

The Economic Impact of Allowing Alcohol in Retail Stores



An economic impact and statistical analysis demonstrates that relaxing alcohol restrictions will lead to 18% declines in beer and wine prices in Colorado. Due to limited competition, Colorado consumers overpay for beer and wine, and the average Colorado household will save \$750 on alcohol over the next three years if alcohol is allowed to be sold in retail stores. Colorado craft beers sales are expected to substantially increase, as grocery stores sales are projected to exceed \$125 million. The impact on liquor stores will be limited since liquor stores prosper close to grocery stores in other states as well as in Colorado where grocery stores are allowed to sell alcohol. Overall, relaxing restrictions will boost Colorado employment by more than 22,000.

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Colorado's alcohol laws and regulations remain similar in many respects to the original laws passed more than eighty years ago after the repeal of Prohibition. The alcohol rules restrict retail licenses to only one store per retailer and hence hurt free enterprise by limiting competition. Government restrictions on free markets hurt the Colorado economy because these restraints lead to economic inefficiencies. Alcohol restrictions act like a tax on Colorado consumers, by contributing to significantly higher alcohol prices and limiting consumer choice. Colorado consumers substantially overpay for alcohol, and allowing full strength beer, wine and possibly liquor to be sold in retail stores will generate a substantial positive economic impact to Colorado consumers. Alcohol sales in retail stores will positively affect the three most important determinants to consumer's shopping choices: Price, Convenience and Selection. A detailed economic and statistical analysis demonstrates:

- **Lower Prices:** The more efficient grocery and superstore model due to improved buying power, superior inventory/management practices and improved technology will lead to substantially lower alcohol prices for Colorado consumers. Increased competition between supermarkets, big box retailers and liquor stores will contribute to additional declines in the price of alcohol. The average Colorado household that consumes alcohol over three years will save more than \$750 in lower beer and wine prices as these prices are forecasted to decline more than 18%. Overall, savings will exceed \$865 per household if liquor is also allowed to be sold in retail outlets. Across the state, relaxing alcohol restrictions will generate \$485 million in cost savings to Colorado consumers. Since this anticipated money is projected to be largely spent locally on food and services, the economic multiplier effect implies the windfall to consumers will contribute to hundreds of millions of additional dollars of economic income gains to Colorado consumers and generate more than 5,000 jobs.
- **Increased Convenience:** Consumers are interested in one-stop shopping due to the increased convenience of saving valuable time. Grocery, convenience and big box stores offer thousands of items in one place, and if alcohol is included at these locations, the time

savings will generate \$312-\$450 in economic benefit to the typical Colorado household over the next three years.

- **Large Positive Economic Effect on Jobs:** Alcohol sales in Grocery stores will lead to 11,000-12,000 more grocery store jobs, 200-225 more grocery stores in Colorado, and sales increases of 25%. The multiplier effect of the store expansions and employment will bring 16,000-17,000 jobs to Colorado.
- **Boost in Craft Beer Sales:** Colorado ranks 3rd in the number of craft breweries per capita. Relaxing alcohol sales restrictions will allow the sale of more than 100 brands of Colorado craft beer in local grocery stores. Among the top five craft brewery states, only Colorado does not allow craft beer to be sold in grocery stores. This substantially hurts Craft beer sales and profits; for instance, Safeway and Kroger's sales of local craft beer in Oregon and Washington State are well over hundred million dollars. In Oregon, 65% of Kroger's sales of craft beer are from Oregon. We estimate improved access of Colorado craft beer by allowing it to be sold in Colorado grocery stores will generate an additional \$125 million dollars in sales of Colorado craft beer, and significantly boost production of Colorado beer. The substantial boost in sales of Colorado craft beer in grocery stores will create approximately 900 jobs in Colorado through the multiplier effect.
- **Limited Liquor Store Impact and Improved alcohol selection:** Liquor stores successfully coexist in many states such as Oregon and Washington with liberalized alcohol sales. Statistical analysis of MSAs (Metropolitan Statistical Area) with similar demographics as Denver indicates that alcohol rules have no significant impact on liquor store sales. For example, MSAs such as Seattle that allow grocery store purchases of alcohol have 14% more liquor store sales per capita than Denver. Statistical evidence in other comparable MSAs that sell alcohol further reveals high alcohol sales in liquor stores. Additionally, local liquor stores in the Denver MSA thrive near the few grocery stores allowed to sell alcohol; e.g., there are 79 liquor licensed stores within a two miles radius of Target and King Soopers' point of sale in Glendale. Further, the failure rate of the liquor stores near the Denver MSA's grocery stores that sell alcohol is statistically lower than the overall liquor store failure rate for the region, and their alcohol sales are not lower than Denver's average. An

analysis of the failure rate of liquor in other states that sell alcohol also demonstrates lower closure rates than grocery stores. Thus, there is no statistical evidence that allowing alcohol to be sold in grocery stores and big box stores will severely hurt neighboring liquor stores.

Methodology

Research shows that the three most important determinants of shopping choice are price, convenience of locations and selection (Brissch, Chintagunta and Fox, 2009). Additional studies by Arnold, Ma and Tigert (1978), Arnold, Oum and Tigert (1983) and Levey and Weitz (2004) highlight the importance of both convenience and assortment. Work by Popkowski, Sinha and Timmermans (2000) further shows the importance of one-stop shopping and location. Popkowski, Sinha and Saghal (2004) highlight the increasing relevance of one-stop shopping “due to the increased need for shoppers to optimize their time spent shopping, since demands of every day professional and personal life have increased for most shoppers.” They demonstrate that consumers economize on the time spent shopping by making multi-purpose shopping such as buying groceries, flowers and liquor at the grocery store or groceries and household items at big box stores, and conclude that it reduces “travel time by combining trips over time.” In response, ‘retailers have responded to this need for shoppers to economize on the time spent shopping by providing a wide assortment of products allowing consumers to combine purchases.’ In the following pages, this paper details the effect of price, convenience and selection of allowing alcohol to be sold in retail stores.

Price Effect

To evaluate the price effect, this study conducted a comprehensive alcohol price evaluation between the Denver MSA and St. Louis MSA. St. Louis is chosen because it has a comparable alcohol tax, standard of living and population, but allows liquor to be sold in retail stores. We examined eight top selling beers including both six, twelve and larger sizes, six of the top selling wine sold in the US in both the 750ml and 1.5l, and eight popular liquors sold in the U.S. More than 800 alcohol product prices were collected and prices comparisons were

estimated between the two MSAs. We also adjusted for the small differences in alcohol tax rates. A statistical analysis shows that beer and wine in St. Louis are 18.4% and 18.3% cheaper, and liquor is 12.6% cheaper; further, adjusting for standard of living of grocery prices leads to even greater price divergences. The estimated alcohol price declines are then multiplied by the average spending on alcohol by the Colorado household averaged over a three-year period. The price savings are \$440, \$310 and \$115 on beer, wine and liquor. The total impact on Colorado is obtained by the number of households that consume alcohol. The savings to all Colorado consumers in lower beer, wine and liquor are \$245, \$175 and \$65 million over a three-year period.

Estimates for the alcohol price declines additionally are supported by Numbeo, which is the largest database on price comparisons between cities. Numbeo reports that the prices of domestic and imported beer are 14.3% and 30.6% cheaper in St. Louis. The price of a medium-price bottle of wine is 8.3% cheaper than Denver; our estimates for wine however consisted of the more popular cheaper varieties of wine such as Yellowtail and Barefoot among others. Numbeo does not report liquor prices. Comparison with Seattle shows domestic and international beer prices are 25% and 26% less expensive than Denver beer prices. Hence, our estimates of a decline in beer prices of 18% are likely conservative. In addition, Pittsburgh and Baltimore, which also restrict alcohol sales, have beer and wine prices within 10% of Denver alcohol prices. Thus, MSAs and states that restrict alcohol have substantially higher prices for alcohol.

Convenience Impact

To calculate the economic impact of convenience (savings of time), we use the methodology of the U.S. Department of Transportation (DOT). The DOT reports that consumers are willing to pay to save time and estimate the value of time equals 50% of the hourly median household income. In Colorado, the 2015 median household income is approximately \$60,000, which yields a per hour wage of \$15 an hour. The average household visits the grocery store to buy food 2.1 times a week, and we assume this household on average purchases alcohol once a week. If the household saves 8 minutes by one-stop shopping, this translates into \$312 over

three years. However, in many cases, it may take more time; e.g., if a parent is shopping with their children, it may be inconvenient to stop a second time and bring them to the liquor store. In other cases, liquor stores are more than a five minute drive; this translates into a roundtrip drive of 10 minutes plus another 3-5 minutes to walk in and purchase the alcohol. This suggests 13-15 minutes; we use a conservative estimate of 12 minutes. In this case, the Colorado household will save \$468 over three years.

Economic Impact

To calculate the economic impact, we used Bizminer, which provides Industry Financial Reports for the average business establishment by North American Industry Classification System (NAICS) code by region over the past three years. We collected data on Grocery stores for 28 states that have less restrictive alcohol sales. The data are then adjusted for population size and standard of living. If Colorado had less restrictive alcohol policies, we estimate 12,000 more jobs in grocery stores and 25% higher sales; alcohol restrictions are a fundamental explanation for Colorado possessing 35% fewer grocery stores per capita than states with less alcohol rules. Comparison with a dozen Western and plain states near Colorado with less alcohol restrictions shows they have 19% more Grocery stores and 29% more sales than Colorado. In contrast, Utah, Kansas, Minnesota and Wyoming, which have similar alcohol restrictions as Colorado, have only 3% more stores, nearly identical sales and roughly similar employment. Hence, the statistical evidence is clear, restrictions on liquor sales in Colorado have hurt the bottom line of grocery stores, and limited their employment and expansion.

The effect of alcohol restrictions on Colorado's grocery stores is becoming more apparent in recent months. Safeway is closing nine stores in Denver due to poor sales, and this has a large impact on neighboring stores in their complex. Bizminer reports that in recent years 48 grocery stores have closed despite a relatively robust economy. Colorado has one of the highest failure rates among Grocery stores with a 17% cessation rate in recent years. Grocery store failure rates in the state are 32% higher than nearby Western and plain states that sell alcohol. The statistical evidence hence demonstrates that increased sales of liquor in grocery stores will contribute to dramatically lower grocery store closings.

The economic impact of alcohol restrictions on Grocery stores is then estimated using economic multipliers from the BEA (Bureau of Economic Analysis). We expect 16,000-17,000 more jobs over the next several years, and the overall impact to the state is likely to exceed \$2.2 billion dollars due to increased hiring (and its wage impact) and sales. For example, the average large grocery store in St. Louis has roughly two beer and/or wine specialists per store, and one to two additional employees to stock the shelves. Therefore, the positive economic impact of alcohol sales in Colorado grocery stores will be considerably greater than the possible downside impact on liquor stores in Colorado (which is detailed below).

Additionally, using the BEA multipliers, if a modest 15%-20% of the cost savings on alcohol purchases is due to the increased buying power of supermarkets and superstores, an additional 4,500-6,300 jobs will be created. This number is likely to be greater for two reasons. First, large supermarkets and superstores such as Walmart and Target have better buying power and lower distribution costs than small Colorado liquor stores; hence, less money will leave the state. This positive effect will be additionally compounded by the preference of supermarkets to buy local beer (discussed below). As a result, we expect employment gains of an additional approximate 5000 jobs; overall, more than 22,000 jobs to the state will be created if alcohol sales restrictions are loosened.

What do other studies find? Tennessee also has restrictive alcohol franchisee laws, and a 2011 Stonebridge study found that allowing wine to be sold in food stores would generate thousands of jobs. Our findings are consistent as this paper also examined beer sales, which are considerably greater than wine sales, and Tennessee's households spend less on alcohol as they have a large number of dry counties and little home beer brewing. A Connecticut study also found large job gains in the state after regulations on wine sales were relaxed.

Liquor Store Impact

The economic impact on liquor stores will be limited and overwhelmed by the positive impact on grocery stores sales. Liquor store sales are not likely to experience sharp sales declines and go out of business for a number of reasons. Statistical evidence shows that alcohol restrictions do not substantially affect liquor sales. Liquor store sales in cities such as Portland

and Seattle, which have less alcohol restrictions than Denver, have per capita 55% and 14% more liquor store sales respectively than Denver. Liquor store sales per capita in other cities that also allow grocery stores to sell alcohol are considerably greater than Denver; e.g., Cincinnati has 95% more alcohol sales, while Grand Rapids has 71% more liquor store sales than Denver. More examples of cities with thriving liquor store sales (that also allow alcohol to be sold in grocery stores) include Detroit and Indianapolis; they have liquor store sales 18% and 11% higher adjusting for per capita income. Des Moines has more than double the per capita liquor store sales as Denver. Liquor stores hence thrive in many cities and states that allow alcohol to be sold in grocery and superstores.

Locally, grocery stores that allow alcohol in the Denver region such as Safeway in Littleton, King Soopers in Glendale or Whole Foods in Boulder have no negative effect on neighboring liquor store sales, the number of liquor stores or their failure rates. These facts are demonstrated both statistically and visually. Using Bizminer, we examined the sales and cessation rates of liquor stores with the same zip codes as these three stores and compared them to the Denver MSA average and the state of Colorado. The failure rate of liquor stores near these stores is substantially below both the MSA and state average; further, their sales volumes are higher. As a result, statistical analysis significantly rejects a negative effect of grocery stores selling alcohol in the Denver region on liquor stores in the region. Over the past several years, no liquor store has gone out of business near these grocery stores that sell alcohol. Thus, there is no statistical evidence that grocery store sales of alcohol hurt the liquor store business in Colorado or other states.

Further, statistical investigation for the state highlights that Colorado liquor stores have very low failure rates. Cessation or failure rates in Colorado are only 4.2% and are one-fourth Colorado grocery stores. In western and plain states that sell alcohol, the liquor store failure rates are relatively similar. As a result, the liquor store business produces a stable income in states with less alcohol restrictions, and these states do not experience high liquor store failures. Further, comparison of liquor stores in nearby Western and plains MSAs that allow grocery store and superstore sales of alcohol have failure rates similar to Denver, and sharply below grocery store cessation rates. Thus, there is no evidence that allowing liquor to be sold in grocery stores

raises the failure of liquor stores. In fact, the evidence suggests the opposite, Colorado's grocery store cessation rates are high and need the revenue from liquor sales or more grocery stores may close.

A visual inspection of liquor stores near the grocery stores that sell alcohol in the region reveals no impact on the number of liquor stores. Map 1 presents a two-mile radius of the King Soopers Glendale location. As the map illustrates, there are approximately 75 liquor stores near both King Soopers and the Target stores that sell liquor. Map 2 shows the residential area of Littleton where Safeway sells alcohol and there are 35 liquor stores near it. Map 3 presents liquor stores near one of the Whole Foods in Boulder. All three maps illustrate large numbers of liquor stores near these grocery stores that sell alcohol; further, as reported above, sales of liquor and the failure of liquor stores in this area are better than both the MSA and state average. In comparison, we present maps of Seattle and Portland, and pick an arbitrary Safeway in these cities; in Seattle, there are no alcohol restrictions in Grocery stores, and in Portland, grocery stores are allowed to sell full strength beer and wine. Maps 4 and 5 show large numbers of liquor stores near Safeway stores in both these cities. Maps of other cities reveal similar patterns – large numbers of liquor stores near grocery sales that sell alcohol. People go to liquor stores for selection and service in other states, and hence they successfully coexist with grocery stores that sell alcohol.

Craft Beer Effect

Colorado ranks third in the number of craft breweries with 235 breweries and is also third per capita. Both Washington and Oregon allow full strength beer to be sold in Grocery stores, and they have 256 and 216 craft breweries, respectively, and are ranked per capita fourth and second, respectively. Vermont and Montana also have more craft breweries per person than Colorado and allow alcohol with less than 16% to be sold in grocery stores. Among the top five states that produce craft beers, Colorado is the only state that restricts alcohol sales. Allowing Colorado grocery stores to sell craft beer will substantially boost the craft beer industry in the state for two reasons: improved access and local preference. Consumers shopping at the grocery store will have more options than the 3.2% beer that is currently sold. The availability of

craft beer and the importance of convenience imply its availability will substantially boost sales of craft beer in grocery store; for example, the availability of craft beer in grocery stores Oregon and Washington have led to substantial sales of craft beer in grocery stores, and is documented below.

The policy of Safeway and King Soopers of buying local and the preference of Coloradans to purchase local craft beer indicate that grocery store sales of local craft beer will be a success and further enhance their availability and sales; e.g., 65% of craft beer sold in a leading grocery store in Oregon is from Oregon. For instance, grocery stores in Oregon even sell small run micro-brew pint bottles from local producers. Most craft beer sales in Washington state grocery stores are locally produced in Washington or Oregon. The competition for craft beer is intense in Oregon, Washington and Colorado, and hence expanding access to more consumers is critical for the product to survive. In Oregon and Washington State as well as Vermont and California, all large producers of craft beer, craft brewers have an advantage – they can sell in the local grocery stores.

Kroger and Safeway supplied data for total craft beer sales in Oregon and Washington State; they also supplied both the percentage and total sales of local craft beer in these states. Using these estimates along with the total beer sales of Kroger and Safeway in these states combined with the population of these states, we estimated that grocery stores in Colorado will sell more than \$125 million dollars. The multiplier effect implies an increase of 900 jobs to Colorado, which is projected to generate an additional \$200 million in income to the state.

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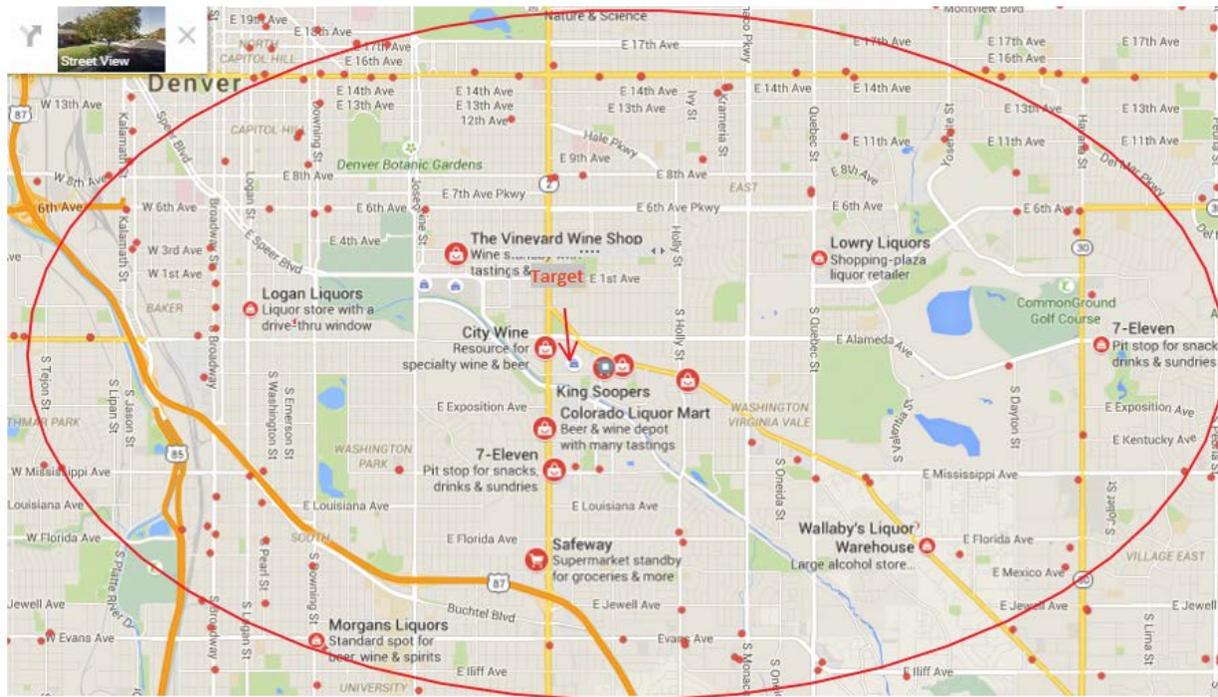
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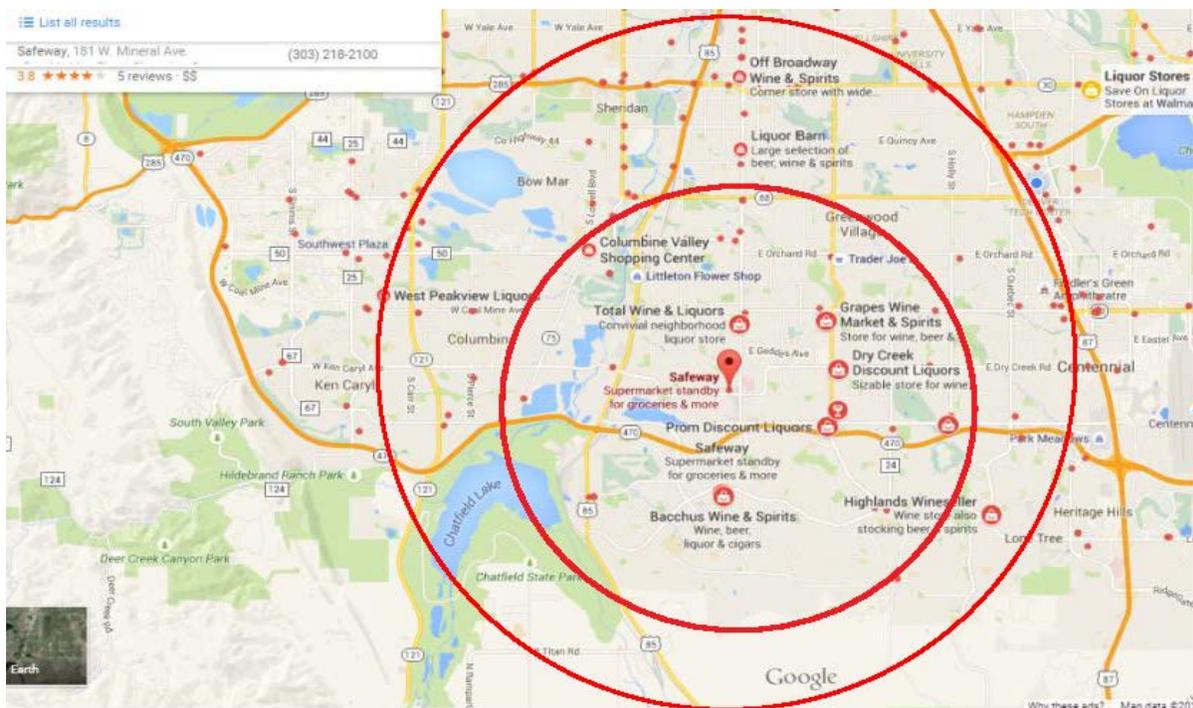
U.S. Department of Transportation, Value of Travel Time Savings: Departmental Guidance for Conducting Economic Evaluations.

Map 1 Liquor Stores within 2 miles of King Soopers & Target in Glendale, Denver

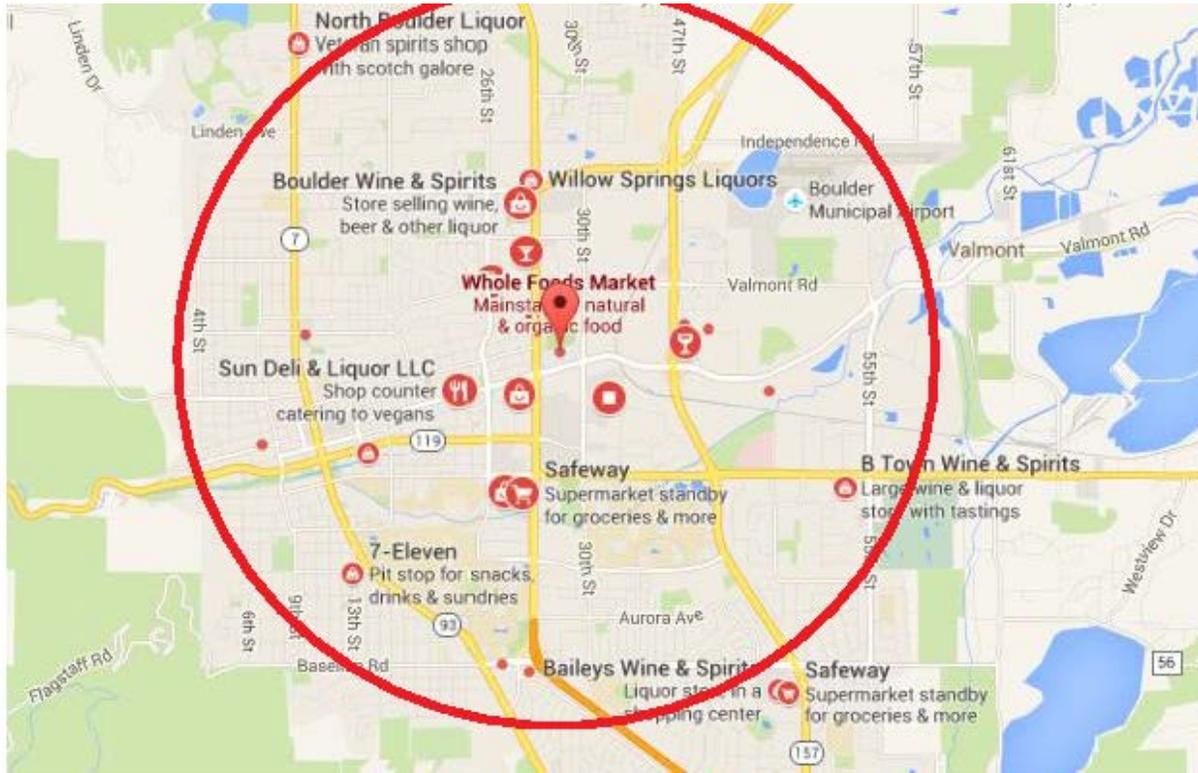


King Soopers

Map 2 Liquor Stores near Safeway in Littleton Denver 1 and 2 mile circles

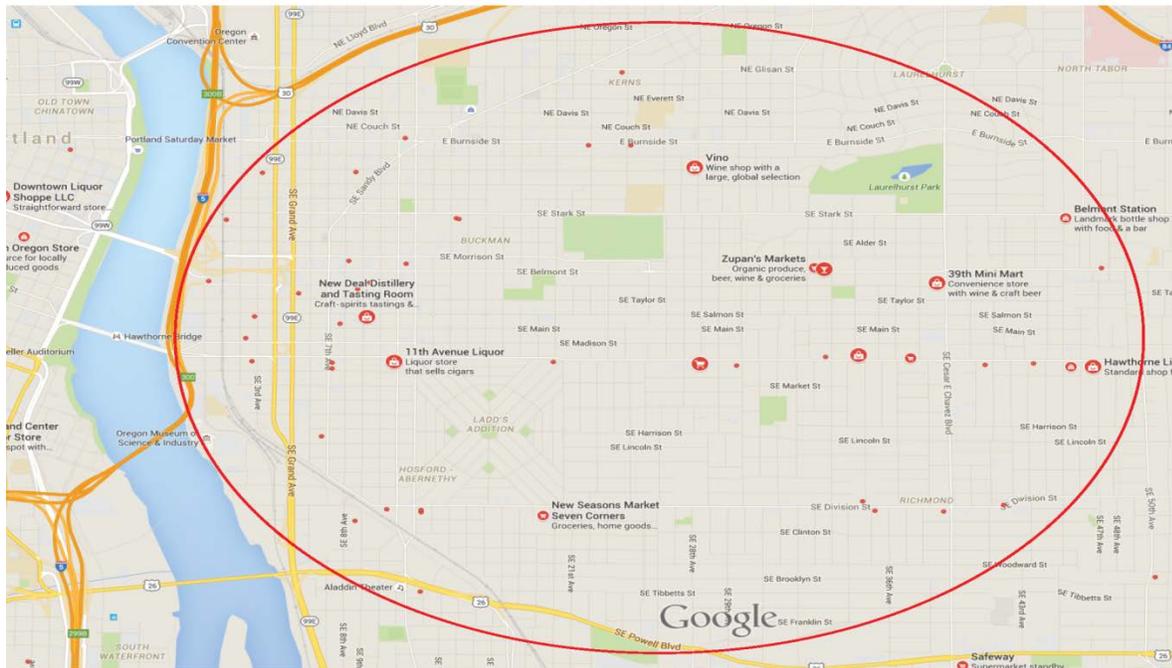


MAP 3 Liquor Stores near the Wholefoods in Boulder



Map 4 Portland Liquor Stores within 1 Mile of Safeway

Google liquor stores near 2800 S.E. Hawthorne portland



Map 5 Liquor stores within 1 Mile of Safeway store in Seattle

 liquor store near 1410 E John St Seattle, WA 98112

