 3 percent down payment assumed.

Using these assumptions a one-person household in Tooele County in 2009 with an income at 30 percent AMI (very low income) could afford a home priced at \$54,833 or less. Affordability ranges are determined for very low, low and moderate income household by household size in *Table 13*. A low income one-person household could afford a home priced between \$54,833 and \$91,510 and for a moderate income household the affordable housing price range is \$91,510 to \$146,344.

Table 13
Price Range for Affordable Owner Occupied Homes by Selected AMI Level - 2009

Household Size	Affordable Price for 30% AMI Household	Affordable Price for 30% - 50% AMI Household	Affordable Price for 50% - 80% AMI Household
1 person	<\$ 54,833	\$54,833 - \$91,510	\$91,510 - \$146,344
2 persons	<\$ 62,823	\$62,823 - \$104,584	\$104,584 - \$167,406
3 persons	<\$ 70,448	\$70,448 - \$117,474	\$117,474 - \$188,105
4 persons	<\$ 78,437	\$78,437 - \$130,729	\$130,729 - \$209,167
5 persons	<\$ 84,792	\$84,792 - \$141,260	\$141,260 - \$225,871

Source: James Wood.

In the 2000 HUD CHAS for Wendover City the number of affordable rental and owner occupied units was estimated. For example HUD estimated the number of rental units affordable to a household at less than 30 percent AMI in 2000 at 81 units *Table 14*. Since there have been no new

rental units added to the Wendover inventory since 2000 it was assumed that the same number of units (81 units) would be affordable to households at less than 30 percent AMI in 2009. A similar assumption was made for other income categories. For the owner occupied units the 36 new homes added to the inventory of owner occupied units since 2000 were distributed in the following manner; 20 homes affordable to households at 50-80 percent AMI and 16 homes affordable to households at above 80% AMI *Table 15*. So for example in 2009 it is estimated that 42 homes in Wendover are affordable to households at 50-80% AMI.

Table 14
Rental Units by Affordability

	2000	2009
<30% AMI	81	81
30-50% AMI	143	143
50-80% AMI	91	91
>80% AMI	9	9
Total	325	325

Source: HUD CHAS 2000 and James Wood.

Table 15
Owner Units by Affordability

	2000	2009
<30% AMI	---	---
30-50% AMI	127	127
50-80% AMI	22	42
>80% AMI	36	52
Total	185	221

Source: HUD CHAS 2000 and James Wood.

Once the number of affordable units is estimated the next step is to estimate the number of renters and owners by income category. This was done using the HUD CHAS 2000. The distribution by income category from the 2000 CHAS was applied to the number of renters and owners in 2009 to derived the distribution. Of the 272 renters in 2009 66 had income less than 30 percent AMI *Table 16*. Of the 194 owners 43 had incomes less than 30 percent AMI *Table 17*.

Table 16
Number of Renters by AMI

	2000	2009
<30% AMI	65	66
30-50% AMI	55	56
50-80% AMI	61	62
>80% AMI	84	87
Total	264	272

Source: HUD CHAS 2000 and James Wood.

Table 17
Number of Homeowners by AMI

	2000	2009
<30% AMI	37	43
30-50% AMI	26	31
50-80% AMI	47	54
>80% AMI	58	66
Total	168	194

Source: HUD CHAS 2000 and James Wood.

Table 18 shows the household income for each income category, the price range of an affordable home for that income category, the number homes in Wendover at that price range, the number of homeowners or renters by income categories and finally the surplus or deficit between the number of homeowners (demand) and the number of affordable homes (supply). The data show that for low income households 30-50 percent AMI there are 127 homes affordable for these households; i.e. supply exceeds demand by 53 units. For the 50-80 percent category, demand exceeds supply by 12 units and similarly for those households above 80 percent AMI, demand exceeds supply, in this case by 14 units. While there is a shortage of homes for the low and moderate income households—homes priced between \$130,729 to \$209,167—this is not as serious as it appears at first blush. Those low and moderate income households could buy a cheaper home, in other words move down in housing price to homes priced at less than \$130,729 where there is a surplus of homes. This may be a sound strategy given the difficulty many households have in qualifying for mortgage loans.

The affordability data indicate that affordable owner occupied housing is not a serious problem due to very low prices which reflect the deteriorating condition of the housing stock. There is a need for an infusion of new single family homes to revitalize the housing stock but most new detached home construction has occurred in West Wendover rather than Wendover City. The city should consider some CROWN Home possibilities. CROWN Homes are administered through Utah Housing Corporation. The CROWN “lease-to-own” program was developed in 1993 by Utah Housing Corporation to increase the availability of affordable housing for lower income Utahns. Using the CROWN program, a portion of the tenants’ monthly rent payments are put towards the purchase price of the home, which can be purchased after the fifteen-year rental period expires. Favorable terms are achieved through the use of tax credits.

Table 18
Surplus or Deficit of Affordable Homes by Selected AMI Level – 2009

	<30% AMI	30% - 50% AMI	50% - 80% AMI	>80 AMI
Household Income	\$19,410	\$19,410 - \$32,350	\$32,350 - \$51,760	>\$51,760
Price of Affordable Home	NA	<\$130,729	\$130,729-\$209,167	<\$209,167
Number of Homes in Price Range	NA	127	42	52
Number of Homeowners	NA	74	54	66
Surplus/(Deficit) of Units	NA	53	(12)	(14)

Source: HUD and James Wood.

The affordable price thresholds for rents in Wendover are presented in *Table 19*. These data show for example that a low income household (30-50% AMI) could afford a two bedroom unit that was priced between \$349 and \$640. Rents in Wendover are very low consequently affordable rental housing is available but much of this housing is low quality and deteriorating.

Through a survey of rental units in Wendover and West Wendover and discussions with property managers the average rental rates are estimated at \$375 for a one bedroom unit, \$500 for a two bedroom unit and \$630 for a three bedroom unit. These rents are well within the price range of the low (30-50% AMI) and moderate income (50-80% AMI) households.

Table 19
Apartment Rent Range for Renters at
Selected AMI Levels - 2009

Bedroom Type	Affordable Rent for Household at <30% AMI	Affordable Rent for Household at 30% - 50% AMI	Affordable Rent for Households at 50% - 80% AMI
One Bedroom	<\$294	\$294 - \$536	\$536 - \$900
Two Bedroom	<\$349	\$349 - \$640	\$640 - \$1,076
Three Bedroom	<\$397	\$397 - \$733	\$733 - \$1,238

Source: HUD.

As was the case with owner occupied housing in Wendover, rental housing is also very affordable, again largely due to the poor condition of much of the rental stock. The comparison of affordable rental units to number of renters by income category shows that there are sufficient affordable units to meet the demand for very low, low and moderate income renters *Table 20*. However, these data do not show the need for additional apartments to revitalize the rental stock. The survey of rental housing in Wendover and West Wendover showed that the vacancy rate for tax credit and rural development subsidized projects is very low. Currently the vacancy rate for these *subsidized* units is less than 4 percent. Although the data show there is a sufficient stock of affordable rental units in Wendover nevertheless there is a significant need for new, higher quality rental units to provide better housing alternatives and opportunities for the city's renter population

Table 20
Surplus or Deficit of Affordable Rental Units
by Selected AMI Levels - 2009

	<30% AMI	30% - 50% AMI	50- 80% AMI	>80 AMI
Number of Rental Units	80	145	90	10
Number Renters	66	56	62	87
Surplus/(Deficit)	14	89	28	(77)

Source: James Wood.

Characteristics of Rental Market

Detail characteristics on Wendover's rental market are provided by the 2000 Census. Since there has been no new rental units added to the inventory in the past ten years the characteristics in 2010 are likely very similar to what they were in 2000.

The median contract rent in 2000 was \$446 *Table 21*. This median has likely increased about 10 percent since 2000, bringing the median to around \$500. Average household size for all renters is 3.38 with Hispanic renters having larger households size of 4.02.

Table 21
Selected Characteristics for Rental Market - 2000

	Number
Median Contract Rent	\$446
Average Household Size	3.38
Average Household Size (Hispanic)	4.02
Median Year Structure Built	1979

Source: U.S. Census Bureau, STF (1), 2000 Census.

Wendover has a disproportionate share of large family (5 persons or more) renters. Nearly one out of every four renter households has at least 5 persons *Table 22*. This characteristic indicates a demand for three and four bedroom rental units. For Hispanic renters nearly 40 percent are households with at least five persons *Table 23*.

Table 22
Renter Households by Household Size - 2000

Number of Renter Households by Household Size	Renter Households	% Share
1-person household	44	16.7%
2-person household	51	19.3%
3-person household	53	20.1%
4-person household	49	18.6%
5-person household	34	12.9%
6-person household	19	7.2%
7-person household	14	5.3%
Total	264	100.0%

Source: U.S. Census Bureau, STF (1), 2000 Census.

Over half of renter households in Wendover have a head of household less than 35 years of age *Table 20*. There are very few senior renters, which indicates little need to explore the possibilities of senior rental housing. Nearly three quarters of all renters are families, which is reflected in the large household size of renters *Table 25*.

Table 23
Number of Hispanic Renter Households
by Household Size - 2000

Number of Renter Households by Household Size (Hispanic)	Renter Households
1-person household	12
2-person household	17
3-person household	30
4-person household	32
5-person household	29
6-person household	16
7-person household	12
Total	148

Source: U.S. Census Bureau, STF (1), 2000 Census.

Table 24
Renter Households by Age of Renter - 2000

Renter Households by Age of Householder	Renter Households	% Share
Householder 15 to 24 years	39	14.8%
Householder 25 to 34 years	103	39.0%
Householder 35 to 44 years	55	20.8%
Householder 45 to 54 years	37	14.0%
Householder 55 to 64 years	17	6.4%
Householder 65 to 74 years	10	3.8%
Householder 75 to 84 years	3	1.1%
Householder 85 years and over	0	0.0%
Total	264	100.0%

Source: U.S. Census Bureau, STF (1), 2000 Census.

Table 25
Renter Households by
Household Type - 2000

Renter Households by Household Type	Renter Households
Total Renter Households	264
Family households	194
Married couples	131
Other family households	63
Nonfamily household	70

Source: U.S. Census Bureau, STF (1), 2000 Census.

Forty six percent of all rental units are in detached or attached single-family homes or mobile homes *Table 26*. This is a relatively high percent for a rental inventory. Generally single-family homes and mobile homes account for no more than one-third of all rental units. These data indicate scarcity of traditional types of rental housing in Wendover; duplexes, four plexes, etc.

**Table 26
Rental Units by Units in Structure - 2000**

Rental Units by Units in Structure	Occupied Rental Units
1 detached	52
1 attached	10
2 units	11
3 or 4 units	42
5 to 9 units	22
10 to 19 units	62
20 to 49 units	7
50 or more units	0
Mobile home units	59
Total	264

*Source: U.S. Census Bureau, STF (3),
2000 Census.*

Eighty five percent of all rental units in Wendover are studio, one and two bedroom units. Only 15 percent of the rental inventory has three or more bedrooms. Given that 25 percent of all renter household have five or more persons there is a need for rental units with three or more bedrooms *Table 27*. Consequently overcrowding is a problem for the local rental market.

**Table 27
Occupied Rental Households
by Number of Bedrooms - 2000**

Occupied Rental Units by Number of Bedrooms	Occupied Rental Units
No Bedroom	26
1 Bedroom	98
2 Bedrooms	100
3 Bedrooms	36
4 Bedrooms	3
5 or more Bedrooms	0
Total	264

Source: U.S. Census Bureau, STF (3), 2000 Census.

Profiles and photographs of selected rental units in Wendover are below:

Name	Two Four Plexes
Address	180 Gardenia Way, Wendover
Units	8; Two Bdrms
Type	Market
Rents	\$550
Condition	Approx. 20 Years Old, Average



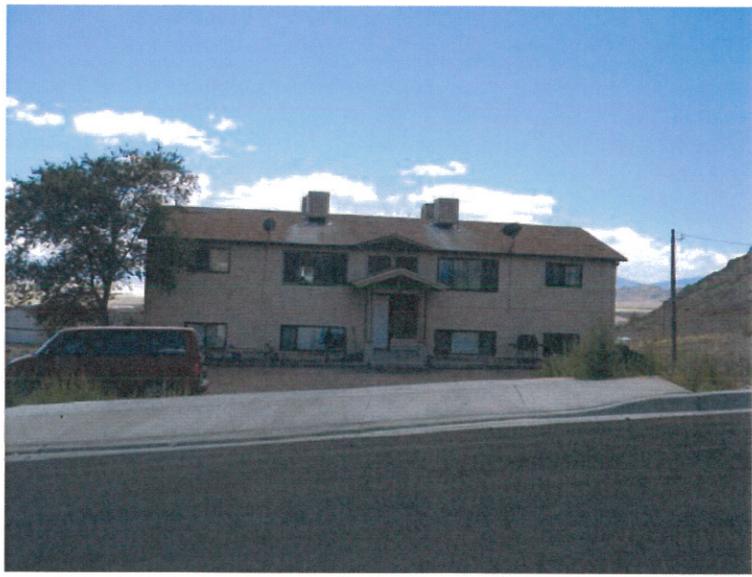
Name	Two Four Plexes
Address	600 Aria Blvd
Units	8; Two Bdrms
Type	Market
Rents	\$550
Condition	Approx. 20 Years Old, Average



Name	Briarwood Apartments
Address	145 Gardenia Way, Wendover
Units	32 Units; One Bdrm, Two Bdrm
Type	HUD Project Based
Rents	Tenants Pay 30% of Income for Rent and Util.
Condition	Approx. 20 Years Old, Average



Name	Four Plex
Address	663 Aria Blvd, Wendover
Units	4; Two Bedroom
Type	Market
Rents	\$550
Condition	Approx. 20 Years Old, Average



Name	Needle Point
Address	650 Odle Drive, West Wendover
Units	72 units; One Bdrm, Two Bdrm
Type	Market
Rents	One Bedroom \$375, Two Bdrm \$450
Condition	Over 25 Years Old, Average



APPENDIX
VITA – James Wood

VITA

JAMES A. WOOD

P.O. Box 58107
Salt Lake City, Utah 84158

Phone: (801) 581-7165 (office), fax (801) 581-3354
(801) 583-0392 (residence)

EDUCATION

University of Utah, Salt Lake City, Utah; B.S. Finance, June 1967.
University of Utah, Salt Lake City, Utah; Graduate Student in Economics, 1970-1974.

MILITARY EXPERIENCE

United States Army, Military Intelligence 1968-1970; Vietnam 1969-1970.

EMPLOYMENT EXPERIENCE

2002 to present, Director, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah.
1975 to 2002, Senior Research Analyst, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah, Salt Lake City, Utah.
1975 to present, private consultant, James A Wood & Associates, Salt Lake City, Utah.
1974-1975 - Legislative Aide on economic issues for Senator Frank E. Moss, Washington, D.C.
1972-1974 - Research Analyst, Bureau of Economic and Business Research.
1970 (summer) - Accountant, Jacobsen Construction Company, Salt Lake City, Utah.
1966-1967 - Accountant, Utah Idaho Sugar Company, Salt Lake City, Utah.

ADVISORY COMMITTEES AND BOARDS

Ex-Officio Member of the Board of Trustees Downtown Alliance Salt Lake City.
Committee Member of Revenue Assumption Committee, State of Utah.
Board Member of NeighborWorks Salt Lake City
President of Wasatch Economic Forum 2008-2009
Advisory Board Member of the Salt Lake County Housing Trust Fund 2009-2011
Board Member Salt Lake Home Builders Association

UNIVERSITY RESEARCH STUDIES AND PUBLICATIONS

"Utah's Home Building Industry: Recovery and Challenges", Utah Economic and Business Review, Volume 70 Number 1, Spring 2010.

Residential and Nonresidential Construction Trends and Forecast for Utah and Wasatch Front Counties. David Eccles School of Business, University of Utah. Prepared for Summit Materials, May 2010.

Utah's Sports Sector: Economic Activity and Impact. David Eccles School of Business, University of Utah. Prepared for Utah's Sports Commission. February 2010.

"Utah's Housing Market: Present Perspective, Future Prospects", Utah Economic and Business Review, Volume 69 Number 1, Spring 2009.

A Review of the Proposed Home Run Grant Program, David Eccles School of Business, University of

Utah. Prepared for Utah's Housing Action Coalition. February 2009.

Economic Impact of Bonding for Capital Facilities in Utah, David Eccles School of Business, University of Utah. Prepared for Commissioner's Office of Higher Education. January 2009.

The Economic Impact of Thanksgiving Point on the Utah County Economy. David Eccles School of Business, University of Utah. Prepared for Thanksgiving Point Foundation. November 2008.

Foreclosures in Utah Likely to Hit Record. David Eccles School of Business, University of Utah. Prepared for Foreclosure Prevention Taskforce, October 2008.

Economic Baseline Study for Vernal and Ashley Valley, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Tightline Community Resources, September 2008.

Pathways Project: A Study of the Cost of Services for Chronically Homeless Individuals in Salt Lake County. Funded by Utah State Department of Community and Culture, August 2008

The Changing Structure and Current Baseline of the Davis County Economy, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Davis County Community and Economic Development, June 2007.

Competitive Role of Commercial Development at West Bench, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Kennecott Land. January 2007.

An Analysis of the Land Use and Value of Weber State University's Mountainside Parcel, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Weber State University. Co-authored with Frank Lilly. December 2006.

The Changing Structure and Current Baseline of Draper City, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Draper City Office of Economic Development. Co-authored with Frank Lilly. September 2006.

West Bench Economic Impact: Economic, Demographic and Fiscal Analysis, Bureau of Economic and Business Research, David Eccles School Business, University of Utah. Prepared for Kennecott Land. Co-authored with Pam Perlich. October 2005.

Economic Impact of Affordable Housing: Construction, Rehabilitation and Assistance Programs, Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Utah Housing Coalition, September 2004.

"The Utah Economy: Outlook and Review", Utah Economic and Business Review, Volume 64, Numbers 1 and 2, January/December 2004.

Affordable Housing in Utah Cities: New Construction, Building Fees and Zoning. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for Fannie Mae Utah Partnership Office, Utah Housing Corporation, Envision Utah and The Olene Walker Housing Trust Fund, June 2003.

Changing Economic Structure of Salt Lake City's Central Business District, 1990 to 2002. Bureau of

Economic and Business Research, David Eccles School of Business, University of Utah. Prepared for The Downtown Alliance of Salt Lake City, 2002.

■The Impact of Changing Economics and Demographics on the Characteristics of New Homes and Housing Densities (Part II)•, Utah Economic and Business Review, Volume 61 Numbers 9 & 10, September/October 2001.

■Utah's Residential Construction: A Look at Past and Present Construction Cycles (Part I)•, Utah Economic and Business Review, Volume 61, Numbers 1 & 2, January/February 2001.

A Demand and Use Analysis of Research Park Land and Buildings 2000 to 2015. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for University of Utah Administration. Co-authored with Jan Crispin-Little, May 2000.

■Single-Family Construction Bucks Trend•, Utah Construction Report, Volume 42 No 2. April, May, June 1999, published by Bureau of Economic and Business Research, University of Utah.

■A Closer Look: Nonresidential Construction in Utah 1985 to 1998•, Utah Economic and Business Review, Volume 59, Numbers 5 and 6, May/June 1999.

■Residential Construction Remains Surprisingly Strong•, Utah Construction Report, Volume 42 No 1. January, February, March 1999, published by the Bureau of Economic and Business Research, University of Utah.

■Construction Value Reaches New High•, Utah Construction Report, Volume 41 No 4. October, November, December 1998, published by the Bureau of Economic and Business Research, University of Utah.

■Retail Trends and the Need for Downtown Revitalization•, Utah Economic and Business Review, Volume 58, Numbers 11 and 12, November/December 1998.

Gateway Retail Development and Downtown Revitalization. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Boyer Company and Salt Lake City Council, October 1998.

"Overview of Construction and Housing in the Utah Economy", Economic Report to the Governor, 1998.

Utah Technology Finance Corporation: Economic Development Policy and Economic Impacts. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Utah Technology Finance Corporation, June 1998.

"Housing Prices and Affordability in Utah", Utah Economic and Business Review, Volume 57 / Numbers 5 and 6, May/June 1997.

Demographic and Economic Trends for Utah, U.S., the Rocky Mountain Region and Hermes' Market Areas. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Hermes Associates. Coauthored with Jan Crispin-Little. March 1997.

"Housing Price Trends in Utah 1980-1996", Economic Report to the Governor, 1997.

Impediments to Low and Moderate Income Housing in Unincorporated Salt Lake County and Selected Municipalities. Bureau of Economic and Business Research, David Eccles School of Business,

University of Utah. Report for Salt Lake County Office of Economic Development and Job Training. December 1996.

The University of Utah Research Park: A Review of Policy and History. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared University of Utah Research Park Administration, December 1996.

Demographic and Economic Trends and Forecasts for Utah and Idaho. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Oldcastle Materials. Coauthored with Jan Crispin-Little. February 1996.

"Construction Cycles in Utah" Utah Economic and Business Review, Volume 55 Numbers 11 and 12, November/December 1995.

"Losing Ground: Housing Affordability and Low-Income Renters in Utah", Utah Economic and Business Review, Volume 55 Numbers 9 and 10, September/October 1995.

"The Performance of Wage Rates in Utah 1982-1993" Utah Economic and Business Review, Volume 55 Numbers 3 and 4, March/April 1995. Coauthored with Kenneth E. Jensen, Utah Department of Employment Security.

Demographic, Economic and Export Statistics for the Salt Lake City Airport Authority. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Reported prepared for Salt Lake Airport Authority. May 1995.

A Study of the Custom Fit Training Program. Bureau of Economic and Business Research, David Eccles School of Business, University of Utah. Report prepared for Utah State Office of Education. Coauthored with Jan Crispin-Little. March 1995.

"Utah Wage Levels" Economic Report to the Governor, 1995. Coauthored with Kenneth Jensen.

"Management of State Trust Lands in Washington County" Utah Economic and Business Review, Volume 54, Numbers 7 and 8, July/August 1994. Bureau of Economic and Business Research, University of Utah, 1994.

"The Changing Demographic and Economic Structure of Washington County, 1970-1993." Utah Economic and Business Review, Volume 54, Numbers 1 and 2, January/February 1994. Bureau of Economic and Business Research, University of Utah, 1994.

An Economic Analysis for the Management of State Lands in Washington County. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of State Lands and Forestry, Department of Natural Resources, State of Utah, March 1994.

"Economic Impact of Utah Housing Finance Agency's New Residential Mortgage Programs" Utah of Economic and Business Review, Volume 53, Numbers 11 and 12, November/December 1993. Bureau of Economic and Business Research, University of Utah December, 1993.

Economic Analysis for the Salt Lake Courts Complex. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Facilities and Construction Management,

Department of Administrative Services, State of Utah, October 1992.

"Economic Well-Being of Utah Households: 1979-1989" *Utah Business and Economic Review*, Volume 52, Numbers 4 and 5, April/May, 1992. Coauthored with R. Thayne Robson. Bureau of Economic and Business Review, Bureau of Economic and Business Research, University of Utah, May 1992.

Economic Impact of the Utah Technology Finance Corporation on the Utah Economy. Bureau of Economic and Business Research, University of Utah. Coauthored with Jan Elise Crispin. Report prepared for the Utah Technology Finance Corporation, State of Utah, 1992.

"Manufacturing in the West Since World War II." *Utah Business and Economic Review*, Volume 51, Number 3, March 1991. Bureau of Economic and Business Research, University of Utah, 1991.

"Utah's Adjustment to Declining Defense Budgets." *Utah Economic and Business Review*, Volume 50, Numbers 11 and 12, November/December 1990. Coauthored with Jan Elise Crispin. Bureau of Economic and Business Research, University of Utah, 1990.

"Utah's Electronics Industry." *Utah Economic and Business Review*, Volume 50, Number 9, September 1990. Bureau of Economic and Business Research, University of Utah, 1990.

Electronics Target Industry Study. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1990.

"Report on Women-Owned Business in Utah." *Utah Economic and Business Review*, Volume 50, Number 3, March 1990. Coauthored with Rose Ann Watson. Bureau of Economic and Business Research, University of Utah, 1990.

Report on Women-Owned Business in Utah. Bureau of Economic and Business Research, University of Utah. Report prepared for the Women's Business Development Office, Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1990.

"Utah Housing Finance Agency: The Economic Impact of Mortgage Programs for New Residential Units." *Utah Economic and Business Review*, Volume 49, Number 9, September 1989. Bureau of Economic and Business Review, University of Utah, 1989.

Economic Impact of Utah Housing Finance Agency Programs on the Utah Economy. Bureau of Economic and Business Research, University of Utah. Report prepared for the Utah Housing Finance Agency, 1989; annual report 1989 to present.

"Utah's Aerospace Industry." *Utah Economic and Business Review*, Volume 49, Number 8, August 1989. Bureau of Economic and Business Research, University of Utah, 1989.

Utah's Aerospace Industry. Bureau of Economic and Business Research, University of Utah. Coauthored with John Brereton. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1989.

The Economic Impact of a Catastrophic Earthquake on Utah's Financial Institutions. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Comprehensive Emergency Management, Financial Institution Emergency Preparedness Committee, June 1989.

Public Education and Economic Development. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1989.

The Characteristics and Potential of the Health Care and Weight Control/Fitness Industries of St. George. Bureau of Economic and Business Research, University of Utah. Prepared for St. George City, October 1988.

Economic Profile Summit County/Park City. Bureau of Economic and Business Research, University of Utah. Report Prepared for Summit County/Park City Chamber of Commerce and Visitors Bureau, September 1988.

The Economic Impact on Utah of the U.S. Petroleum Corporation's Wax Processing Plant. Report for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, October 1987.

Projected Employment Growth Rates for State Government. Bureau of Economic and Business Research, University of Utah. Report prepared for Wallace Associates, Salt Lake City, Utah, October 1987.

A Proposal for US West Advanced Technologies. Bureau of Economic and Business Research, University of Utah. Coauthored with Jan Elise Crispin and Shipley Associates. Prepared for Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1987.

"The Utah Housing Market: Demographic and Economic Trends." Utah Economic and Business Review, Volume 47, Number 3, March 1987. Bureau of Economic and Business Research, University of Utah, March 1987.

Utah as a Location for Frozen Prepared Food Manufacturing. Bureau of Economic and Business Research University of Utah. Prepared for the Division of Business and Economic Development, State of Utah, 1986.

Capital Flow in Utah. Bureau of Economic and Business Research, University of Utah, 1986. Report prepared for Governor's Economic Development Conference, February 1986.

The Strategy and Economic Impact for the Development of a Western Town in Moab Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, June 1985.

"The Changing Conditions of The Salt Lake County Apartment Market." Utah Economic and Business Research, Volume 45, Number 3, March 1985. Bureau of Economic and Business Research University of Utah, 1985.

"Utah's Expanding Service Sector," Utah Economic and Business Review, Volume 44, Number 9, September 1984. Coauthored with Constance C. Steffan. Bureau of Economic and Business Research, September 1984.

Electronics Target Industry. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Business and Economic Development, Department of Community and

Economic Development, State of Utah, September 1984.

"Salt Lake County Apartment Construction Activity," Utah Economic and Business Review, Volume 44, Number 6, June 1984. Bureau of Economic and Business Research, University of Utah, 1984.

Service Sector Target Industry Study. Bureau of Economic and Business Research, University of Utah, May 1984. Coauthored with Constance C. Steffan. Report prepared for Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, May 1984.

Survey of Utah's Exporting Firms. Bureau of Economic and Business Research, University of Utah, 1983. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1983.

Market Feasibility Study for Apartment Development. Bureau of Economic and Business Research, University of Utah. Report prepared for Triad Utah, December 1983.

Market Feasibility Study for Luxury Condominiums. Bureau of Economic and Business Research, University of Utah. Report prepared for Triad Utah, October 1983.

"Natural Resource Development and Small Business Opportunities in the Uintah Basin." Utah Economic and Business Review, Volume 43, Numbers 4 and 5, April/May 1983. Bureau of Economic and Business Research, University of Utah, 1983.

Natural Resource Development and Small Business Opportunities in the Uintah Basin. Bureau of Economic and Business Research, University of Utah. Report prepared for the Small Business Development Center, Salt Lake City, Utah, June 1983.

"The Electronics/Information Processing Industry in Utah," Utah Economic and Business Review, Volume 42, Number 10, October 1982. Bureau of Economic and Business Research, University of Utah, 1982.

The Electronic Components and Information Processing Industry and State Industrial Development Programs. Bureau of Economic and Business Research, University of Utah, 1982. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1982.

"Utah Homebuilding: Decline, Structural Changes, and Demand Factors." Utah Economic and Business Review, Volume 42, Number 9, September 1982. Bureau of Economic and Business Research, University of Utah, 1982.

"Utah's Thrust Belt: Exploration, Development and Economic Impacts." Utah Economic and Business Review, Volume 41, Number 1, January 1981. Bureau of Economic and Business Research, University of Utah, 1981.

Demand for Cold and Frozen Storage in Utah and the Mountain States. Bureau of Economic and Business Research, University of Utah. Report prepared for the Division of Business and Economic Development, Department of Community and Economic Development, State of Utah, 1980.

Proposed Industrial Park Development in Grand County. Bureau of Economic and Business Research,

University of Utah. Report prepared for Division of Economic and Industrial Development, Department of Community and Economic Development, State of Utah, October 1979.

Utah Labor Market Conditions for Manufacturing Assemblers and Electronic Technicians 1979. Coauthored with Randy Rogers and Ronda Brinkerhoff. Bureau of Economic and Business Research, University of Utah, 1979.

Utah: A Profitable Location for Headquarters and Administrative Office Facilities. Bureau of Economic and Business Research, University of Utah, September 1979. Report prepared for Division of Economic and Industrial Development, Department of Community and Economic Development, State of Utah, 1979.

Utah Demand for Bricks 1978, 1985, 1990. Bureau of Economic and Business Research, University of Utah. Coauthored with Mark Linford. Report prepared for Interstate Brick, Entrada Industries, July 1979.

Market Feasibility Study for Kaolin Clay Production in Utah. Bureau of Economic and Business Research, University of Utah, May 1979. Coauthored with Mark Linford. Report prepared for Office of Small Business Development, Department of Community and Economic Development, State of Utah, 1979.

Utah: A Profitable Location for the Machinery Industry. Bureau of Economic and Business Research, University of Utah, 1978. Report prepared for Division of Industrial Development, Department of Development Services, State of Utah, 1978.

"Demand for Housing in Salt Lake County." Real Estate Activities in Salt Lake Davis, Weber, Utah and Cache Counties, Fall 1978. Utah Real Estate Research Committee and Bureau of Economic and Business Research, University of Utah, 1978.

An Analysis of the Clay Roofing Tile Market in Utah. Bureau of Economic and Business Research, University of Utah, 1978. Report prepared for Interstate Brick, Entrada Industries, March 1978.

Sandy: An Economic Profile and Land Use Requirements. Bureau of Economic and Business Research, University of Utah. Coauthored with John Brereton and Randall Rogers. Report prepared for Sandy City Planning Office, January, 1977.

Demand for Selected Steel Products. Bureau of Economic and Business Research, University of Utah, October 1976. Coauthored with Dwight Israelsen, Robert Wood and Randall Rogers. Report prepared for Steelco Corporation, Salt Lake City, Utah, 1976.

A Study of the Economic Potential of the Great Salt Lake State Park. Bureau of Economic and Business Research, University of Utah, September 1976. Coauthored with John Brereton and Janet Kiholm. Report prepared for Division of Parks and Recreation, Department of Natural Resources, State of Utah, 1976.

Married Student Housing Survey. Bureau of Economic and Business Research, University of Utah, August 1976. Report prepared for Housing Management, University of Utah, 1976.

"The Changing Composition of the State Budget," Utah Economic and Business Review, Volume 36, Numbers 4 and 5, April/May 1976. Bureau of Economic and Business Research, University of Utah, 1976.

"Utah Building Activity 1970-1975." Real Estate Activities in Salt Lake, Davis, Weber, Utah and Cache Counties, Fall 1975. Coauthored with Kathy Watanabe. Utah Real Estate Research Committee and the Bureau of Economic and Business Research, University of Utah, 1975.

"Condominium Developments in Utah," Utah Economic and Business Review, Volume 34, Number 9, September 1974. Bureau of Economic and Business Research, University of Utah, 1974.

Electronics Industry: Location Potential in Utah. Bureau of Economic and Business Research, University of Utah, June 1973. Coauthored with Jean H. Hanssen. Report prepared for the Division of Industrial Development, Department of Development Services, State of Utah, 1973.