
MAD RIVER VALLEY 2010 ANNUAL DATA REPORT



ACKNOWLEDGMENTS

This report was authored by Joshua Schwartz, Executive Director of the Mad River Valley Planning District. MRVPD Interns Jeff Guevin and Caitrin Noel were instrumental in tabulating and assessing data for several sections of the report.

The data used in this report originates from a variety of public sources, as well as contributions from Sugarbush Resort, Mad River Glen, Mad River Valley Chamber of Commerce, Friends of the Mad River, and the Mad River Watershed Conservation Partnership.

Cover Photography by Mike Brouillette

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INTRODUCTION

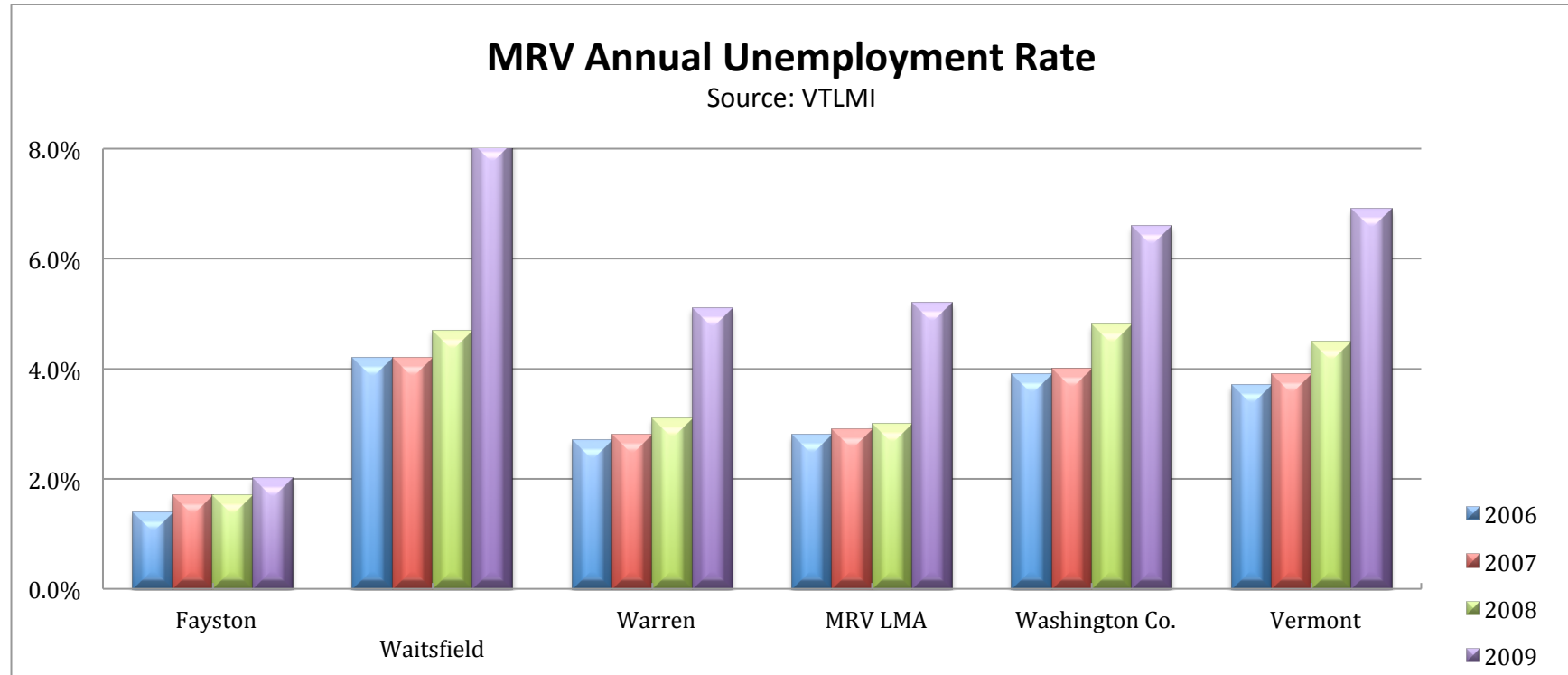
This report was prepared by the Mad River Valley Planning District to address the requirements of the 1998 Memorandum of Understanding, and provide information for community planning purposes. Information used in this report was publicly available, except where noted. Sugarbush Resort contributed greatly to the creation of this report and provided data in conjunction with the MOU.

The Mad River Valley Planning District was created in 1985 by the Towns of Fayston, Waitsfield and Warren. The Purpose of the Planning District is to *carry out a program of planning for the future of the Mad River Valley. The planning program shall be directed toward the physical, social, economic, fiscal, environmental, cultural and aesthetic well being of the member Towns and its inhabitants* (MRVPD Articles of Agreement, March 1985).

The Mad River Valley Planning District employs a full time Executive Director. The District is governed by a Steering Committee consisting of a Selectboard Member and a Planning Commission member from each of the three member Towns, a business representative from the Mad River Valley Chamber of Commerce, and a non-voting representative from Sugarbush. The Central Vermont Regional Planning Commission (CVRPC) holds a non-voting ex-officio seat. The three towns and Sugarbush fund the Planning District equally.

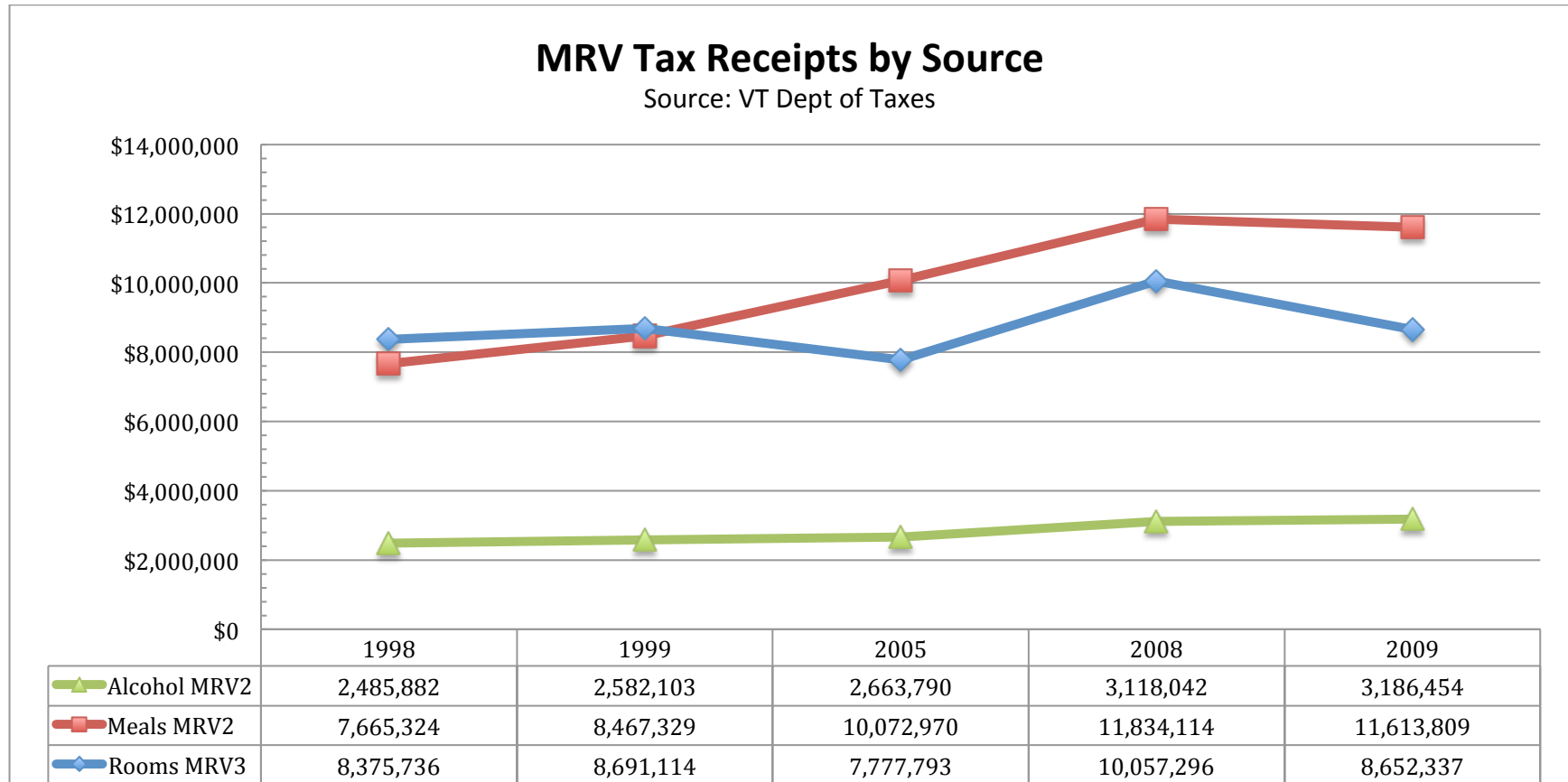
SECTION I: ECONOMICS

The Economics section includes Items #35 & 36 from the Memorandum of Understanding.



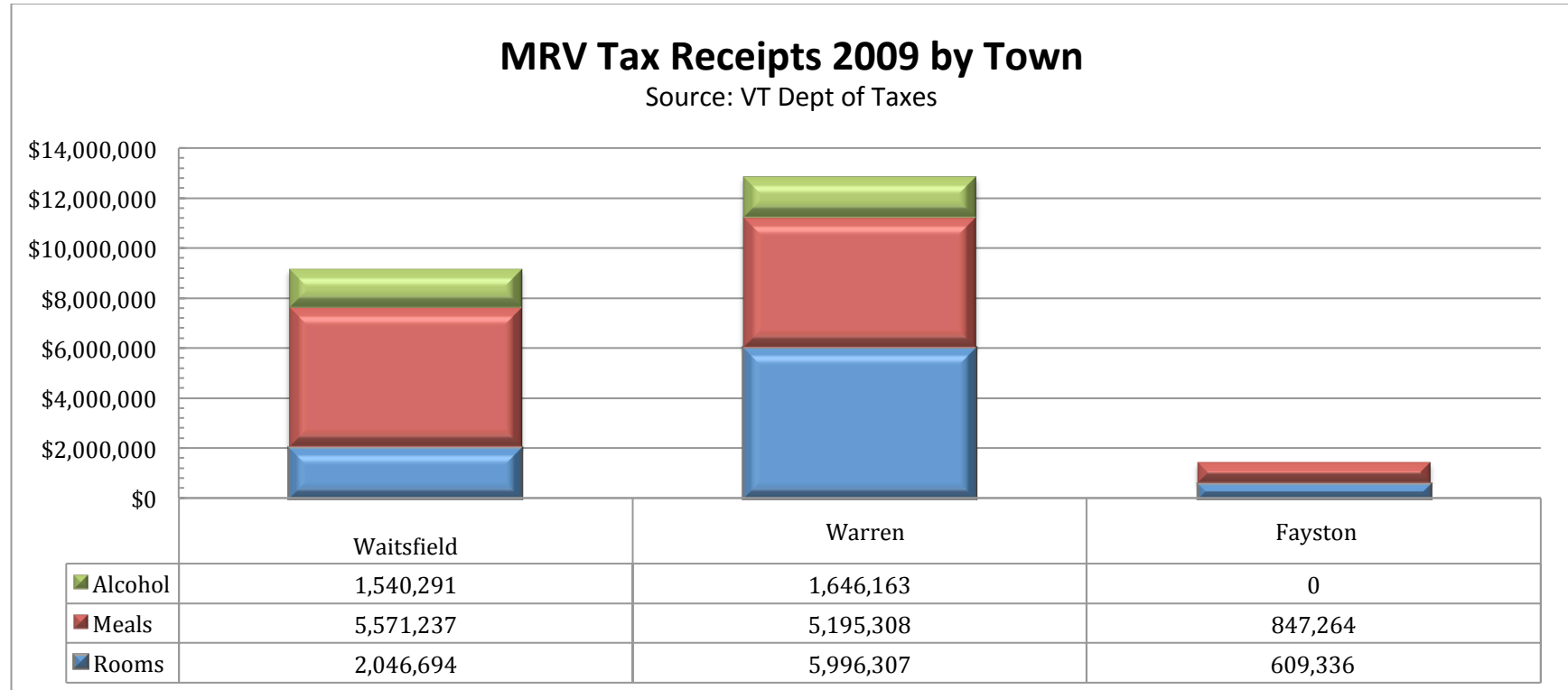
Employment data used in this report comes from the Vermont Department of Labor's Economic & Market Information Info Center (VTLMi). In December 2008, the National Bureau of Economic Research stated that the U.S. had been in a recession since December 2007, and in September 2010 announced that the 2008/2009 recession ended in June 2009. The Mad River Valley is not immune to these economic hardships. The sharp rise in unemployment between 2008 and 2009 is shared across the State, County, and broader Valley. However, the sharpest rise has taken place in Waitsfield, at 8.1% in 2009. This is in contrast to Fayston, which most recently experienced an unemployment rate of 2.0%. Despite these contrasts, the Mad River

Valley Labor Market Area (Fayston, Waitsfield, Warren & Moretown) continues to track lower than the state at 5.2% vs 6.9% in the most recent year.



The state of Vermont collects taxes on accommodations, restaurant meals and alcohol sold within the state. While the revenue collected from these taxes in MRV towns does not directly flow to the MRV, the trend informs as to the health of these sectors in the community.

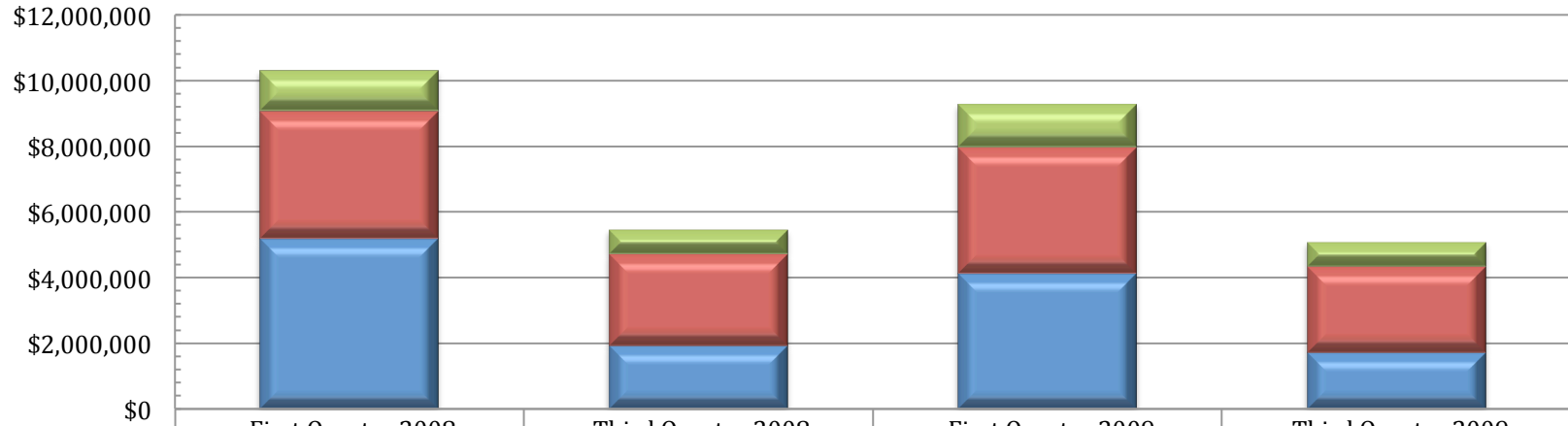
After a period of either increases or steady gains, the most recent economic downturn has suppressed revenue gains from restaurant meals, sales of alcohol, and accomodations. Most drastic reduction is found in rooms between 2008 and 2009. Alcohol sales remain steady. It should be noted that Fayston tax receipts are not included in the Meals or Alcohol data, as several years of data were not available as the VT Department of Taxes does not release the data when a town has insufficient establishments to preserve anonymity.



A 2009 snapshot at tax receipts by MRV town illustrates the significance of the accomodation sector within the Town of Warren. As stated previously, alcohol data is not available for the Fayston. However, meal data was available for this particular year.

MRV Tax Receipts 2008 & 2009 by Quarter

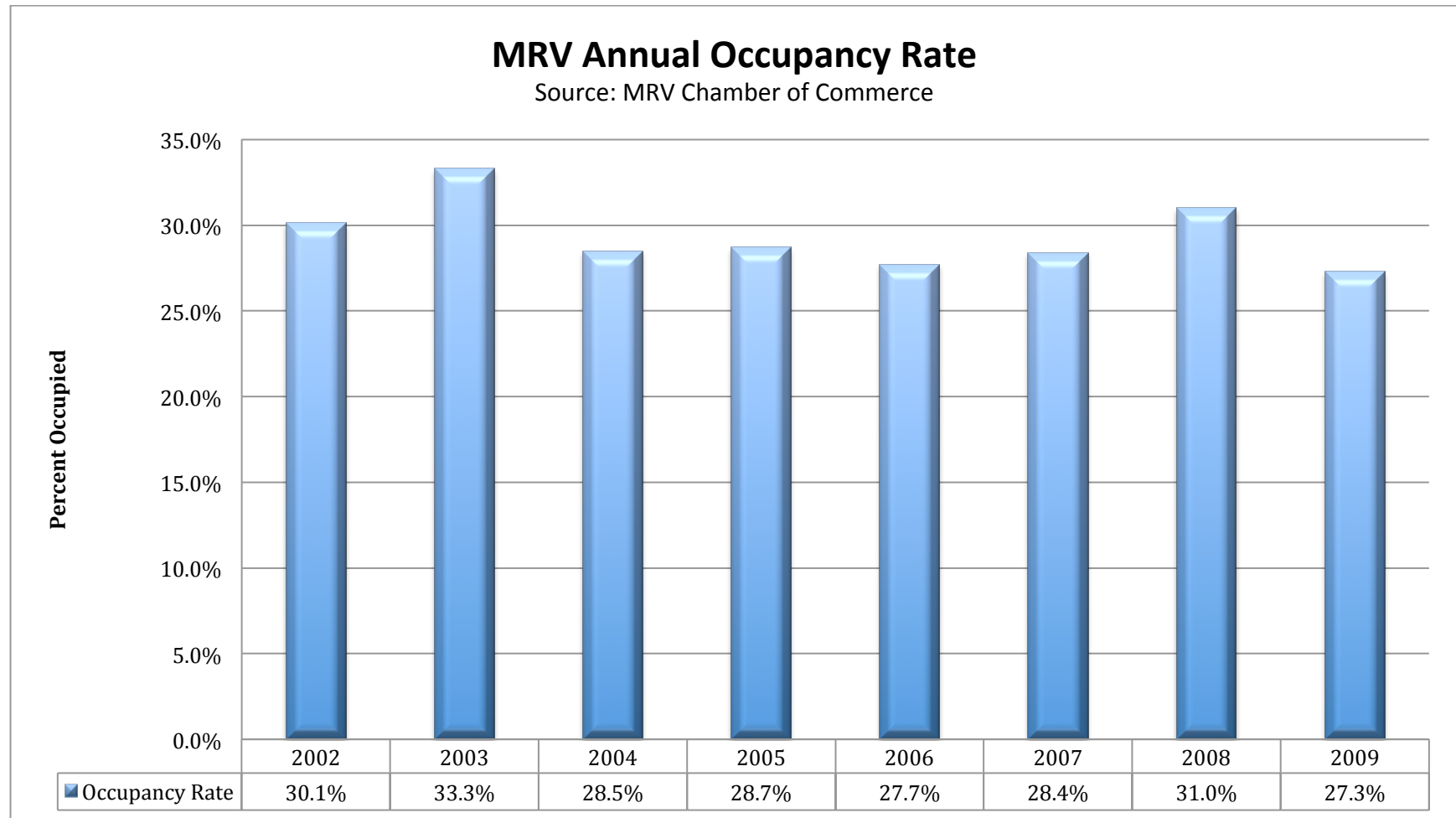
Source: VT Dept of Taxes

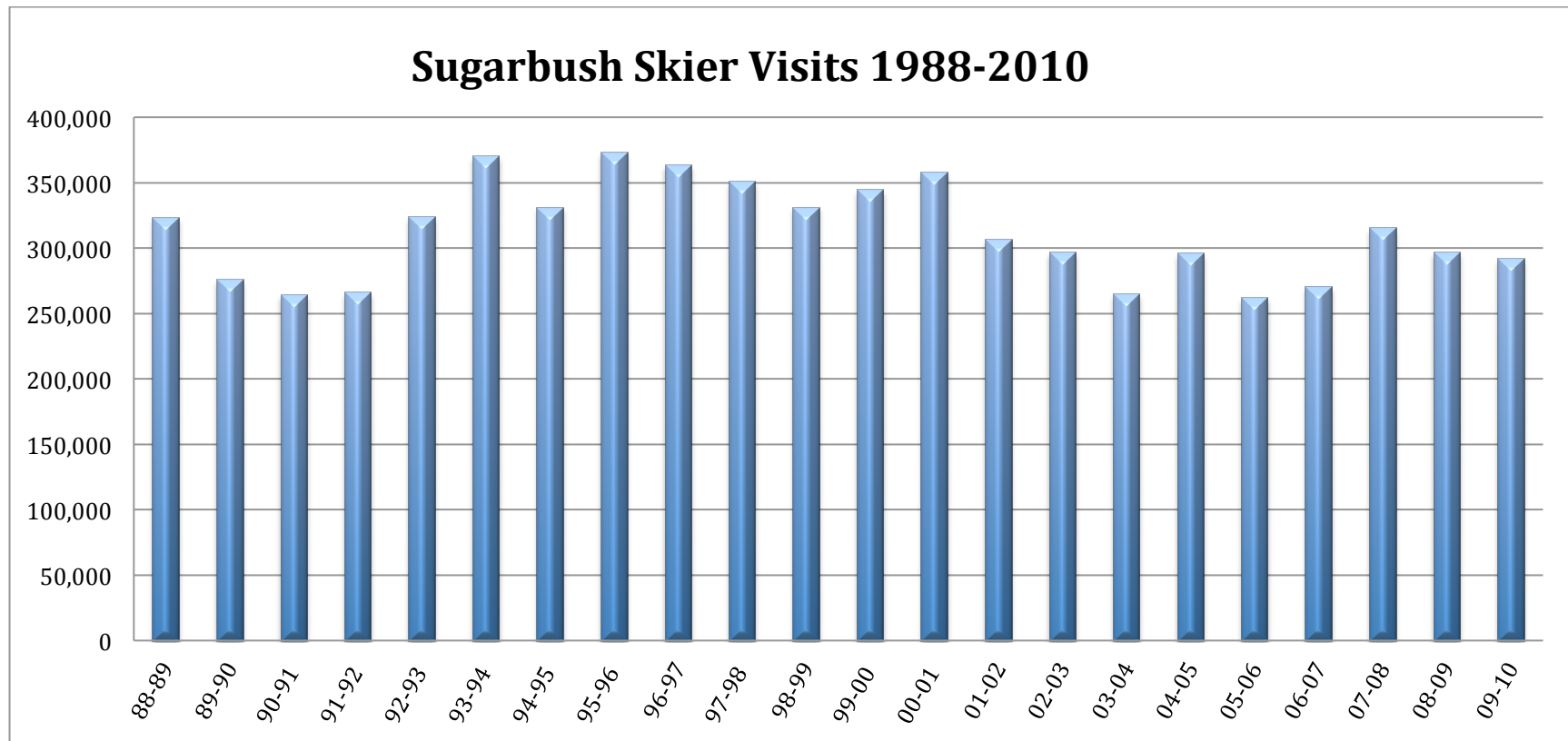


Alcohol MRV2	1,225,551	743,148	1,311,743	739,028
Meals MRV2	3,889,711	2,784,974	3,827,646	2,639,724
Rooms MRV3	5,185,631	1,946,149	4,140,588	1,725,113

A look at tax receipts by the first and third quarter provides a perspective of winter (Jan-March) vs summer (July-Sept) activities most closely related to tourism. Despite the dominance of winter activity, the third quarter receipts provide substantial revenue for the MRV. The percentage drop in room and alcohol receipts between first and third quarter is the most significant, while meal receipts drop less significantly. Also of note is the reduction in overall receipts between 2008 and 2009 is the least within the third quarter. These are quarters where room receipts traditionally play a less active role.

Tourism remains a driving force behind the Mad River Valley economy. Based on data provided by the Mad River Valley Chamber of Commerce, 2009 saw a 3.7% decrease in annual occupancy. The resultant occupancy in 2009 of 27.3% is in contrast to a 7 year high of 33.3% in 2003. The occupancy rate does not illustrate changes to the MRV's overall bed base. Anecdotal evidence suggests that the overall bed base has shrunk in the past decade.

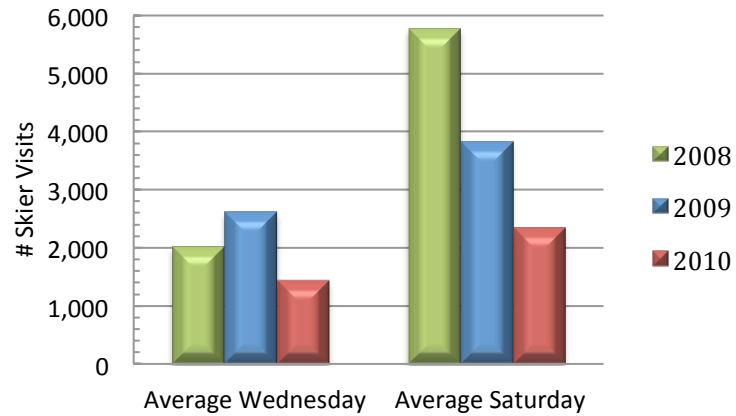




The weather during the 2009-2010 snowmaking season caused several challenges for snowmaking operation. November was warmer than normal, December was colder than normal, and January's weather was concurrent with historic temperatures. A noticeable lack of natural snow for those months called for the need to rely on manmade snow at both areas for guests needs. At the end of February, Sugarbush received a significant snowstorm that produced 50+ inches of snow at the summit and 30+ inches at the base, however the warmer than normal temperatures continued. Minimal precipitation occurred during March and temperatures remained above normal. The lack of natural snowfall and the above normal temperatures shortened the snowmaking operations, which ceased on February 2nd at Mt. Ellen and February 15th at Lincoln Peak. Sugarbush received 186 inches of natural snowfall during the 2009-2010 snowmaking season compared to 283 inches during the 2008-2009 season. Despite 34% less snow, skier visits were 1.7% lower in 2009-10 then 2008-09.

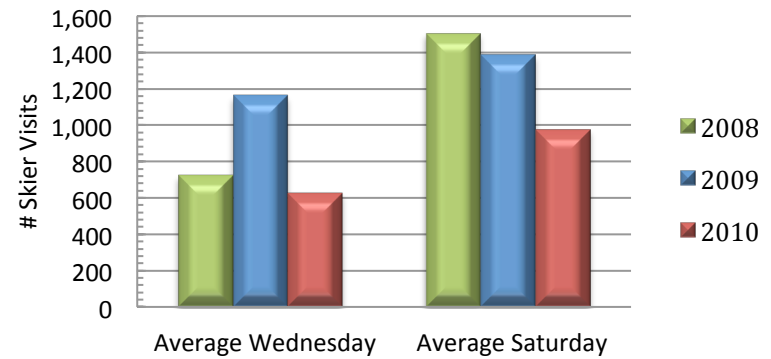
Sugarbush Average Skier Visits

Monitoring Days



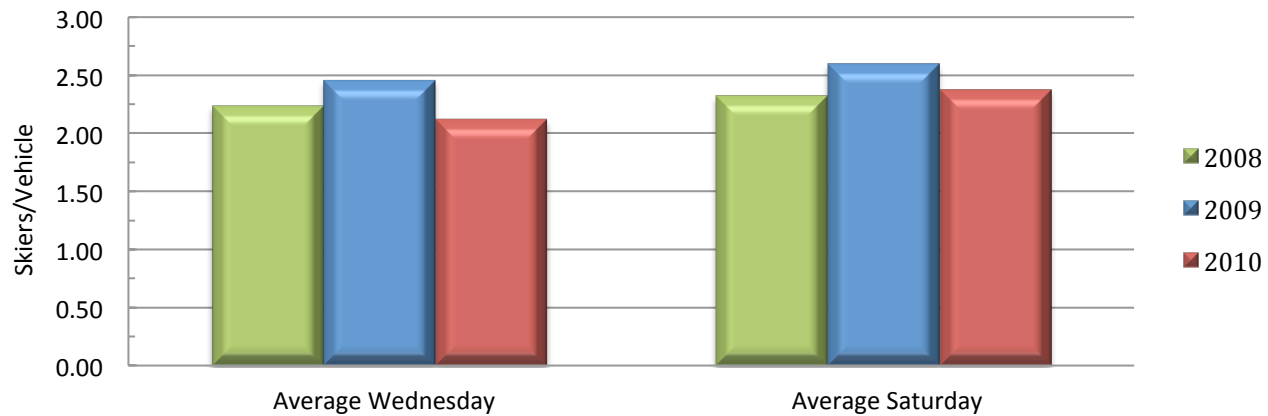
Sugarbush Average Vehicle Count

Monitoring Days

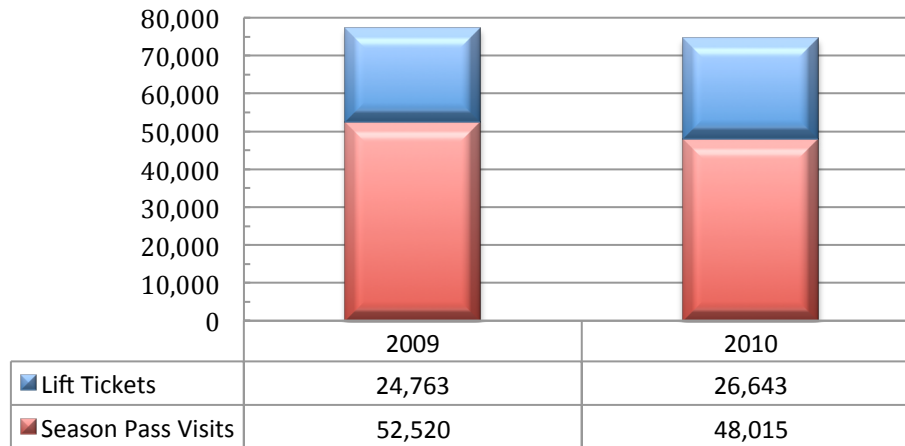


Sugarbush Average Skiers Per Vehicle

Monitoring Days



Mad River Glen Total Annual Visits

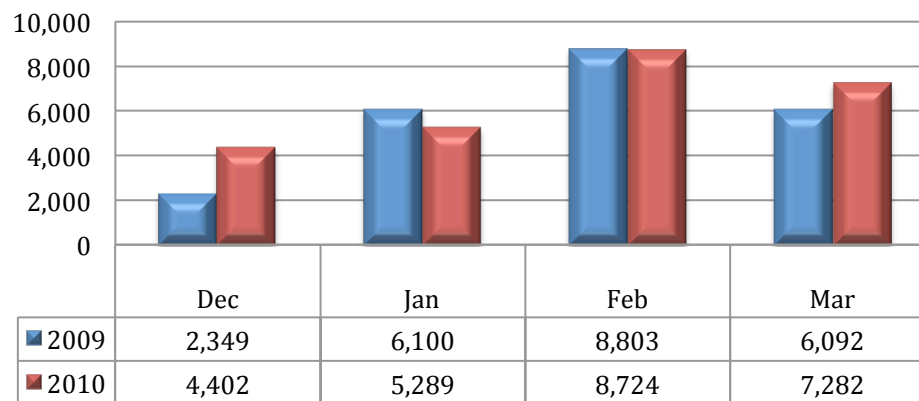


Mad River Glen is not part of the MOU, but has graciously provided the data to the left for inclusion in this report. The data provided is not meant for comparison to Sugarbush Resort, but simply to provide a snapshot of Mad River Glen. Mad River Glen calculates skier visits by adding individual lift tickets with season passes based on a visit formula.

Mad River Glen saw a slight drop in overall visits by 3.4% between the 2009 and 2010 seasons, despite a reduction in snowfall by 34% during this period. This decrease is attributed to season passes; individual lift tickets increased by 7.6% during this time period. Overall, season passes attribute approximately 66% of Mad River Glen's total visits.

The weather pattern mentioned previously attributed to the monthly ticket sales detailed in the lower graph.

Mad River Glen Lift Ticket Sales by Month



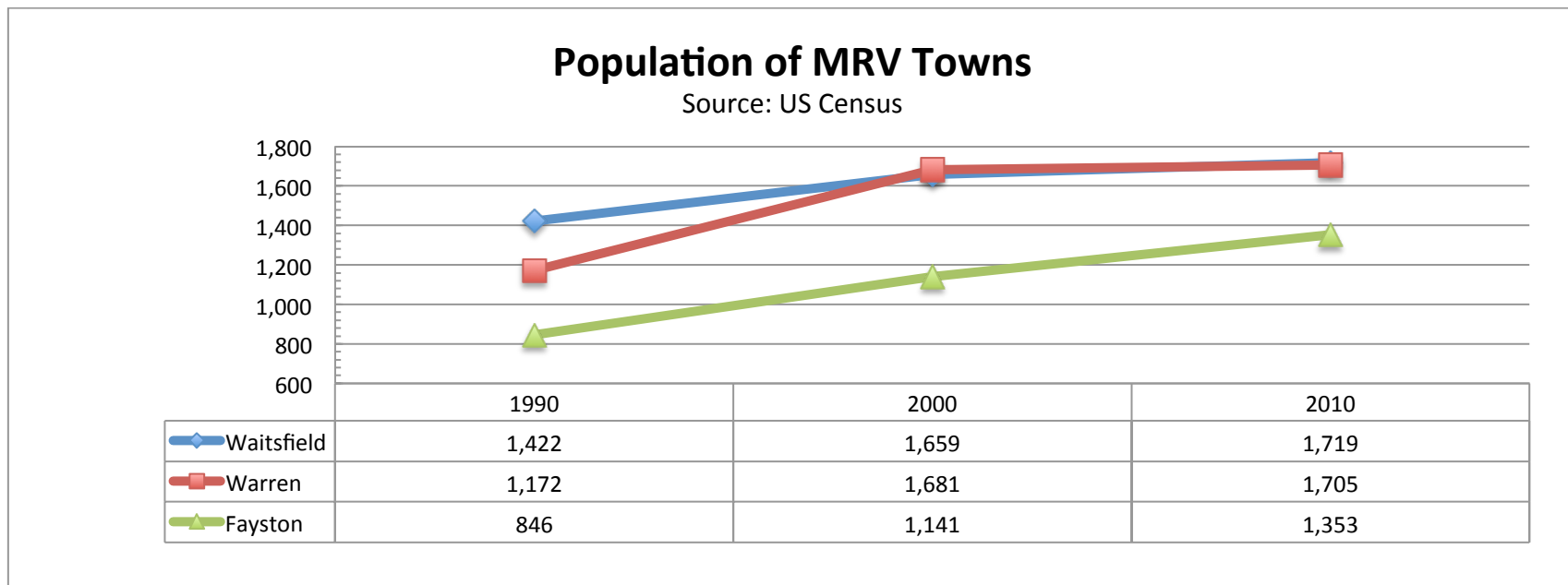
Season Pass Visit Formula: Paid season passes @ 23 visits per pass, Free season passes @ 6 visits per pass, Kids season passes @ 6 visits per pass.

SECTION II: POPULATION & HOUSING

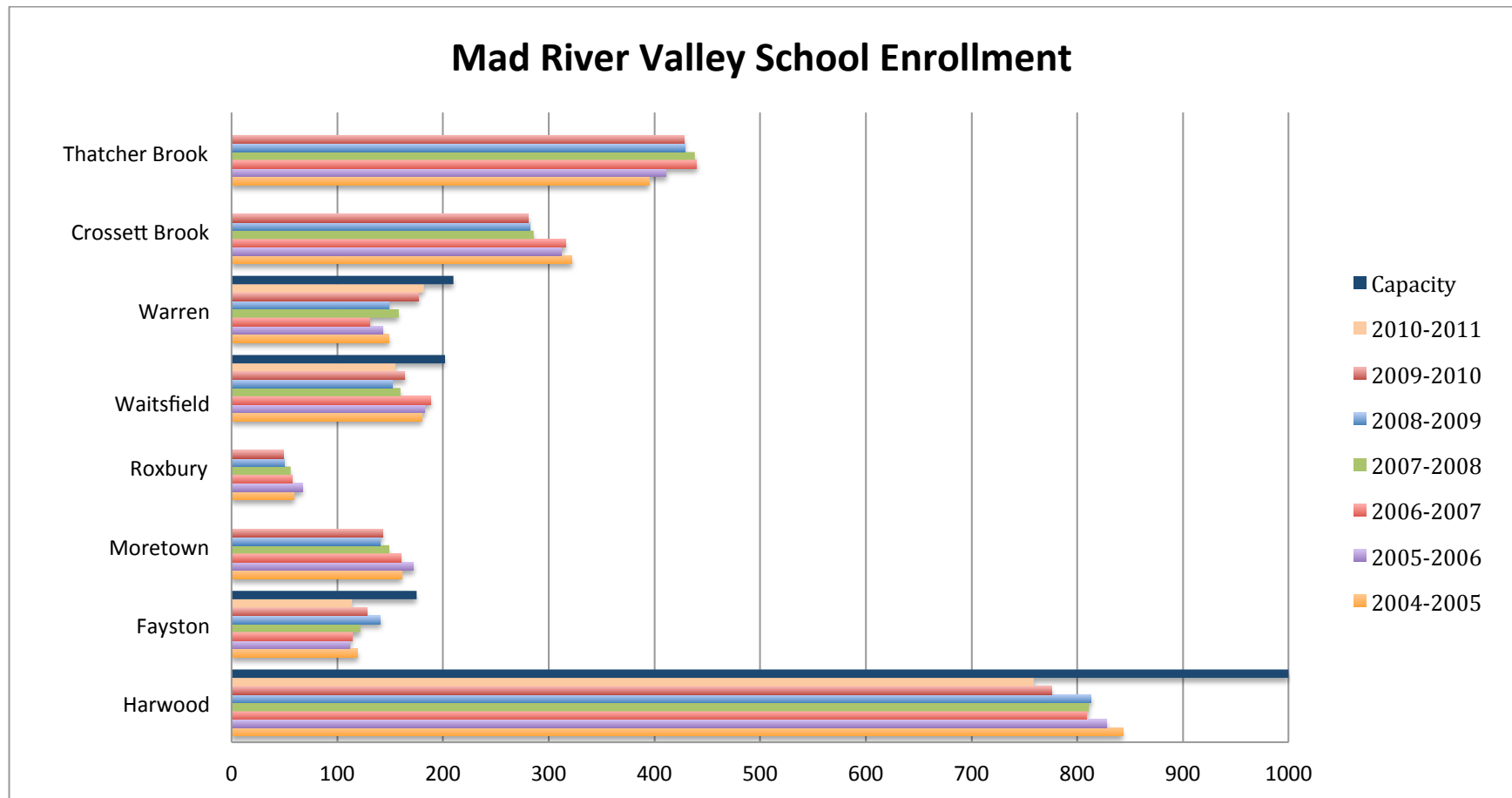
The Population and Housing section includes Items #29, 30, 35 from the Memorandum of Understanding.

To analyze trends in housing and population, this report reviews several different indicators, including growth estimates, school enrollments, number of homes sold, age of residents, and births and deaths in the MRV.

POPULATION

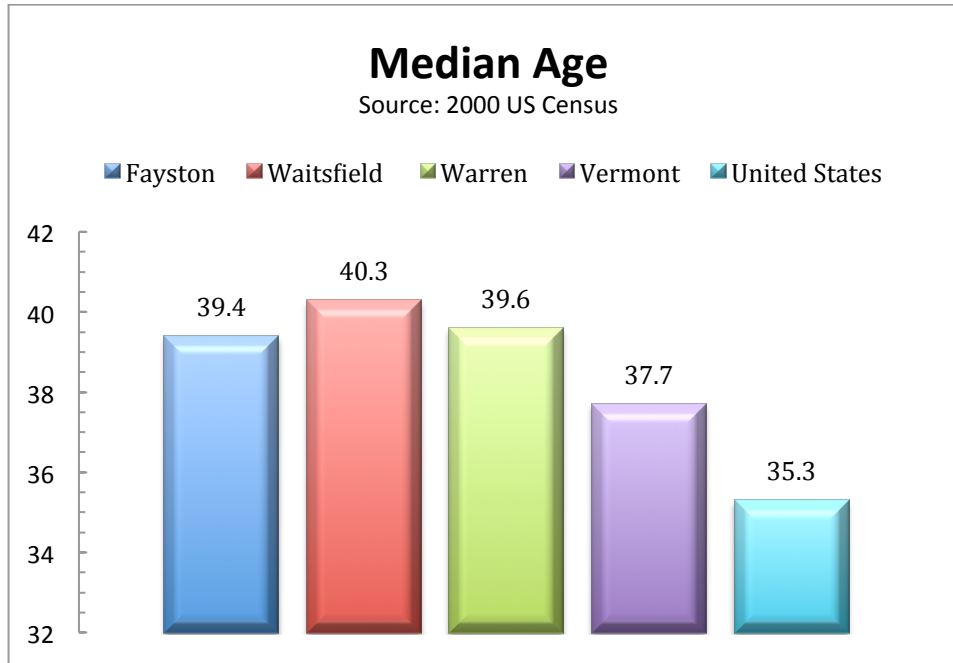


Initial 2010 U.S. Census Bureau results became available in February, 2011. Since the last Census, the combined population of the three Mad River Valley towns has increased by 6.6%. This is more than twice the growth rate that has been experienced for Vermont overall in the same time period (2.8%). These percentage increases are higher than previous estimates [the MRV was expected to see its population increase by 4% and Vermont by 2%].



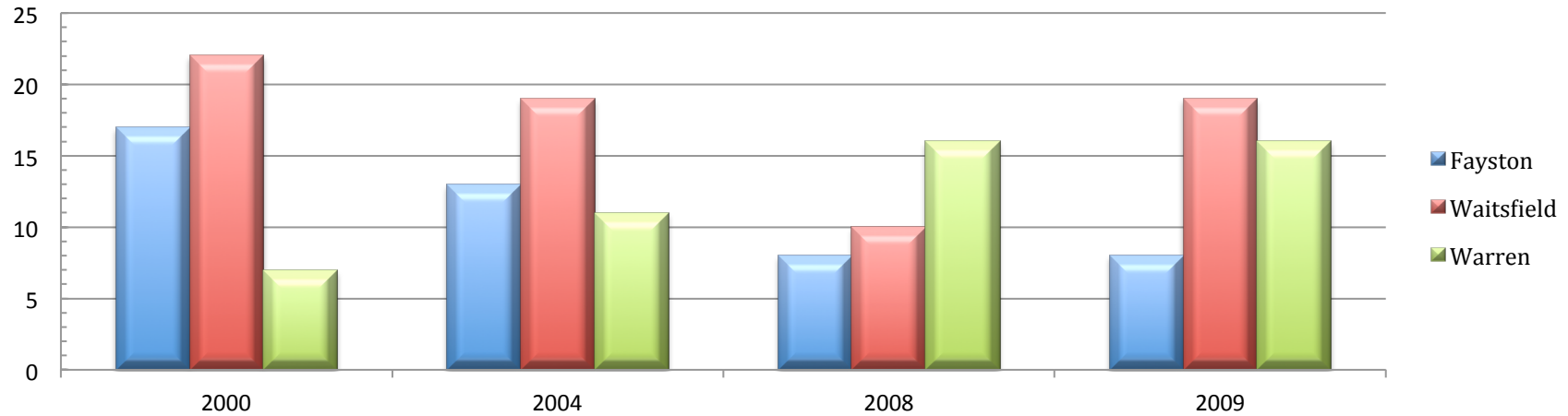
Another indicator of population change is school enrollment. In the past two years Warren has experienced continued enrollment increase while all other schools have either declined or leveled out. Fayston's school population has decreased in the past two years after a substantial gain in 2008-2009. Harwood Union combined Middle & High School continues a downward trend, losing approximately 10% in the past six years. The capacity data was provided by each school. Note: Enrollment numbers originate with the VT Dept. of Education's Public School Enrollment Report, with the exception of the 2010-2011 enrollment numbers, which came directly from the schools.

By looking at overall population growth along with school enrollment, MRVPD can get a better sense of the type of changes occurring in its population. Another useful piece of information is the median age of the population of MRV towns, which shows at least in 2000 (the most recent year available), MRV towns were older than Vermont overall.

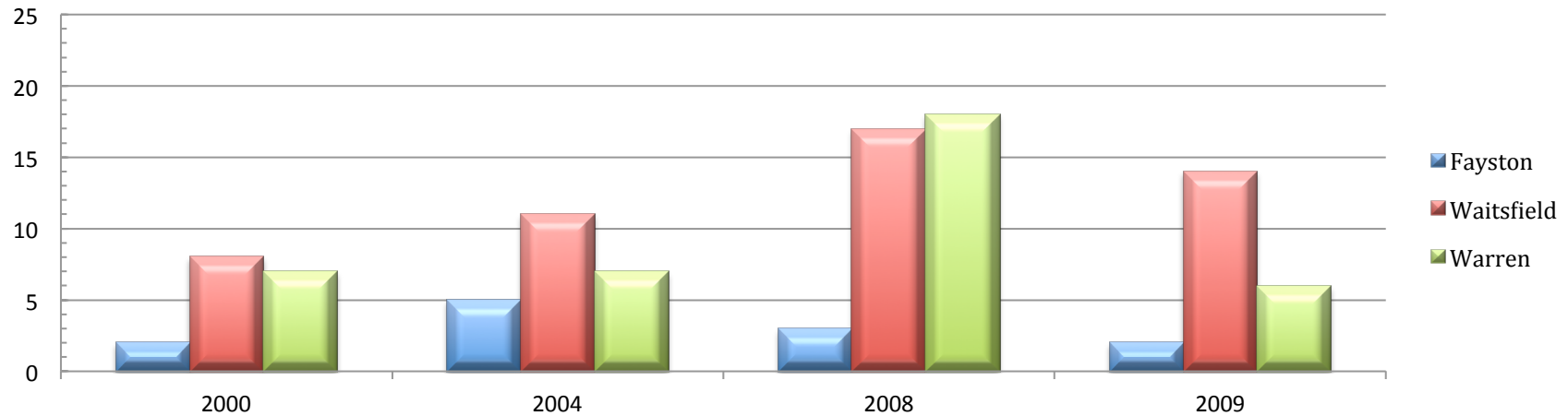


Overall, the Mad River Valley's total population has grown by about six and a half percent, the median age in the Valley is about 40 years and school enrollments are experiencing a slight uptick.

Births in the Mad River Valley

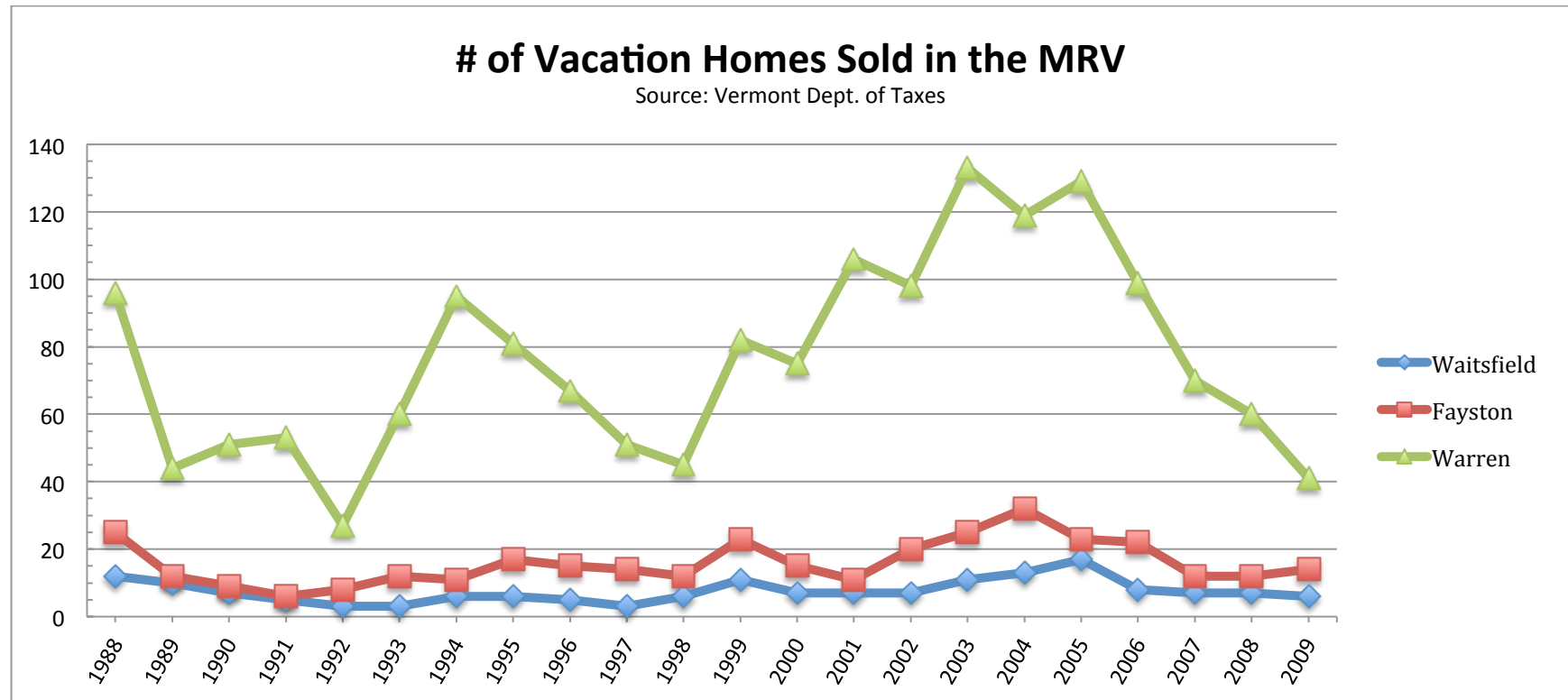


Deaths in the Mad River Valley

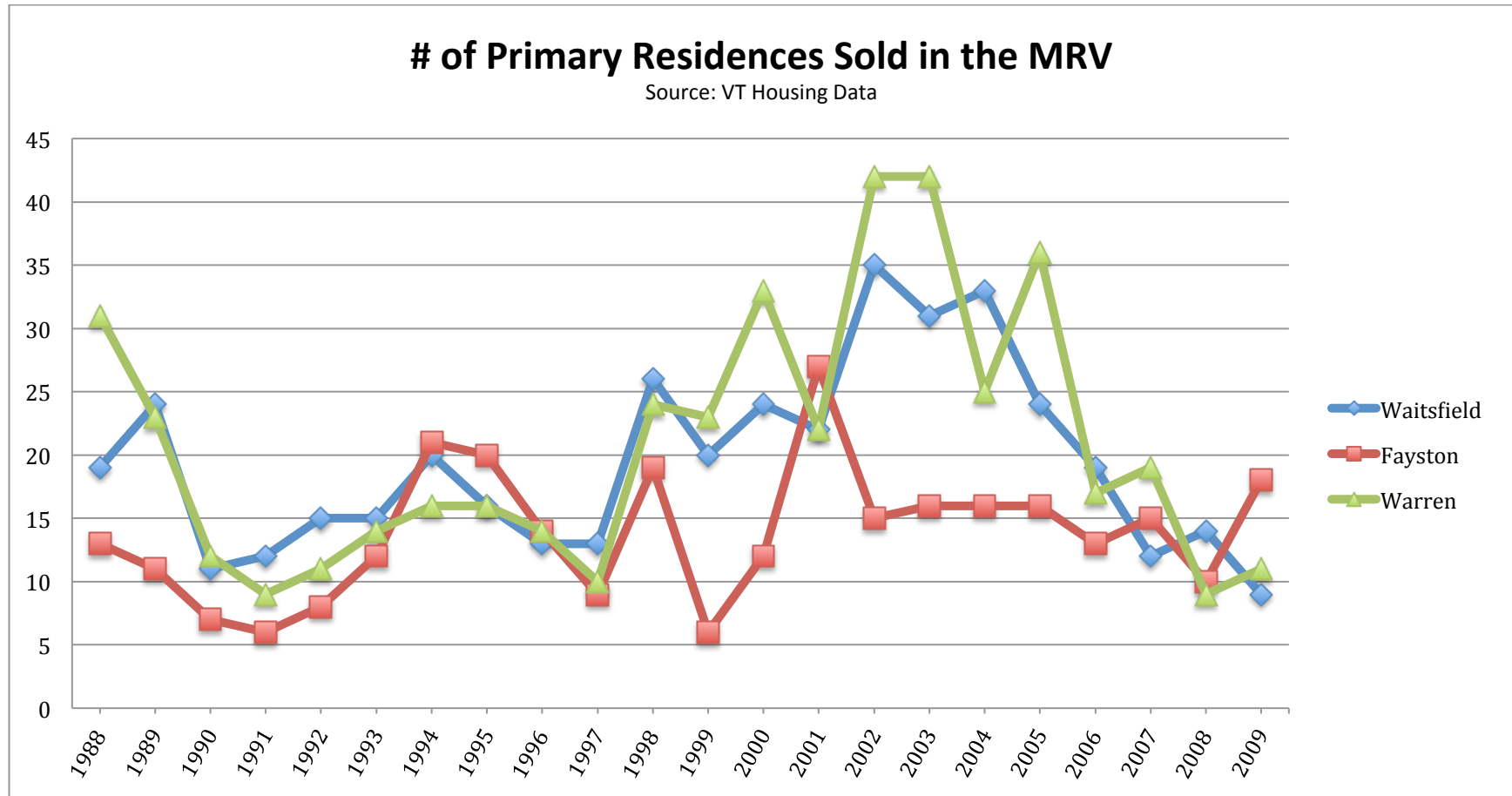


HOUSING

The number and types of homes sold in the MRV provides additional insight into the growth of the Valley. Vacation home data is particularly insightful, as these owners are likely not included in general population or school enrollment statistics.



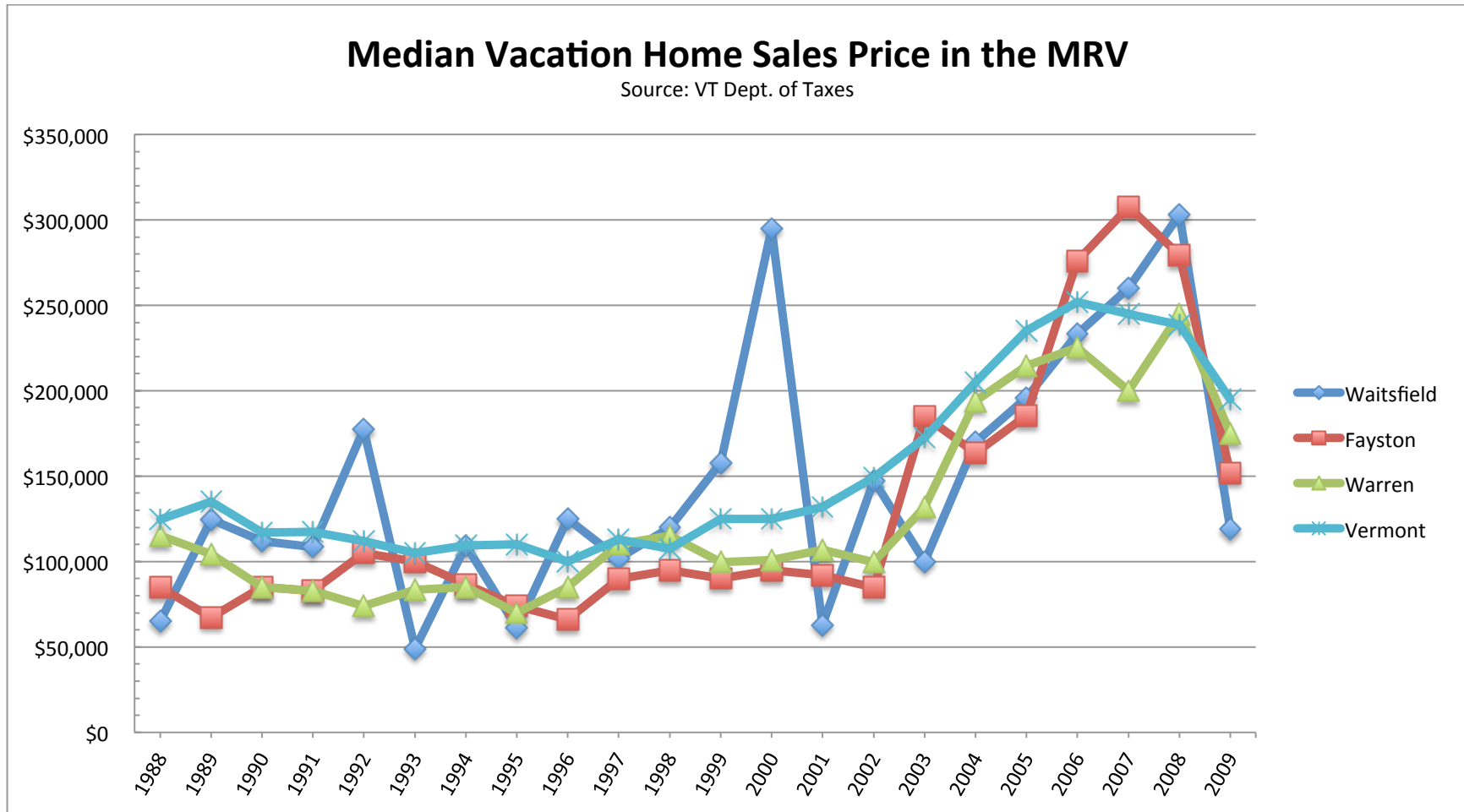
As this chart shows, the number of vacation homes sold has declined overall in the MRV, with Warren experiencing both the biggest increases and declines and Fayston seeing a slight increase in the last year. Vacation homes include condominiums that are not primary residences, as well as other non-primary residence homes. Most of these vacation homes are found closest the Resort. The most recent year reported is 2009.



With the exception of the volatility of the vacation and primary home sales in Warren, homes have remained fairly constant over the past 4 years. The number of primary homes sold has declined somewhat in recent years, especially in Warren, back to 1990s levels. The most recent decline appears to be leveling, especially in Fayston. For reference, in 2009 there were 6 vacation homes sold in Waitsfield, 14 in Fayston and 41 in Warren. In the same year, there were 9 primary residences sold in Waitsfield, 18 in Fayston and 11 in Warren.

Median Vacation Home Sales Price in the MRV

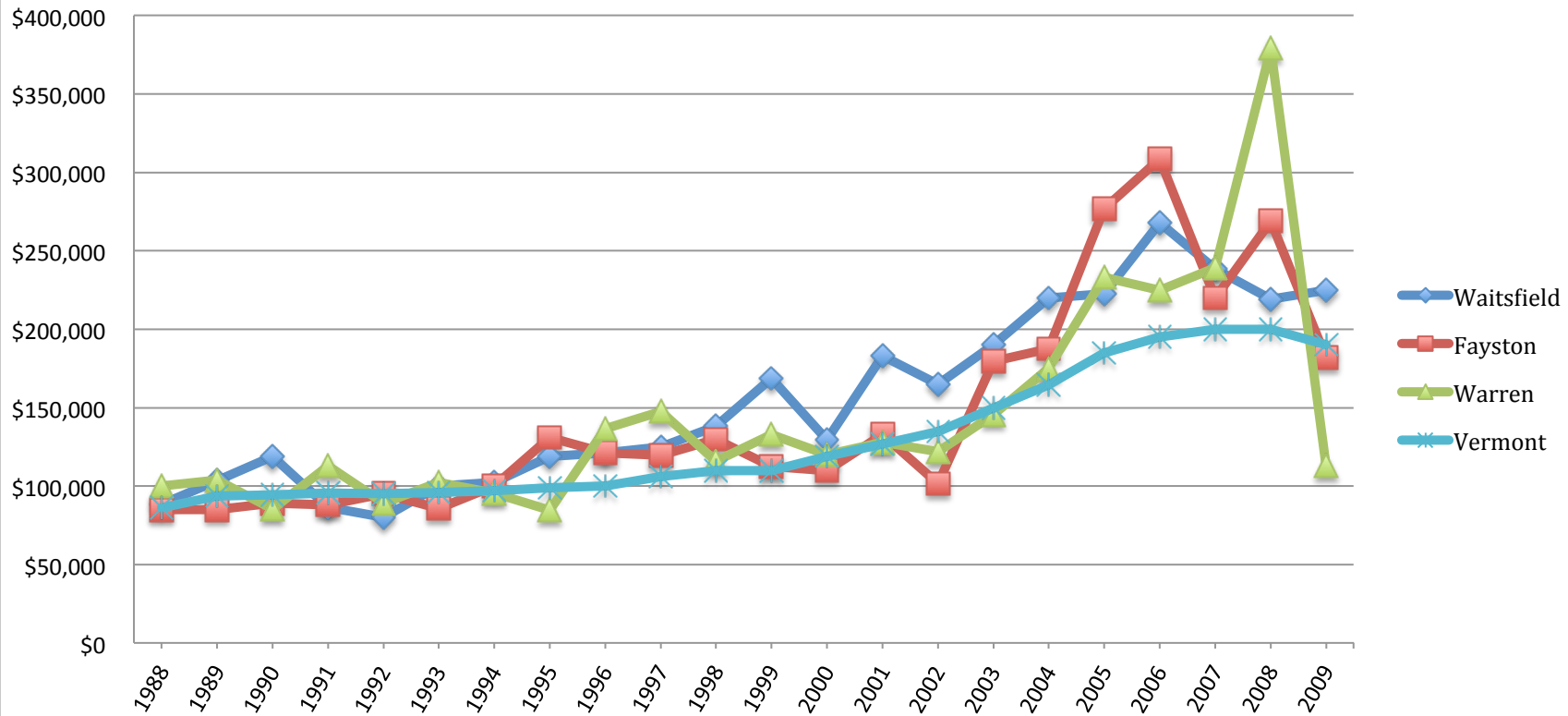
Source: VT Dept. of Taxes



The median vacation home sales price has dropped within the state and more significantly within the MRV. From 2008 to 2009 the average reduction in median vacation home sales price was -46%, in comparison to -18% statewide. For reference, in 2008, the median vacation home price in Waitsfield was \$303,000, vs. \$119,000 in 2009. In Fayston, the median vacation home cost \$280,000 and in Warren it cost \$245,000 in 2008, vs. \$152,000 and \$175,000, respectively. The median vacation home price for Vermont overall fell from \$239,000 in 2008 to \$195,000.

Median Primary Residence Sales Price in the MRV

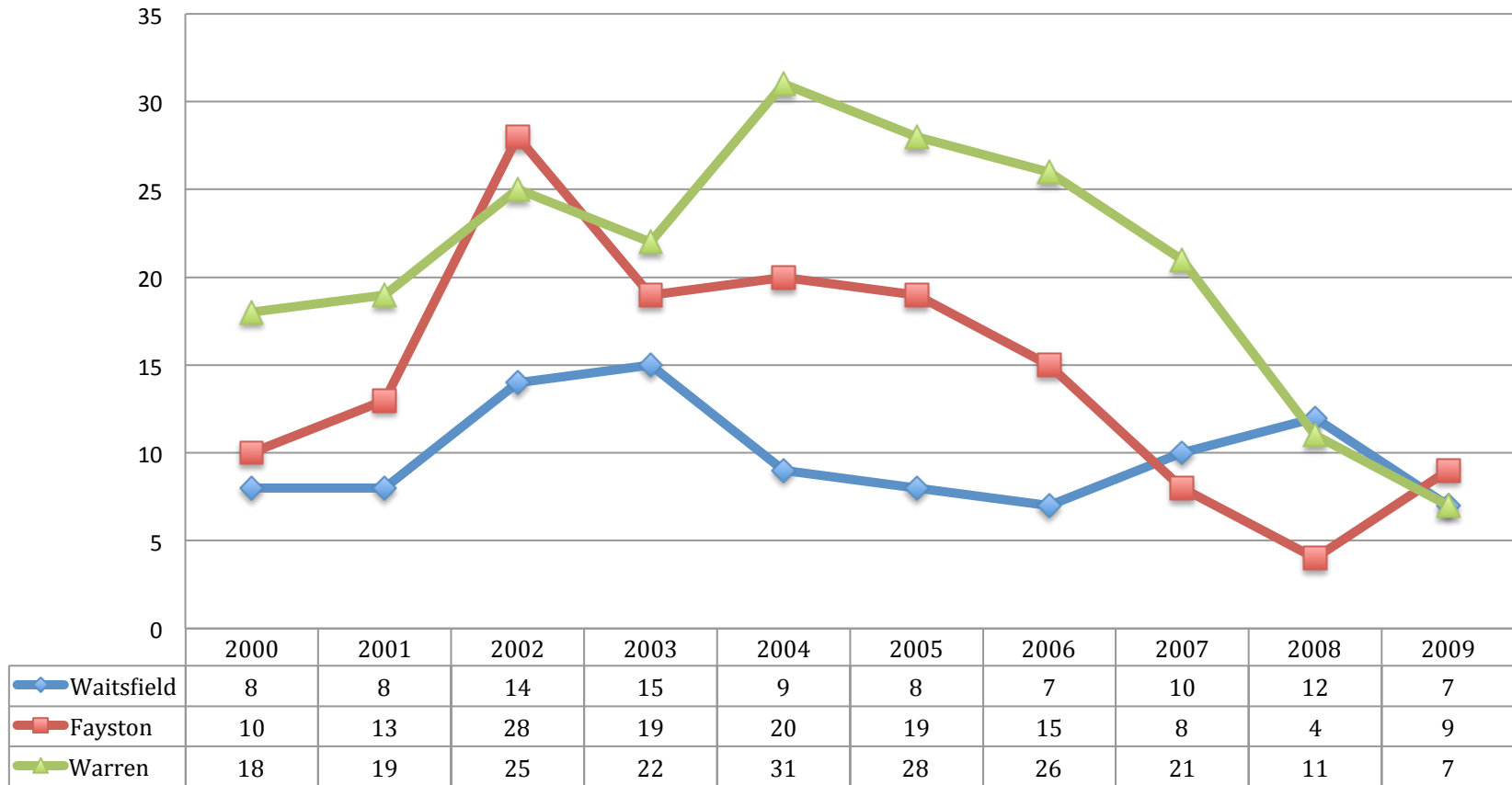
Source: Vt. Dept of Taxes



Similarly, 2009 saw a drastic reduction in the median sales price of primary residences sold in the MRV. After a steady climb since 1998, the median sales prices dropped 40% on average. Waitsfield experienced a slight increase, while Warren's median primary residence sales price dropped by 70% from 2008 to 2009. For reference, the median home in Waitsfield cost \$225,000 in 2009 and \$181,750 in Fayston, while Warren's median home price was \$113,000. The overall average for Vermont was \$190,000.

Residential Building Permits Issued

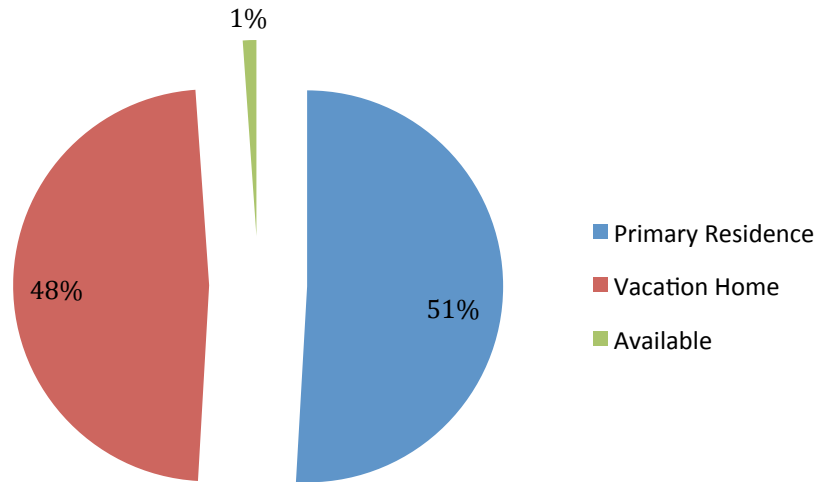
Source: US Census Bureau



One leading indicator of new home construction is zoning permits. This chart shows that while the number of permits issued for Waitsfield has remained relatively constant each year from 2000 to 2009, Warren and Fayston both experienced declines in that time period. Most recently, however, Fayston has seen an uptick in the past year.

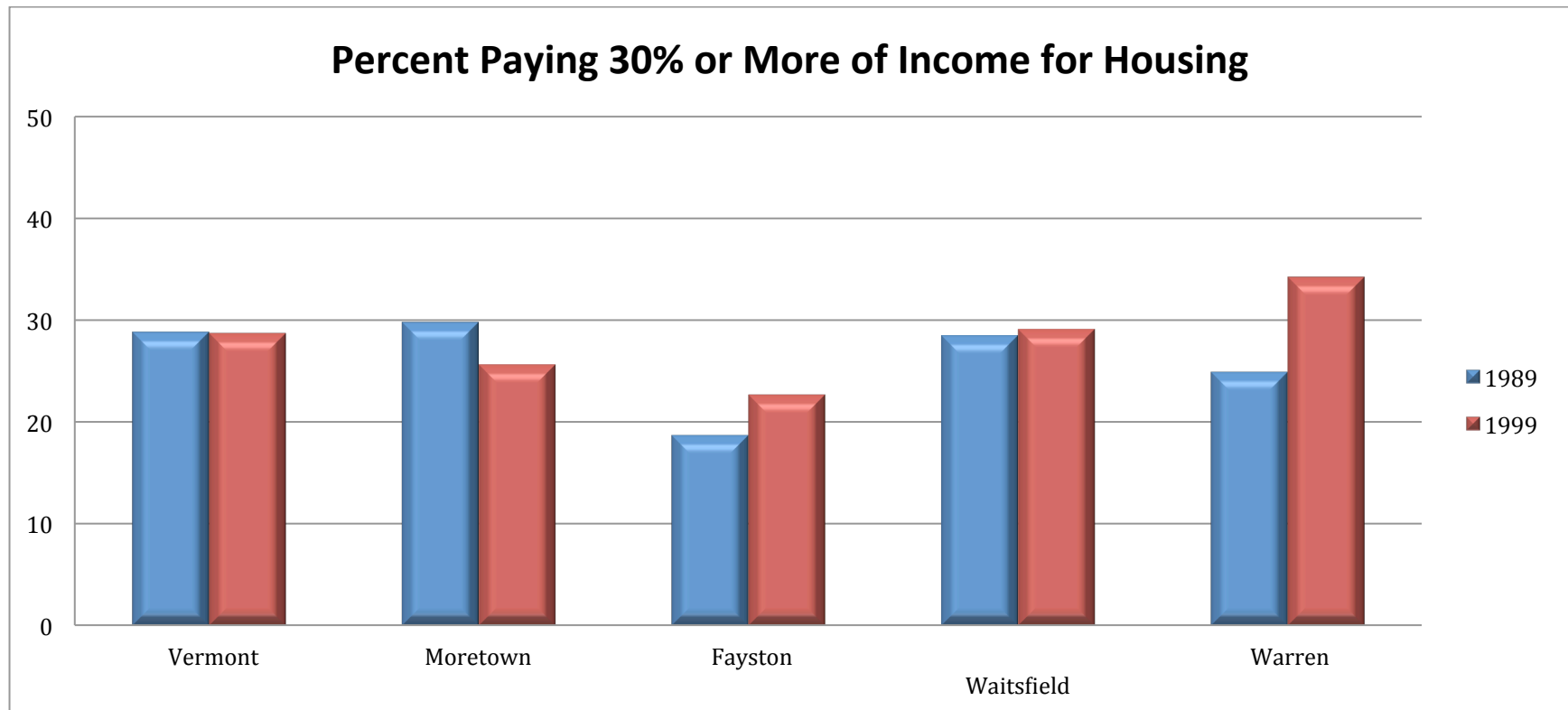
MRV Housing, 2000

Source: VT Housing Data



A snapshot of available housing shows that in 2000, housing was split evenly between full-time and seasonal occupancy, with just a small percentage of housing available at the time of the Census.

Affordability of housing is an ongoing concern. While sale price and housing availability provide some insight into the affordability of homes in the Valley, another metric is to look at what percent of residents' income goes to pay for housing. Thirty percent of income is a commonly accepted threshold for what is considered affordable housing. The chart below shows that, historically at least, residents of the MRV are just about as likely as Vermonters overall to pay 30% or more of their income for housing. Note that the most recent data available is from 1999.

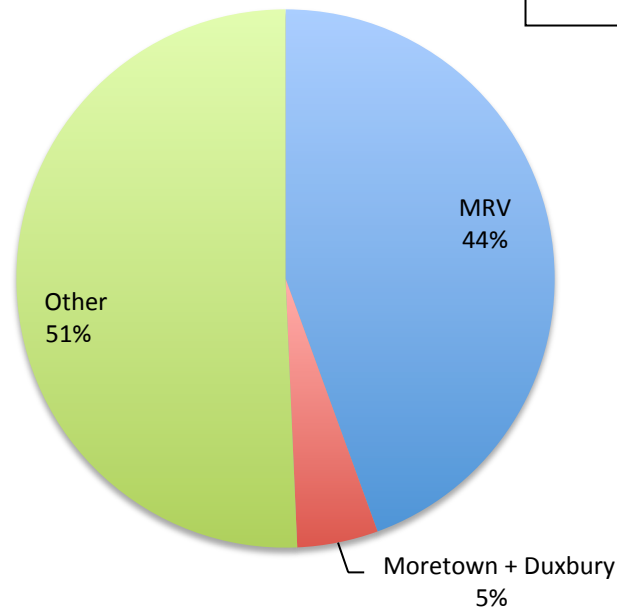


Data from Sugarbush Resort suggest that there is enough housing in the MRV for most of its employees. Based on a survey of its employees, in 2009-2010 season 44% of its employees who completed the survey lived in one of the 3 MRV towns. This follows the same percentage from the previous year. There is no statistical difference of residence among those who rent versus those who own a home. 583 of Sugarbush's approximate 850 employees participated in its housing survey.

Where Sugarbush Employees Live

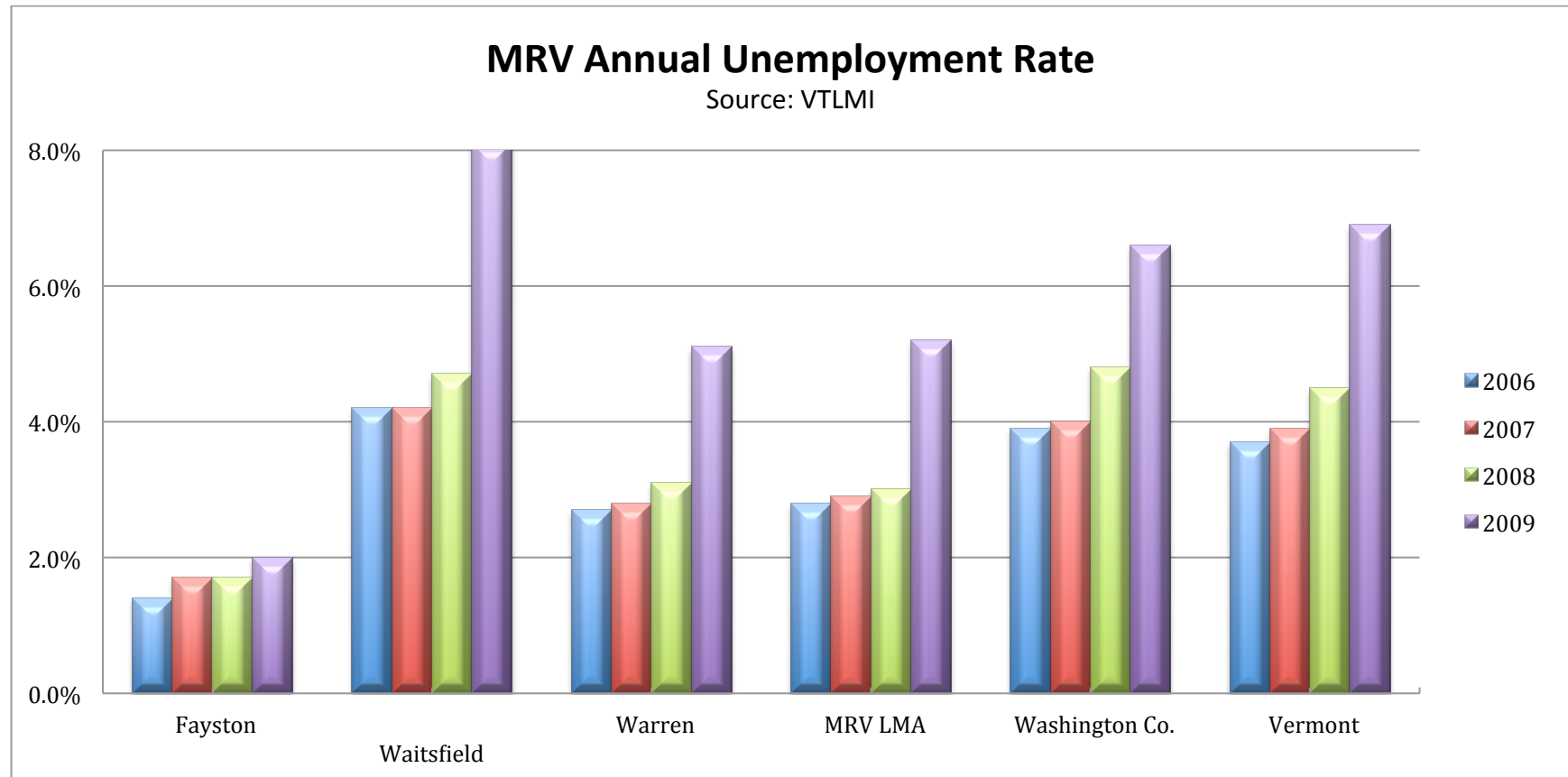
Source: Sugarbush

N=583



SECTION III: EMPLOYMENT

The Employment section includes Items #35 & 36 from the Memorandum of Understanding.



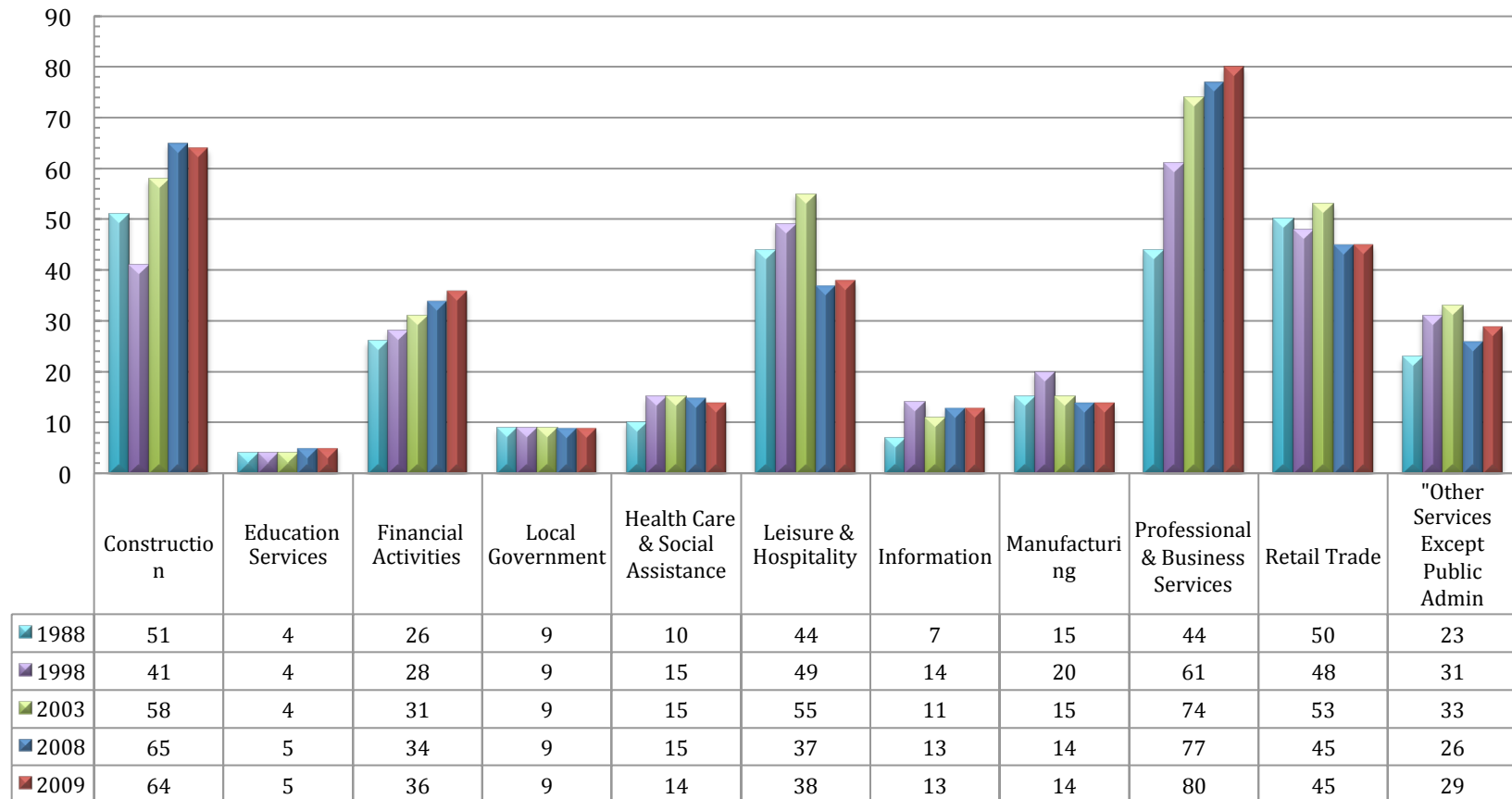
As discussed earlier in this report, the unemployment rate in the Mad River Valley has been on an increase over the past few years, but has jumped dramatically in the most recent. However, not only is the unemployment rate lower in the Mad River valley than in Vermont overall, but the increase in 2009 was far less in the Mad River Valley than in Vermont overall. Again, note that the Vermont data includes the Mad River Valley.

The employment and wage data below is based on the Mad River Valley Labor Market Area (MRVLMA). The MRVLMA includes Moretown and not just the three towns used for the rest of this report. Only industries that are well represented in the MRV are included in the charts below. Descriptions of each industry presented is as follows:

- Construction industry includes building construction, engineering and contractors
- Manufacturing includes manufacturers of durable (wood products, mineral products, transportation equipment, furniture, etc.) and non-durable goods (food, beverage, tobacco, and printing)
- Retail trade includes sellers of motor vehicles and parts, furniture, home furnishings, electronics, appliances, building materials, garden supplies, food and beverages, personal care, gasoline, clothing, sporting goods, books, music and general merchandise
- Information industry includes publishing, motion picture, sound recording, broadcasting and some telecommunications
- Financial activities include financial services, insurance, credit services, securities and other investments, real estate services
- Professional and business services includes professional services, technical services, administrative services, and other support services
- Educational services includes non-government schools, technical or trade schools
- Health care includes outpatient, ambulatory care, nursing services and facilities, social assistance
- Leisure and hospitality includes art, entertainment, recreation, performing arts, spectator sports, gambling, accommodation, food services, drinking places
- Other services include repair and maintenance, personal services, laundry services, membership associations
- Local government includes government elementary and secondary schools and public administration

Number of Businesses by Industry in MRV LMA

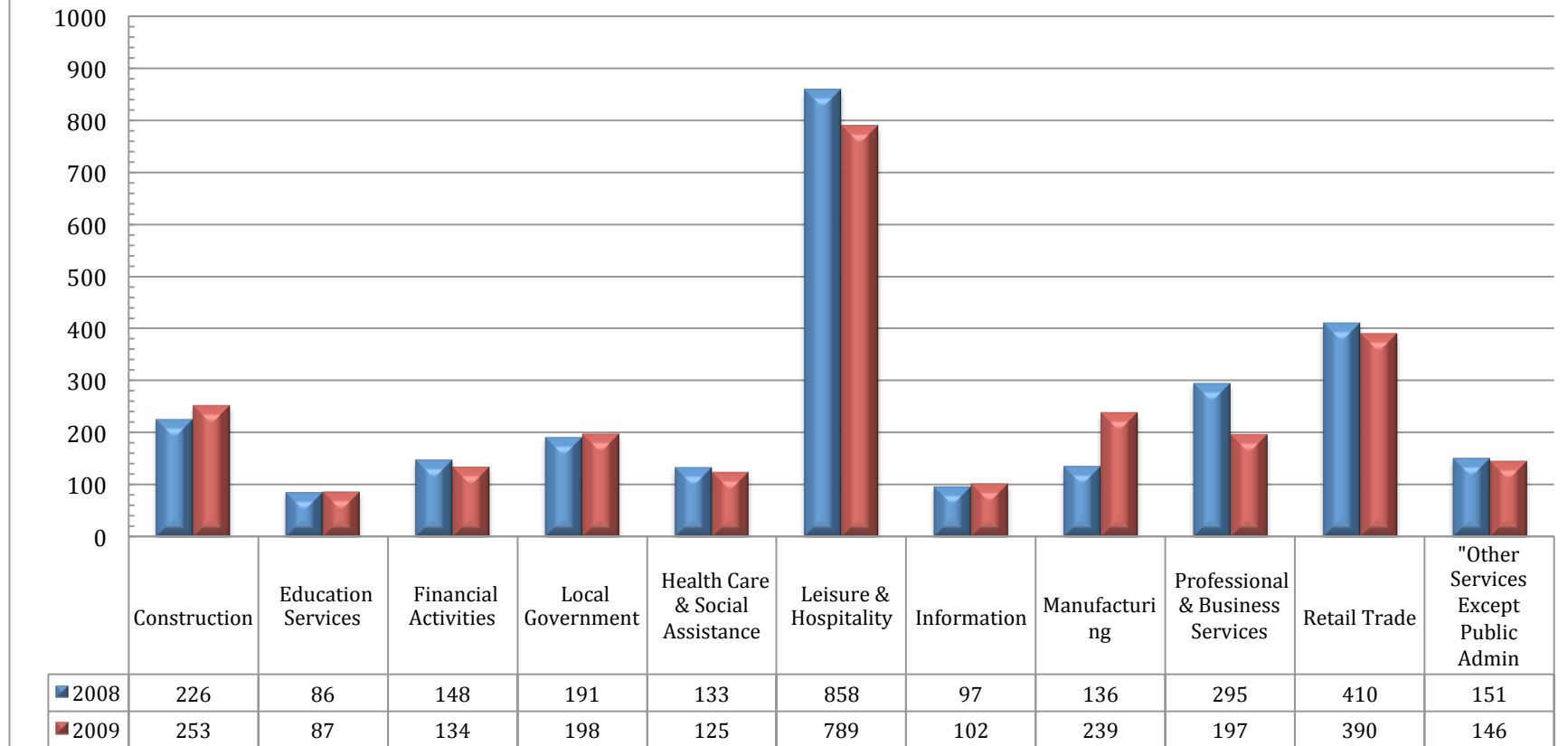
Source: VTLM



Over the past 20 years, the number of firms in each industry has remained fairly steady. However, the number of Professional & Business Services firms has increased by 82% to 80 firms between 1988 and 2009. The Leisure & Hospitality industry saw an increase through 2003, however, the number of firms has held steady after a decline in the past 6 years.

Number of Jobs by Industry in MRV LMA

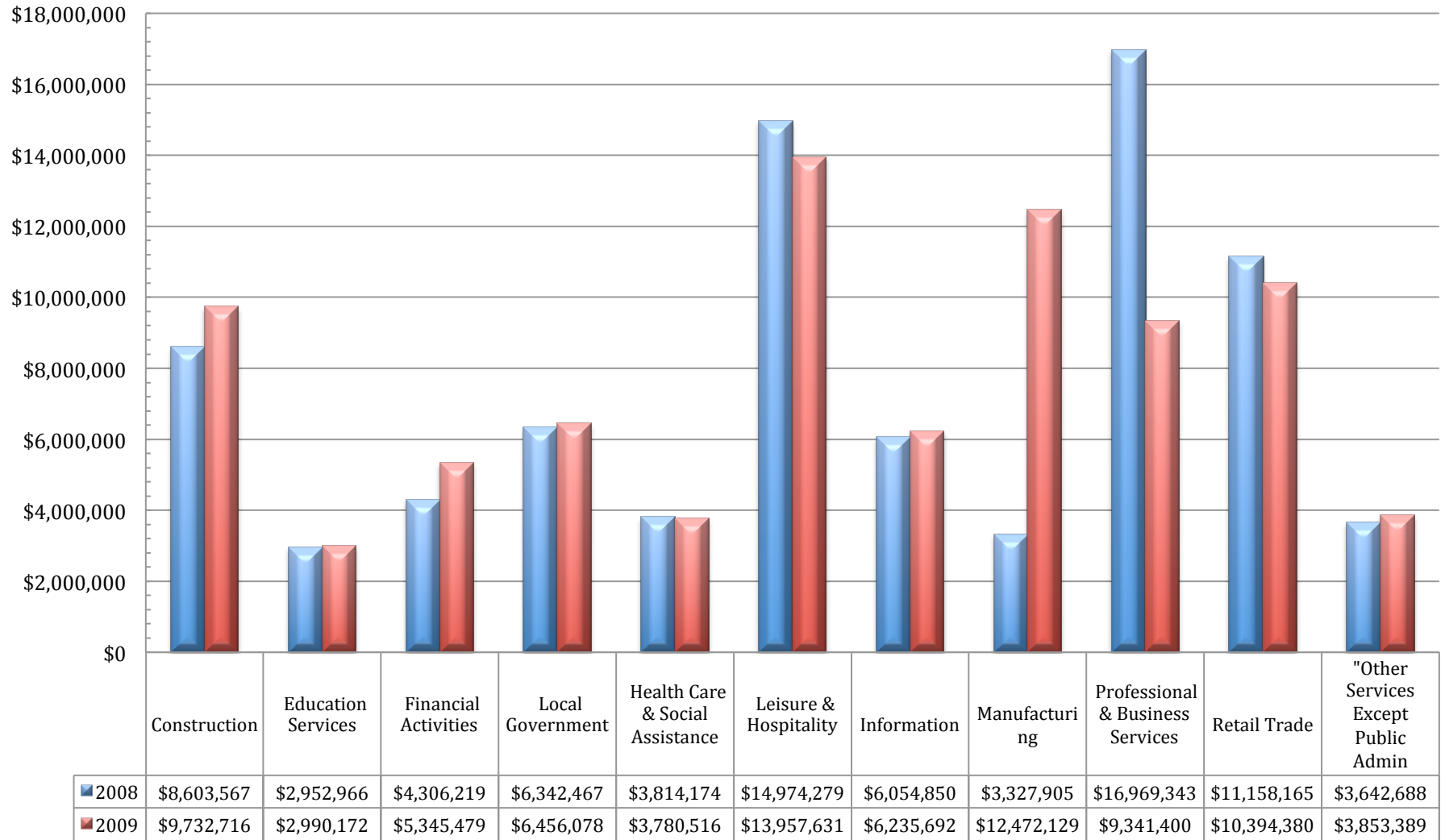
Source: VTLMi



While the Mad River Valley has attracted businesses from most major sectors, the employment landscape remains dominated by the hospitality sector. 2009 saw a substantial drop in Professional & Business Services jobs, but an equally substantial increase in Manufacturing.

Total Annual Wages by Industry in MRV LMA

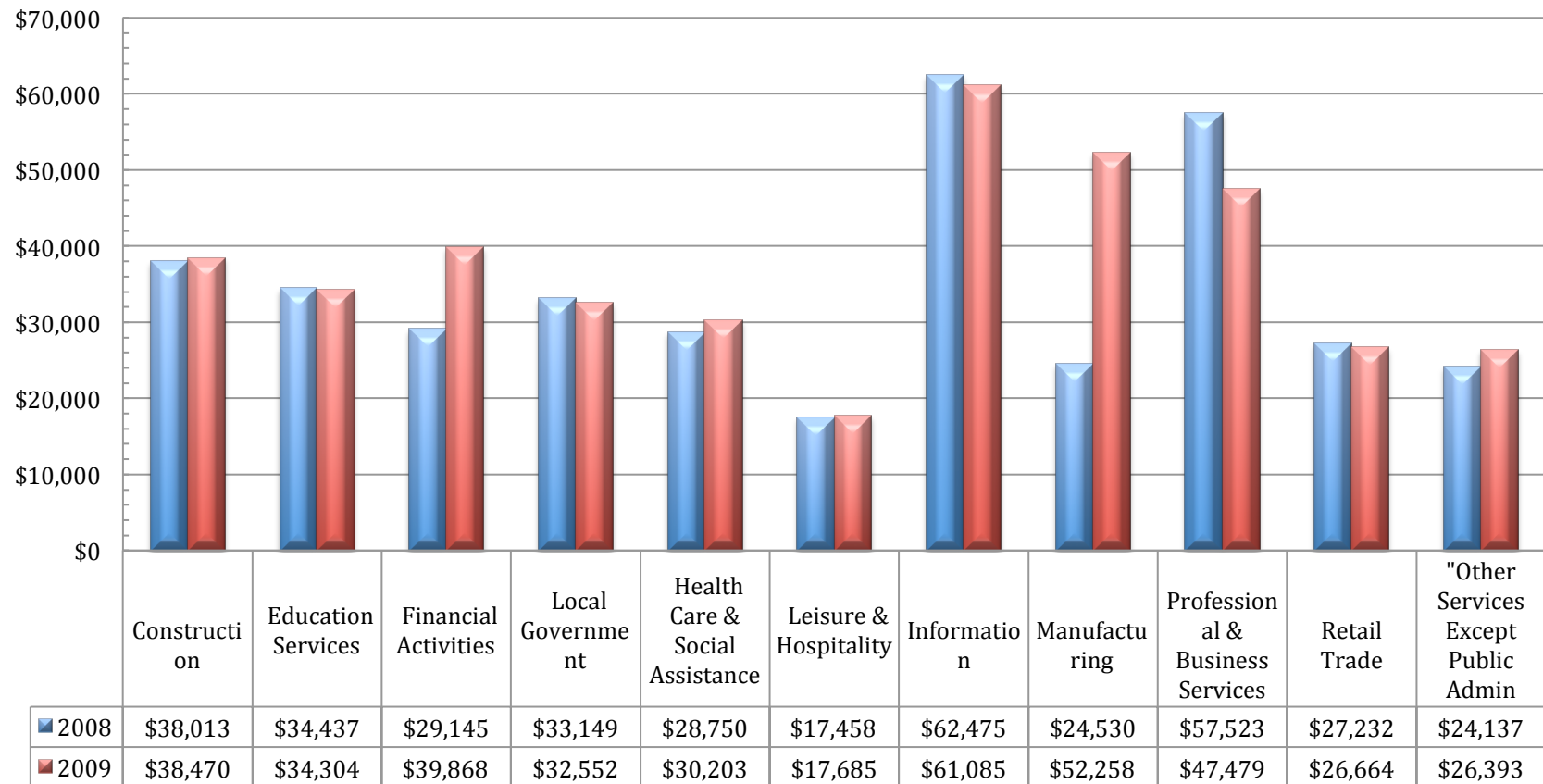
Source: VTLMi



The Leisure & Hospitality industry employs the most people in the Mad River Valley, but at the same time has the lowest average wage. The average wage in the Mad River Valley ranges from just under \$20,000 in the Leisure & Hospitality industry to over \$60,000 in the Information industry. The third largest employment sector, Professional Services has the highest total wage (number of employees multiplied by the average wage). 2009 saw a doubling in the average annual wage for Manufacturing, while it's total annual wages quadrupled. The number of firms in this sector rose by 103 during this time.

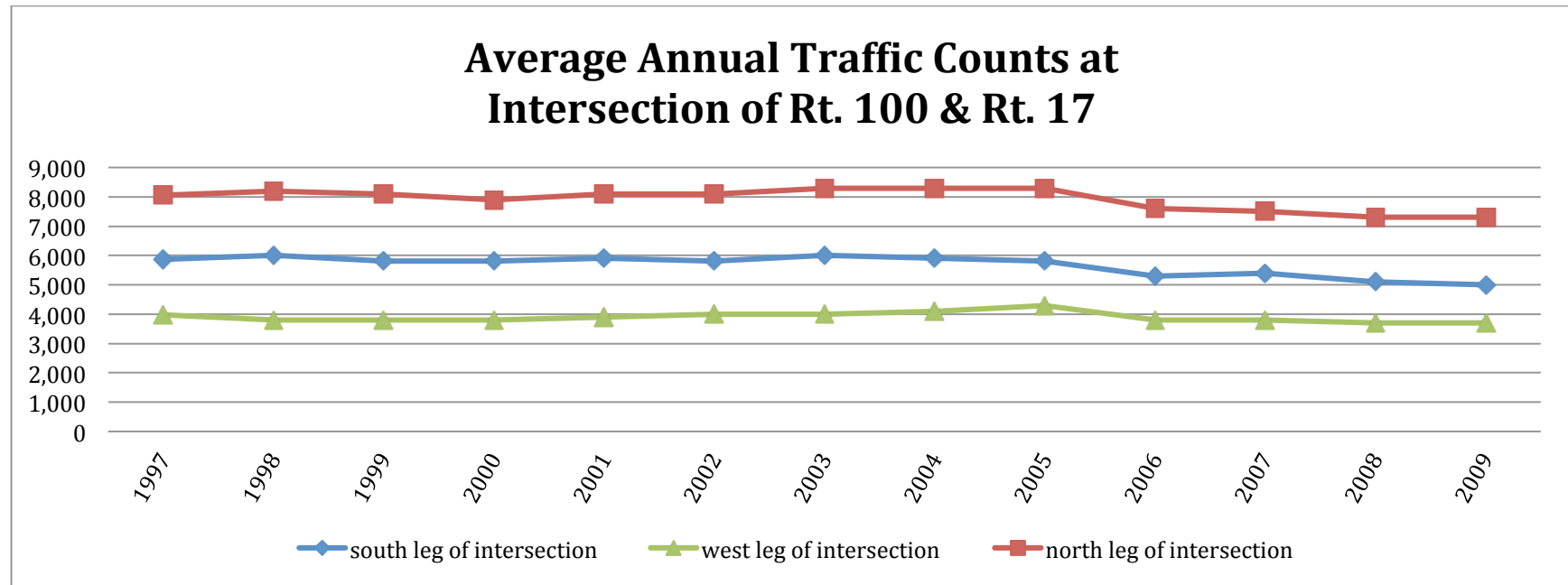
Annual Average Wage by Industry in MRV LMA

Source: VTLMi



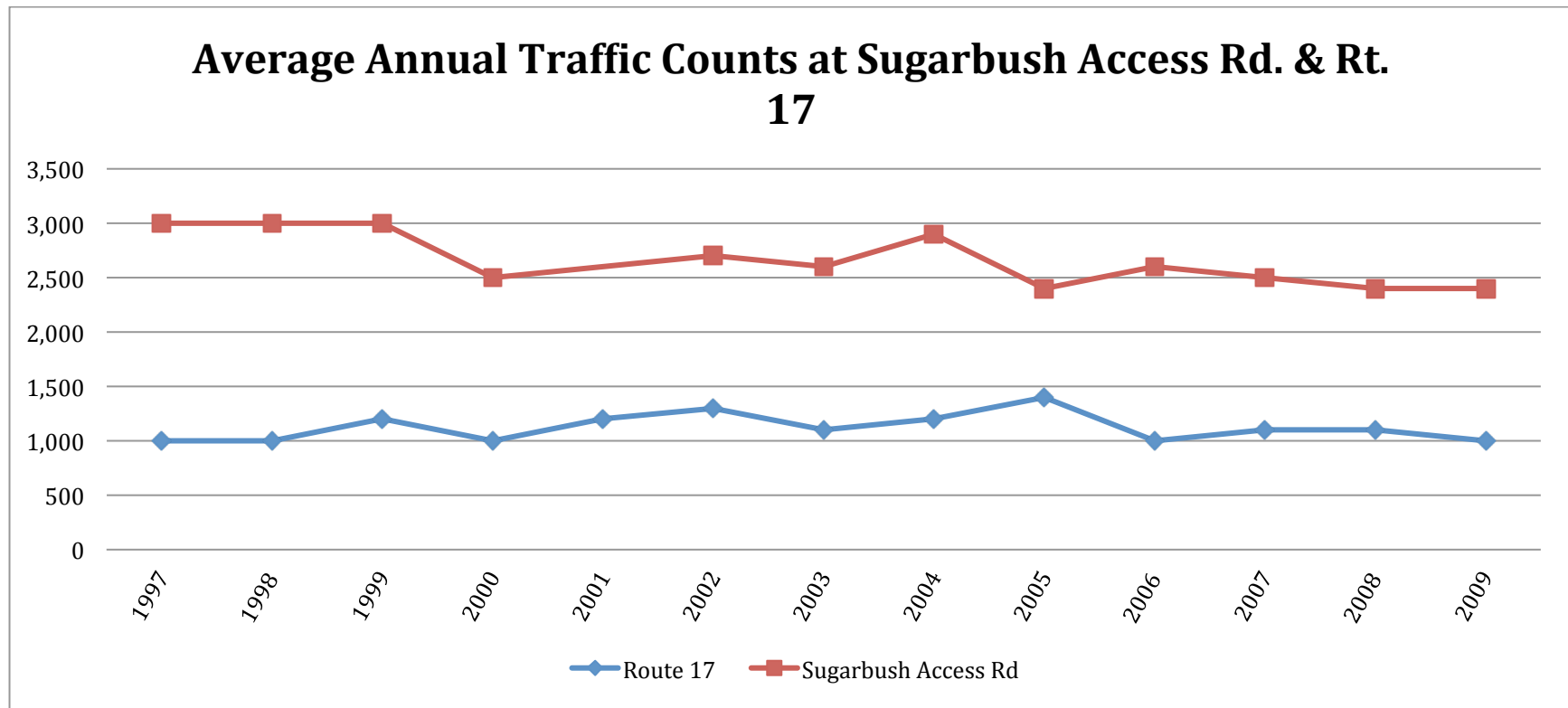
SECTION IV: TRAFFIC & TRANSIT

The Traffic and Transit section includes Items #24, 25 & 32 from the Memorandum of Understanding.



ANNUAL TRAFFIC SUMMARY

As specified in the 1998 MOU, this report contains data from traffic counters in the following key locations: the intersection of Route 100 and Route 17, the Sugarbush Access Road above the Sugarbush Inn, and Route 17 west of German Flats Road. The counter located on the Sugarbush Access Road west of Route 100 has been deactivated and is not included in this analysis. The charts above and below describe the Average Annual Daily Traffic (AADT) from 1997 to 2009. AADT is the total volume of traffic on a highway segment for one year divided by the number of days in the year. The Route 100 and Route 17 intersection has experienced relatively steady use since 1997, with a slight decline in the last 4 years.



There was a slight increase in vehicle traffic on the Sugarbush Access Road in the 1990's, whereas more recently annual vehicle trips have settled lower. Average annual daily traffic measured on Route 17 west of German Flats Road has increased by more than 100% over 30 years, from 680 in 1976 to a high of 1,400 in 2005. Traffic on Rt. 17 has settled back at approximately 1,000 average annual vehicles.

EFFICIENCY OF TRANSPORTATION INFRASTRUCTURE

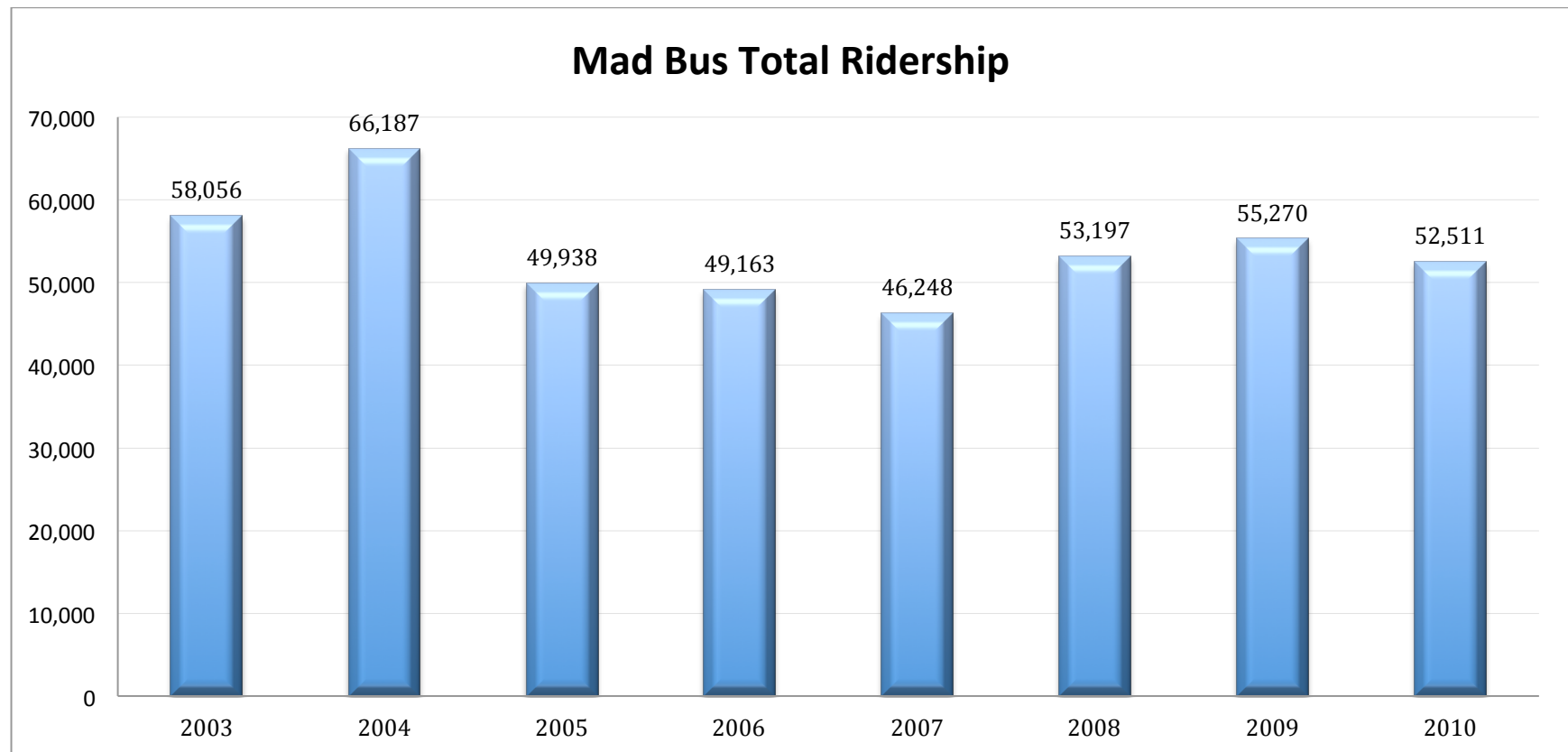
One common indicator that is used to measure the efficiency and convenience of transportation infrastructure is level of service (LOS). LOS utilizes a grading system to categorize the flow of traffic. The Highway Capacity Manual and AASHTO Geometric Design of Highways and Streets ("Green Book") list the following levels of service for roadways: A= Free flow;

B=Reasonably free flow; C=Stable flow; D=Approaching unstable flow; E=Unstable flow; F=Forced or breakdown flow. LOS measured at signalized and unsignalized intersections is graded based on estimated wait times; at an unsignalized intersection, a wait time of ≤ 10 seconds is grade A, whereas a wait time of > 50 seconds is grade F

Evaluation of changes in LOS at MRV intersections is performed by the Central Vermont Regional Planning Commission on an as-needed basis. Since traffic generally flows unobstructed except at the busiest times of year, the LOS for all transportation infrastructure throughout the area are considered to be at grade A.

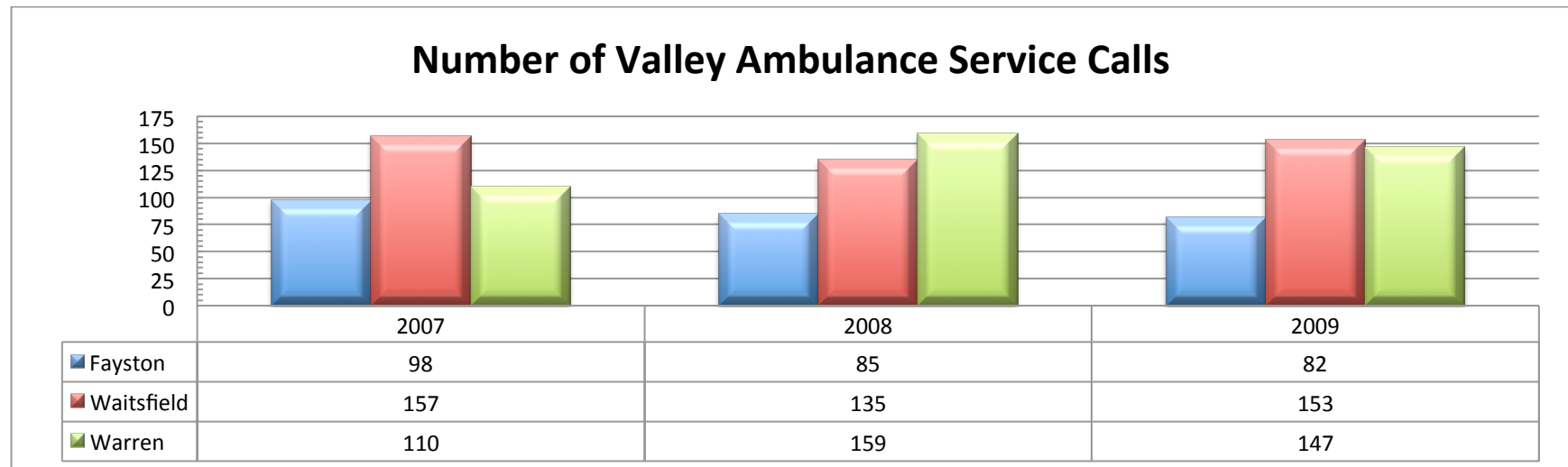
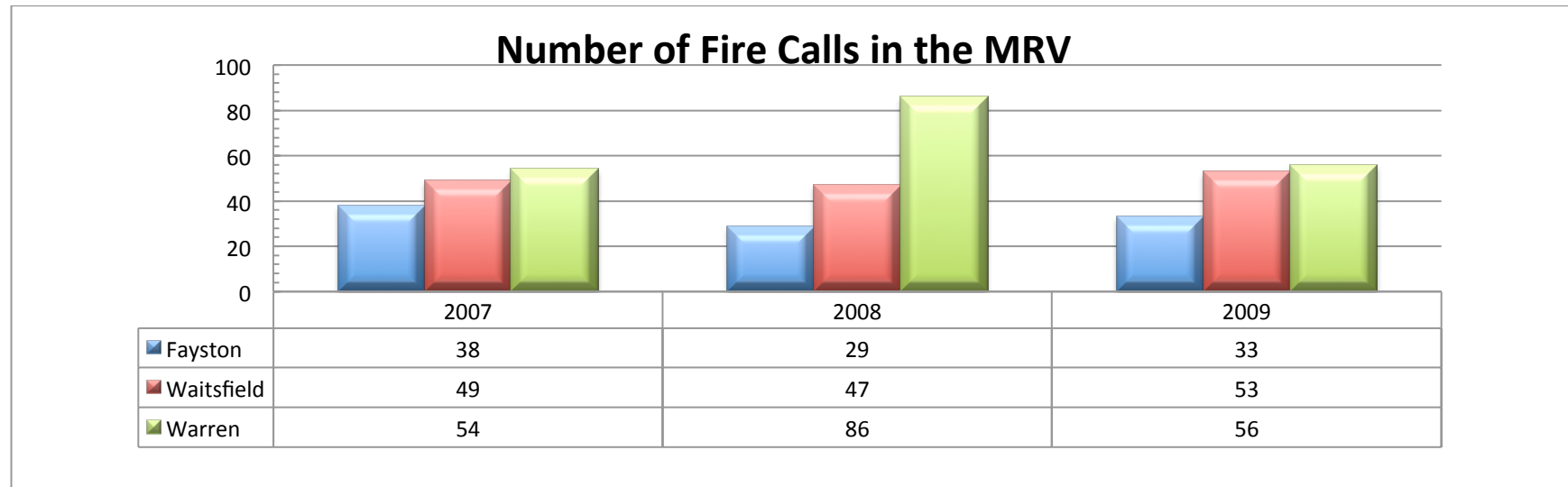
TRANSIT

The Green Mountain Transit Agency (GMTA) is a private not-for-profit organization providing public transportation services in Washington, Lamoille and Orange Counties. GMTA began operating service in the Mad River Valley in late 2003 under the name of the Mad Bus. Year-round service on the Valley Floor route (connecting Warren, Waitsfield, and Lincoln Peak) was offered from October 2003 until April 2005, at which time it was scaled back to seasonal service due to low ridership. The chart below shows ridership from 2003 through 2009. However, since 2005 all service operated by GMTA in the Valley has been seasonal service. In the 2009-10 season GMTA operated 6 Mad Bus routes, all free of charge except the SnowCap Commuter. The Mad Bus ridership decreased 5% between the 2008-09 and 2009-10 seasons (52,511 vs 55,270).

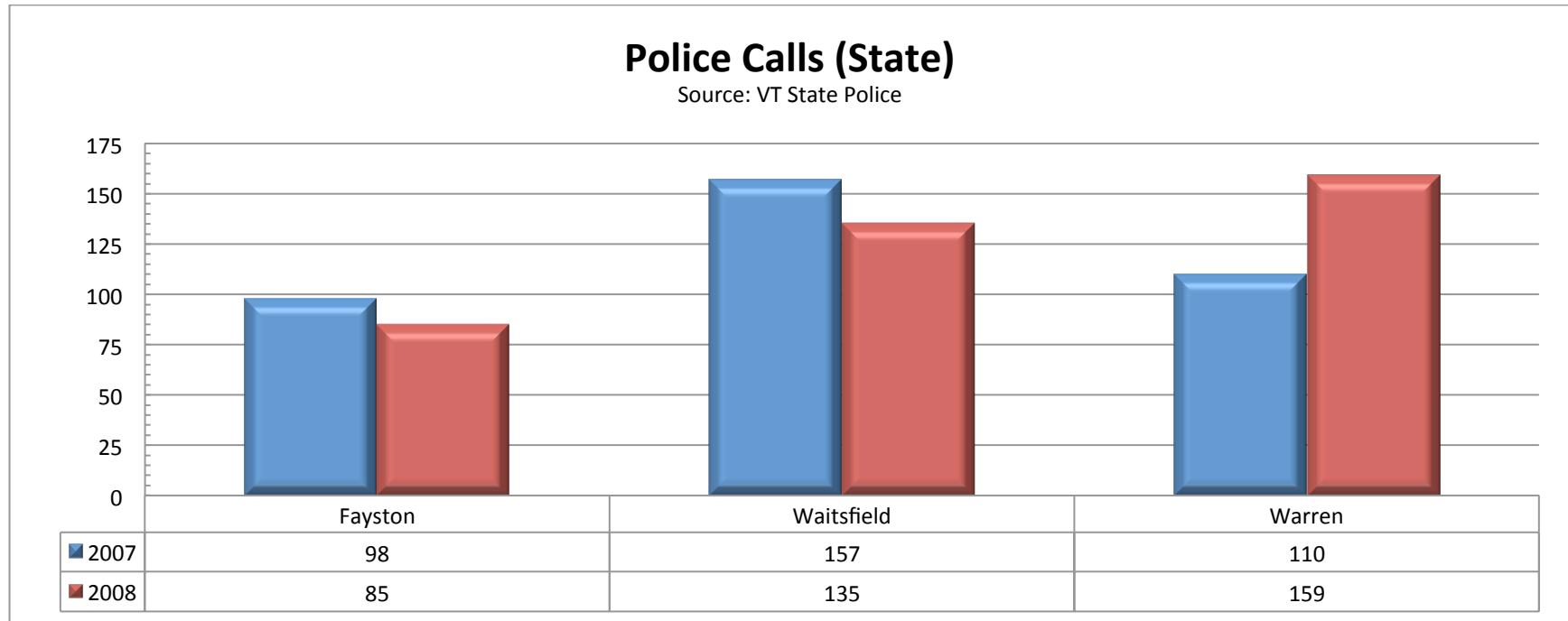


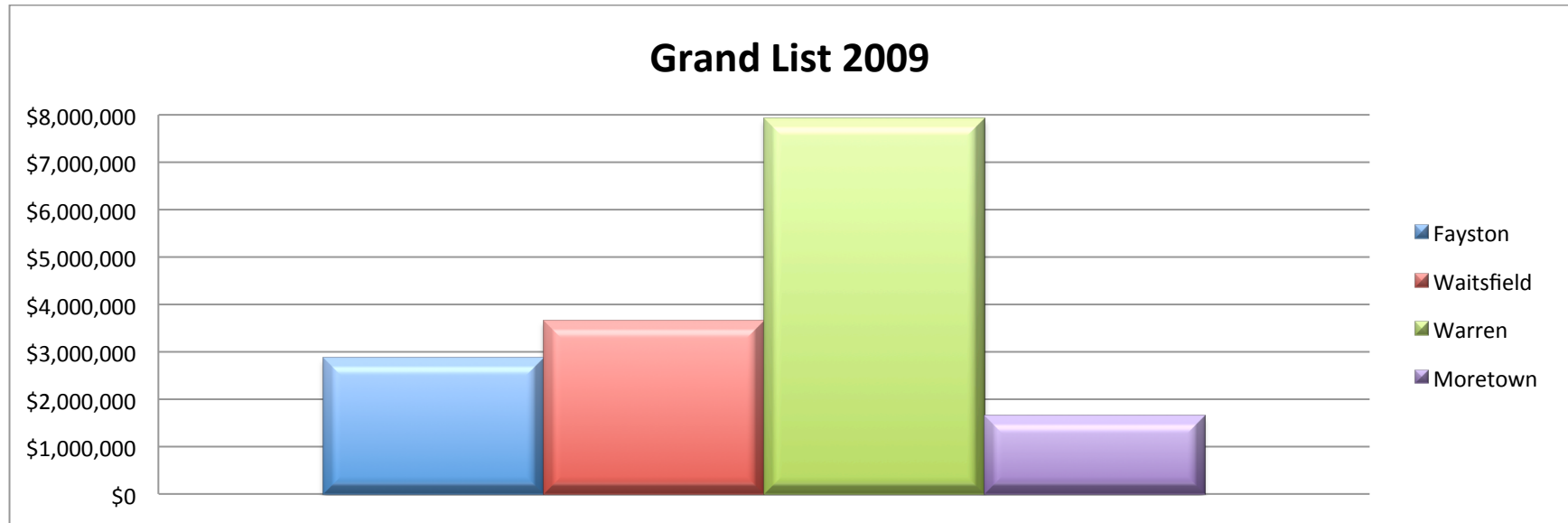
SECTION V: TOWN INFRASTRUCTURE

The Town Infrastructure section includes Items #27 & 35 from the Memorandum of Understanding.



While the number of fire and ambulance calls has increased for Warren from 2007 to 2008, they leveled in 2009. Calls in the other two towns have stayed steady. Further, the number of police calls has remained fairly constant in all three towns over the past two years.





2009 Tax Rates				
	Homestead Tax Rate	Municipal Tax Rate	Non-Residential Tax Rate	Common Level of Appraisal
Fayston	1.7488	0.2651	1.8714	70.7%
Waitsfield	1.2977	0.3250	1.3664	96.5%
Warren	1.1655	0.2570	1.2756	104.5%
Moretown	1.7401	0.3625	1.7998	72.2%

SECTION VI: ENVIRONMENT

The Environment section includes Items #26, 31, 33 & 34 from the Memorandum of Understanding.

ENERGY

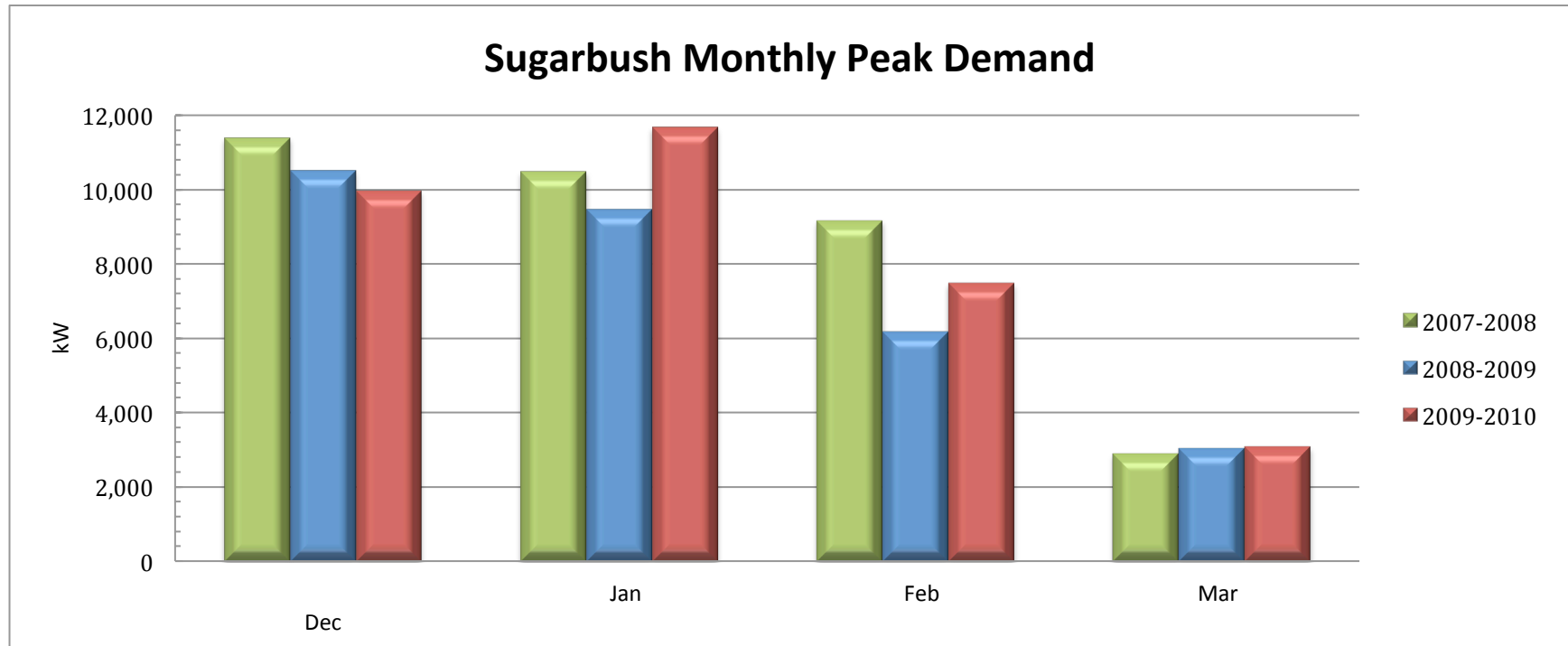
The table below identifies MRV energy consumption in 2008 in terms of electricity and transportation. Electrical consumption data came from the Renewable Energy Atlas of Vermont, while transportation data was based on calculating population and average mpg figures from US Department of Transportation. Transportation contributes a much larger portion of the MRV energy consumption, constituting nearly 5 times the electrical consumption of Fayston.

MRV Energy Consumption Comparison (2008)		
	Electrical ¹ (MWh)	Transportation ² (MWh)
Fayston	5,660	25,998
Waitsfield	16,038	35,040
Warren	36,213	36,147
Total	57,911	97,185

The MRV info below details the breakdown between residential electrical consumption vs commercial & industrial consumption by town. In sum, Warren consumed 63% of the MRV's total energy utilized in 2008. As shown below, the total annual consumption of the MRV is nearly equal between commercial/industrial (52%) and residential (48%) customers, though there is increased commercial demand in winter attributed to ski resort use.

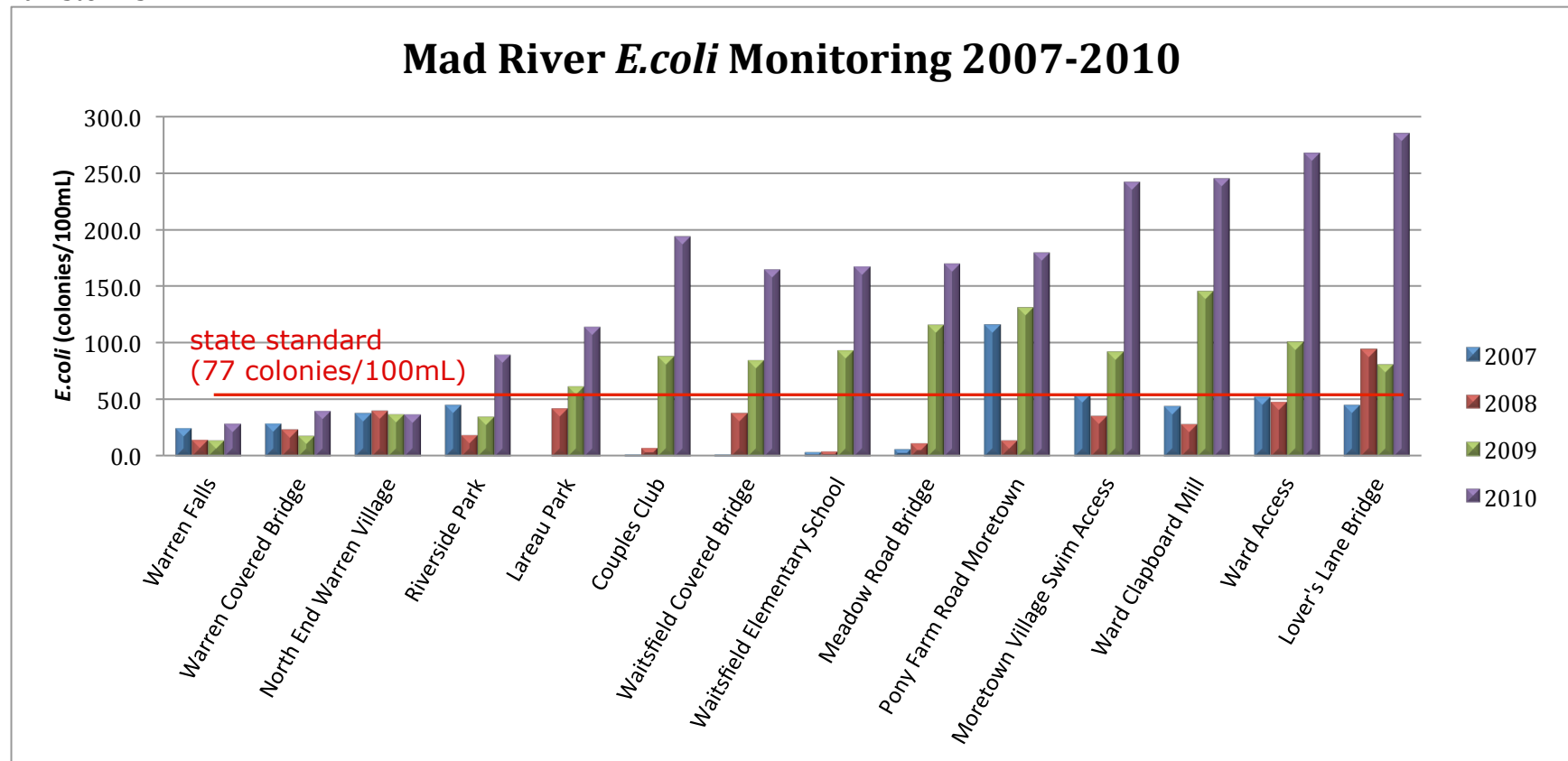
MRV Electrical Consumption (2008)						
	Residential ¹ (MWh)		Commercial & Industrial ¹ (MWh)		Total (MWh)	% of Total
FAYSTON	4,164	15%	1,495	5%	5,660	10%
WAITSFIELD	8,123	29%	7,914	26%	16,038	28%
WARREN	15,293	55%	20,919	69%	36,213	63%
Total MRV	27,580	100%	30,328	100%	57,911	100%

Sugarbush's monthly peak energy demand for the 2009-2010 season increased from the previous year in January, February & March. The large January increase can largely be attributed to increased need for snowmaking.



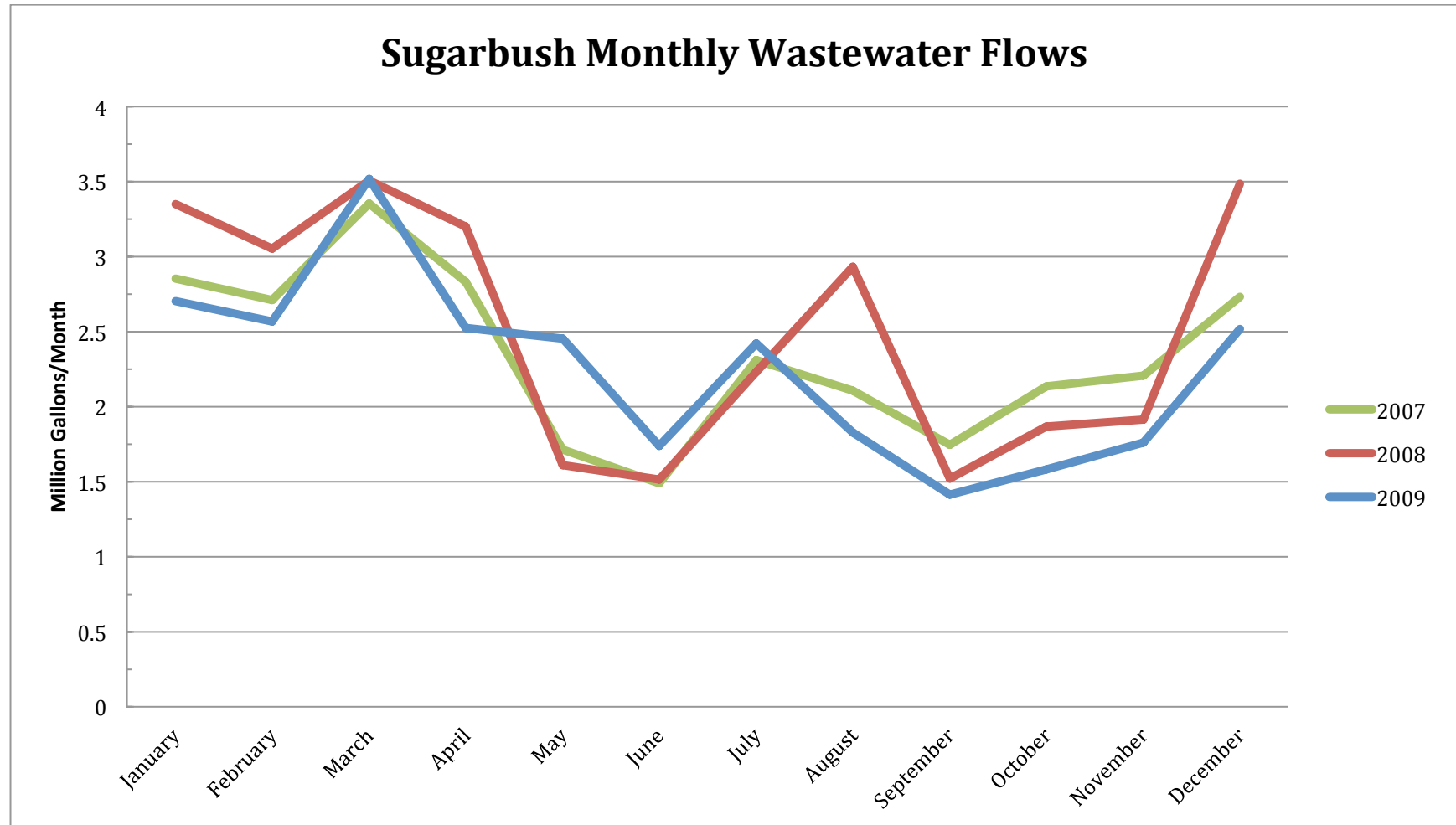
WATER QUALITY

Since 1985, the local watershed group Friends of the Mad River has been monitoring *E.coli* bacteria levels at 37 sites along the main stem and major tributaries throughout the watershed. *E.coli* is an indicator of pollution from fecal matter (livestock, wildlife, human); a high level of *E.coli* indicates the likelihood of a high level of disease-causing pathogens that can sicken swimmers. The standard for *E.coli* in recreational waters according to the Vermont Water Quality Standards is no more than 77 colonies of *E.coli* per 100 mL water. Across the state, swim beaches are temporarily closed when a single sample is found to be above this level, and sites that show a seasonal geometric mean above this standard may be formally recognized as “impaired.” At the Mad River, most sites saw a seasonal geometric mean above 77 colonies/100mL in 2010 due to significant rainstorms.



SUGARBUSH RESORT WASTEWATER FLOWS

The chart below identifies monthly influent flows for Sugarbush Resort treatment facilities, 2007-2009. Sugarbush Resort's wastewater flows have been relatively consistent over the past three years, although the months of January, August and December saw marked increases in 2008.



LAND CONSERVATION

The Mad River watershed encompasses 92,000 acres. The three towns of Fayston, Waitsfield and Warren comprise 65,948 acres, or 71% of land within this watershed. (The Mad River watershed includes Waitsfield, Warren, Fayston, Moretown and a portion of Duxbury.) As of 2011, approximately 7,241 acres (11% of the total land area in the 3 towns) of municipal, state and private land in the three towns of Waitsfield, Warren and Fayston are protected by conservation easements. An additional 7,193 acres of public land in the MRVPD towns are not subject to a conservation easement, but are a part of State and National Forest systems.

Conservation easements in the entire Mad River Watershed are held by the Vermont Land Trust (9,588 acres), the Town of Warren (253 acres), and the Green Mountain Club (531 acres).

Conserved Lands in 2010

	Total Acres	State/Federal land	Municipal Conserved	Privately-owned Conserved	Total Conserved & State/Federal	% Conserved & State/Federal land	Total Acres in "Current Use"
Fayston	23,360	2,998	73	1,531	4,602	20%	10,208
Waitsfield	17,220	550	696	1,212	2,458	14%	6,667
Warren	25,368	6,995	0	1,253	8,248	33%	5,797
Three Town Total	65,948	10,543	769	3,996	15,308	40%	22,672
Five Towns*	121,756	19,651	892	6,219	26,212	22%	47,143

*Fayston, Waitsfield, Warren, Moretown and Duxbury