WESTERN RURAL
DEVELOPMENT CENTER

Five County Association of Governments
Regional Area Sector Analysis Process (ASAP) Project

FINAL REPORT
May 2023

ASAP AREA SECTOR
ANALYSIS PROCESS
Helping communities identify targeted, sustainable economic development.

University of Nevada, Reno
Center for Economic Development

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Cooperative Extension

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Introduction

The Five County Association of Governments (FCAOG) is a regional organization serving the Utah counties of Beaver, Garfield, Kane, Iron and Washington. FCAOG also serves as the regional economic development district as a planning partner with the U.S. Economic Development Administration (EDA). Working regionally the AOG develops and maintains a regional Comprehensive Economic Development Strategy (CEDS). The goals, objectives, and strategies identified in the comprehensive strategic plan, support the economic development goals of the region, as well as those of the counties and communities that comprise the region.

To further its strategic goals the AOG developed an agreement and partnered with the Western Rural Development Center (WRDC) to implement the Area Sector Analysis Process (ASAP) for its five member counties and a final summary regional report. Dates of ASAP project completion for the five AOG counties are Garfield 2022; Beaver 2017; Kane 2019; Washington 2019; and Iron 2020.

The ASAP project reflects collaborative research and development efforts by a group of rural economists, sociologists, and cooperative extension professionals from a number of land-grant universities in the West including Utah State University, University of Nevada, Reno, and University of Idaho among other current and former partners. The implementation of ASAP projects throughout the West is coordinated by the WRDC. The ASAP process has been implemented in over 50 communities in Alaska, Arizona, California, Colorado, Hawaii, Idaho, Montana, Nevada, New Mexico, Utah and Washington.

What is ASAP?

The Area Sector Analysis Process (ASAP) is an economic development tool that identifies the most desirable and compatible industries for a single community. The ASAP process consists of two primary components: 1.) A structural economic model that generates community-specific ranking indices, and 2.) A six-module community economic development program that assists community members in better understanding the economic position of their community generally, and the community application of the ASAP model specifically.

Desirability is determined by how closely the goals and priorities of each industry align with those of the community. Compatibility is determined by how well community resources and assets meet the production requirements of each industry. Identifying which industry sectors are most compatible and most desirable for a community is a key component to developing *sustainable* economic strategies. ASAP is rooted in the idea that what defines sustainable economic development is unique to each community. In other words, while communities may appear similar, each community goals, priorities, and assets are specific to their population and location. Moreover, the ASAP framework is informed by the theory that community development strategies should reflect both community and industry preferences in order to be successful over time.

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ASAP Model and Procedure

The ASAP framework (Figure 1) matches goal and asset data for a specific community to the needs of industries classified using the four-digit North American Industrial Classification System (NAICS) industries. The model generates two summary indices, a Desirability Index (DI) and a Compatibility Index (CI), unique to the community for each industry. The DI ranks how well the business practices and priorities for each industry match with the community's economic, environmental, and social goals. The CI ranks how well the community's asset infrastructure (e.g., location, workforce) meets each industry's production needs. Moreover, quantitative output from ASAP identifies strengths and weaknesses of the community's asset infrastructure, contributing to better-informed and more sustainable economic development strategies. For example, in the short term, well-matched existing industries may benefit from tax incentives to offer job training. Over a longer term, the community can improve communication infrastructure to recruit otherwise well-matched industries that require high-speed internet.

Figure 1.
ASAP Framework
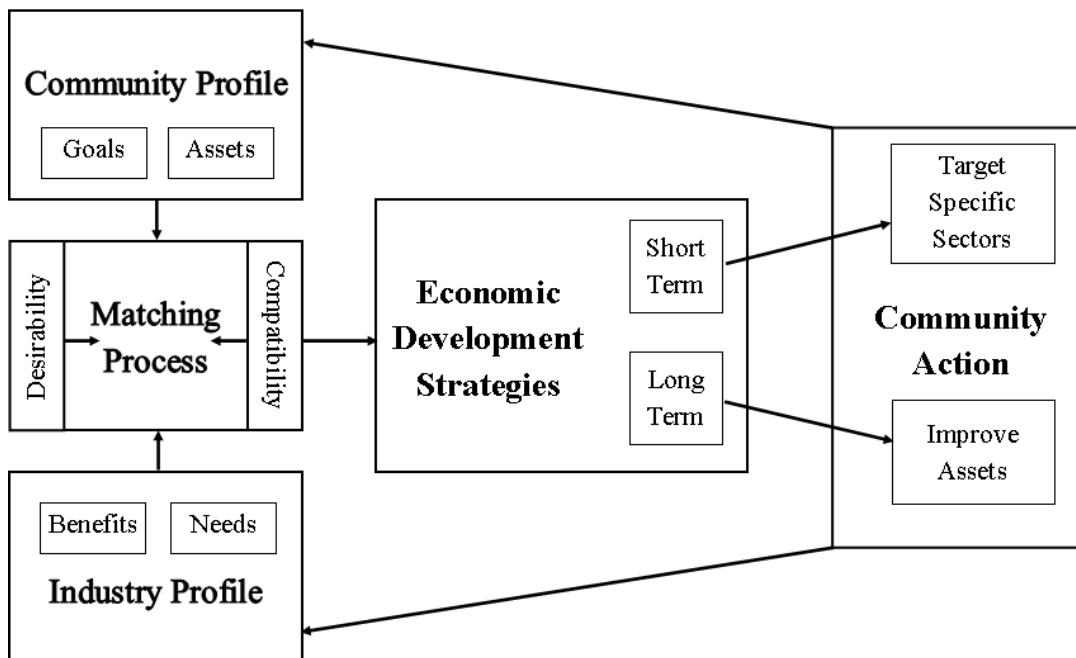
Primary community data are collected as part of a structured six-module ASAP procedure that takes three to six months on average. Working with a steering committee comprised of community members representing a broad range of constituencies, an ASAP facilitator (or team) provides a community-centered socioeconomic overview, assists the committee with its primary data collection of community survey data and assets, and provides guidance on interpreting ASAP model output and formulating community development objective.

ASAP Model Output – Five County AOG

As mentioned above, the ASAP process generates two primary indexes – a Compatibility Index (CI) and a Desirability Index (DI). The CI reflects how well the community's asset infrastructure meets the production requirements of each sector. The DI reflects how well matched each sector is with the community's development goals and priorities. ASAP indexes are unique to each community by industry intersection for each of the 276 sectors currently represented in the model. ASAP analysis also distinguishes between sectors that currently exist in the community and those included in the ASAP model but not currently operating within the community.

Compatibility Index
The CI reflects how well the community's asset infrastructure meets the production requirements of each sector. Information about sector specific production requirements is gathered from representative firms that have completed the ASAP Business Location Choice Survey BLCS). Participation in the BLCS is by invitation only and based on a random sample stratified by the firm's primary four-digit NAICS as reported in a nationwide business directory[1]. Participating firms in the BLCS provide information about production requirements for the space and assets included in the ASAP Community Asset Inventory (CAI). These firms also report how important each of the production factors are in influencing their decision to relocate or expand. Average asset and space values are calculated for each four-digit NAICS sector and compared to the asset and space values from the CAI. This intersection of community asset and space structure and sector asset and space requirements generates the individual indicator rankings and the resulting CI. This process reveals not only the community's ability to meet a sector's production needs, but also reflects the weight of importance that each sector attributes to each required asset.

ASAP Community Asset Inventory: Sample Community Asset Survey

The asset indicator values used to calculate the CI for Five County along with the baseline asset values used to compare the identified 'best' or 'worst' communities in the United States. For example, Glasgow, MT is identified as the most remote incorporated community based on driving distance to a metropolitan with a population of at least 50,000.

High Compatibility Index (CI) Sectors for Five County Region

The following set of tables report Five County sectors with Compatibility Index values greater than .75 (i.e. sectors with at least a 75% compatibility) for each sector included in the ASAP model along with a notation of whether or not the sector exists in the Five County Economic Development District (FCCED). Determination of sector existence in the community is based on the 2015 IMPLAN model, which was the most recent data available when the projects were implemented. IMPLAN is an input-output model commonly used by economic development professionals and others interested in better understanding how regional inter-industry activity generates economic and fiscal impacts to households, sectors, and municipalities. Sectors defined as 'existing' in the ASAP model are based on IMPLAN structure, which incorporates annual state level employment data reported by the department of employment or workforce services. A regional 2015 IMPLAN model for the Five County Region was constructed from the five associated county IMPLAN models to account for inter-industry transactions that occur within the region. A 2015 IMPLAN model for the United States also served as an input to the ASAP model.

Sectors are sorted by CI and are presented in descending order starting with the highest valued CI sector. This list served as the primary basis for identifying well matched sectors that might be targeted for sustainable economic development.

TABLE 1.
Industries with High Compatibility Index Scores (CI > .9)

NAICS4	Description	Existing	DI	CI
1111	Oilseed and Grain Farming	X	0.7341	0.9099
1112	Vegetable and Melon Farming	X	0.7294	0.9258
1113	Fruit and Tree Nut Farming	X	0.7350	0.9372
1114	Greenhouse, Nursery, and Floriculture Production	X	0.6831	0.9215
1119	Other Crop Farming	X	0.5956	0.9461
1121	Cattle Ranching and Farming	X	0.6636	0.9256
1122	Hog and Pig Farming	X	0.7199	0.9519
1124	Sheep and Goat Farming	X	0.7022	0.9408
1125	Aquaculture	X	0.7003	0.9304
1129	Other Animal Production	X	0.7024	0.9340
1131	Timber Tract Operations		0.7856	0.9247
1132	Forest Nurseries and Gathering of Forest Products		0.7055	0.9340
1133	Logging	X	0.7467	0.9193
1141	Fishing		0.6929	0.9290
1142	Hunting and Trapping	X	0.6780	0.9279
1151	Support Activities for Crop Production	X	0.6712	0.9289
1152	Support Activities for Animal Production	X	0.6792	0.9405
1153	Support Activities for Forestry	X	0.6892	0.9378
2111	Oil and Gas Extraction	X	0.7623	0.9327
2121	Coal Mining	X	0.7859	0.9491
2122	Metal Ore Mining		0.7278	0.8890
2123	Nonmetallic Mineral Mining and Quarrying	X	0.7385	0.9236
2131	Support Activities for Mining	X	0.7680	0.9445
2211	Electric Power Generation, Transmission and Distribution	X	0.8113	0.9211
2212	Natural Gas Distribution	X	0.8384	0.9373
2213	Water, Sewage and Other Systems	X	0.6990	0.9195
2361	Residential Building Construction	X	0.7613	0.9367
2362	Nonresidential Building Construction	X	0.7392	0.9172
2371	Utility System Construction	X	0.7434	0.9025
2372	Land Subdivision	X	0.7097	0.9301
2373	Highway, Street, and Bridge Construction	X	0.7368	0.9193
2379	Other Heavy and Civil Engineering Construction	X	0.7112	0.9418
2381	Building Foundation And Exterior Contractors	X	0.7388	0.9265
2382	Building Equipment Contractors	X	0.7629	0.9280
2383	Building Finishing Contractors	X	0.7652	0.9178
2389	Other Specialty Trade Contractors	X	0.7163	0.9151
3111	Animal Food Manufacturing	X	0.6924	0.9105
3112	Grain and Oilseed Milling		0.7466	0.9305
3113	Sugar and Confectionery Product Manufacturing	X	0.7359	0.9289
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing	X	0.6981	0.9149
3115	Dairy Product Manufacturing	X	0.7223	0.9209
3116	Animal Slaughtering and Processing	X	0.7160	0.9375
3117	Seafood Product Preparation and Packaging		0.6979	0.9209
3118	Bakeries and Tortilla Manufacturing	X	0.6916	0.9046
3119	Other Food Manufacturing	X	0.7268	0.9299
3121	Beverage Manufacturing	X	0.7137	0.9350
3122	Tobacco Manufacturing		0.7609	0.9272
3131	Fiber, Yarn, and Thread Mills	X	0.6713	0.9318
3132	Fabric Mills		0.6874	0.9245
3133	Textile and Fabric Finishing and Fabric Coating Mills	X	0.7017	0.9082
3141	Textile Furnishings Mills	X	0.6640	0.9225

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NAICS4	Description	Existing	DI	CI
3149	Other Textile Product Mills	X	0.6973	0.9607
3151	Apparel Knitting Mills	X	0.6408	0.9310
3152	Cut and Sew Apparel Manufacturing	X	0.6702	0.9155
3159	Apparel Accessories and Other Apparel Manufacturing	X	0.6680	0.9263
3161	Leather and Hide Tanning and Finishing		0.6690	0.9262
3162	Footwear Manufacturing	X	0.7038	0.9127
3169	Other Leather and Allied Product Manufacturing	X	0.6713	0.9216
3211	Sawmills and Wood Preservation	X	0.7321	0.9290
3212	Veneer, Plywood, and Engineered Wood Product Manufacturing	X	0.7252	0.9312
3219	Other Wood Product Manufacturing	X	0.7015	0.9275
3221	Pulp, Paper, and Paperboard Mills		0.7351	0.9139
3222	Converted Paper Product Manufacturing		0.7267	0.9107
3231	Printing and Related Support Activities	X	0.7107	0.9381
3241	Petroleum and Coal Products Manufacturing	X	0.7955	0.9173
3251	Basic Chemical Manufacturing	X	0.7801	0.9142
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing	X	0.7620	0.9195
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing		0.7766	0.9140
3254	Pharmaceutical and Medicine Manufacturing	X	0.7944	0.9314
3255	Paint, Coating, and Adhesive Manufacturing	X	0.7554	0.9220
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	X	0.7787	0.9047
3259	Other Chemical Product and Preparation Manufacturing		0.7758	0.9287
3261	Plastics Product Manufacturing	X	0.7033	0.9461
3262	Rubber Product Manufacturing	X	0.7254	0.9173
3271	Clay Product and Refractory Manufacturing	X	0.7377	0.9346
3272	Glass and Glass Product Manufacturing	X	0.7280	0.9323
3273	Cement and Concrete Product Manufacturing		0.7491	0.9131
3274	Lime and Gypsum Product Manufacturing		0.7383	0.9133
3279	Other Nonmetallic Mineral Product Manufacturing	X	0.7409	0.9230
3311	Iron and Steel Mills and Ferroalloy Manufacturing	X	0.7860	0.9294
3312	Steel Product Manufacturing from Purchased Steel		0.7153	0.9243
3313	Alumina and Aluminum Production and Processing		0.7367	0.9132
3314	Nonferrous Metal (except Aluminum) Production and Processing	X	0.7338	0.9225
3315	Foundries	X	0.7509	0.9241
3321	Forging and Stamping	X	0.7230	0.9212
3322	Cutlery and Handtool Manufacturing	X	0.7301	0.9209
3323	Architectural and Structural Metals Manufacturing	X	0.7158	0.9123
3324	Boiler, Tank, and Shipping Container Manufacturing	X	0.7125	0.9298
3325	Hardware Manufacturing		0.7271	0.9276
3326	Spring and Wire Product Manufacturing	X	0.7127	0.9169
3327	Machine Shops; Turned Product; and Screw, Nut, and Bolt Manufacturing	X	0.7381	0.9134
3328	Coating, Engraving, Heat Treating, and Allied Activities	X	0.7399	0.9216
3329	Other Fabricated Metal Product Manufacturing	X	0.7234	0.9209
3331	Agriculture, Construction, and Mining Machinery Manufacturing	X	0.7262	0.9227
3332	Industrial Machinery Manufacturing	X	0.7456	0.9278
3333	Commercial and Service Industry Machinery Manufacturing	X	0.7519	0.9356
3334	Ventilation, Heating, Air-Conditioning, and Commercial Refrigeration Equipment Manufacturing		0.7258	0.9298
3335	Metalworking Machinery Manufacturing		0.7125	0.9255
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing		0.7580	0.9217
3339	Other General Purpose Machinery Manufacturing	X	0.7572	0.9100
3341	Computer and Peripheral Equipment Manufacturing	X	0.8213	0.9360
3342	Communications Equipment Manufacturing	X	0.7903	0.9567

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Industries with High Compatibility Index Scores (CI > .9)

NAICS4	Description	Existing	DI	CI
3343	Audio and Video Equipment Manufacturing		0.8019	0.9274
3344	Semiconductor and Other Electronic Component Manufacturing	X	0.8402	0.9069
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	X	0.7994	0.9155
3346	Manufacturing and Reproducing Magnetic and Optical Media		0.7668	0.9229
3351	Electric Lighting Equipment Manufacturing		0.7418	0.9174
3352	Household Appliance Manufacturing		0.7492	0.9241
3353	Electrical Equipment Manufacturing	X	0.7541	0.9324
3359	Other Electrical Equipment and Component Manufacturing	X	0.7447	0.9356
3361	Motor Vehicle Manufacturing		0.7742	0.9201
3362	Motor Vehicle Body and Trailer Manufacturing	X	0.7198	0.9207
3363	Motor Vehicle Parts Manufacturing	X	0.7168	0.9319
3364	Aerospace Product and Parts Manufacturing	X	0.7453	0.9265
3365	Railroad Rolling Stock Manufacturing		0.7547	0.9200
3366	Ship and Boat Building	X	0.7264	0.9255
3369	Other Transportation Equipment Manufacturing	X	0.7089	0.9323
3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	X	0.7147	0.9321
3372	Office Furniture (including Fixtures) Manufacturing	X	0.7201	0.9257
3379	Other Furniture Related Product Manufacturing	X	0.7158	0.9324
3391	Medical Equipment and Supplies Manufacturing	X	0.7566	0.9210
3399	Other Miscellaneous Manufacturing	X	0.7144	0.9156
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	X	0.7628	0.9188
4233	Lumber and Other Construction Materials Merchant Wholesalers	X	0.7775	0.9188
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	X	0.8216	0.9251
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	X	0.7805	0.9205
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	X	0.8077	0.9216
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	X	0.7846	0.9220
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	X	0.7893	0.9190
4239	Miscellaneous Durable Goods Merchant Wholesalers	X	0.7663	0.9326
4241	Paper and Paper Product Merchant Wholesalers	X	0.7855	0.9248
4242	Drugs and Druggists' Sundries Merchant Wholesalers	X	0.8284	0.9251
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	X	0.7741	0.9241
4244	Grocery and Related Product Merchant Wholesalers	X	0.7802	0.9258
4245	Farm Product Raw Material Merchant Wholesalers	X	0.7769	0.9268
4246	Chemical and Allied Products Merchant Wholesalers	X	0.7837	0.9166
4247	Petroleum and Petroleum Products Merchant Wholesalers	X	0.7720	0.9442
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	X	0.7888	0.9106
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	X	0.7796	0.9317
4251	Wholesale Trade Agents and Brokers	X	0.7405	0.9422
4411	Automobile Dealers	X	0.7546	0.9122
4412	Other Motor Vehicle Dealers	X	0.7568	0.9392
4441	Building Material and Supplies Dealers	X	0.7345	0.9408
4442	Lawn and Garden Equipment and Supplies Retailers	X	0.7168	0.9246
4451	Grocery and Convenience Retailers	X	0.7167	0.9024
4452	Specialty Food Retailers	X	0.7172	0.9201
4491	Furniture and Home Furnishings Retailers	X	0.7431	0.9098
4491	Furniture and Home Furnishings Retailers	X	0.7560	0.9178
4492	Electronics and Appliance Retailers	X	0.7316	0.9180
4552	Warehouse Clubs, Supercenters, and Other General Merchandise Retailers	X	0.7002	0.9084
4561	Health and Personal Care Retailers	X	0.7288	0.9160
4581	Clothing and Clothing Accessories Retailers	X	0.7080	0.9359
4582	Shoe Retailers	X	0.7193	0.9065

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Industries with High Compatibility Index Scores (CI > .9)

NAICS4	Description	Existing	DI	CI
4583	Jewelry, Luggage, and Leather Goods Retailers	X	0.6859	0.8836
4591	Sporting Goods, Hobby, and Musical Instrument Retailers	X	0.7205	0.9449
4592	Book Retailers and News Dealers	X	0.7211	0.9473
4593	Florists	X	0.6902	0.9411
4595	Used Merchandise Retailers	X	0.7102	0.9612
4599	Other Miscellaneous Retailers	X	0.6819	0.9139
4811	Scheduled Air Transportation	X	0.8119	0.9272
4812	Nonscheduled Air Transportation	X	0.8027	0.9211
4821	Rail Transportation	X	0.8011	0.9220
4832	Inland Water Transportation	X	0.7811	0.9392
4841	General Freight Trucking	X	0.7583	0.9235
4851	Urban Transit Systems	X	0.6612	0.9208
4852	Interurban and Rural Bus Transportation	X	0.6839	0.9287
4853	Taxi and Limousine Service	X	0.6796	0.9919
4855	Charter Bus Industry	X	0.6646	0.9479
4859	Other Transit and Ground Passenger Transportation	X	0.6839	0.9304
4861	Pipeline Transportation of Crude Oil	X	0.8001	0.9745
4862	Pipeline Transportation of Natural Gas	X	0.7642	0.9154
4869	Other Pipeline Transportation	X	0.7963	0.8954
4871	Scenic and Sightseeing Transportation, Land	X	0.7683	0.9204
4872	Scenic and Sightseeing Transportation, Water	X	0.7800	0.9386
4879	Scenic and Sightseeing Transportation, Other	X	0.7739	0.9349
4881	Support Activities for Air Transportation	X	0.7558	0.9278
4882	Support Activities for Rail Transportation	X	0.7881	0.9105
4883	Support Activities for Water Transportation	X	0.7814	0.9212
4885	Freight Transportation Arrangement	X	0.7664	0.9085
4889	Other Support Activities for Transportation	X	0.7523	0.8772
4921	Couriers and Express Delivery Services	X	0.7039	0.9422
4922	Local Messengers and Local Delivery	X	0.7319	0.9478
4931	Warehousing and Storage	X	0.7637	0.9122
5121	Motion Picture and Video Industries	X	0.7710	0.9254
5122	Sound Recording Industries	X	0.7335	0.9470
5131	Newspaper, Periodical, Book, and Directory Publishers	X	0.7717	0.9155
5132	Software Publishers	X	0.8254	0.9363
5161	Radio and Television Broadcasting Stations	X	0.8470	0.9429
5162	Media Streaming Distribution Services, Social Networks, and Other Media Networks and Conten	X	0.8986	0.9346
5171	Wired and Wireless Telecommunications (except Satellite)	X	0.7671	0.9246
5178	All Other Telecommunications	X	0.7964	0.9395
5182	Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services	X	0.8056	0.9477
5192	Web Search Portals, Libraries, Archives, and Other Information Services	X	0.7670	0.9399
5221	Depository Credit Intermediation	X	0.7660	0.8993
5222	Nondepository Credit Intermediation	X	0.7834	0.9215
5223	Activities Related to Credit Intermediation	X	0.7880	0.9360
5231	Securities and Commodity Contracts Intermediation and Brokerage	X	0.8091	0.9255
5232	Securities and Commodity Exchanges	X	0.8071	0.9448
5239	Other Financial Investment Activities	X	0.7452	0.9014
5241	Insurance Carriers	X	0.8118	0.9516
5242	Agencies, Brokerages, and Other Insurance Related Activities	X	0.7765	0.9120
5251	Insurance and Employee Benefit Funds	X	0.7179	0.9366
5259	Other Investment Pools and Funds	X	0.7144	0.9232
5311	Lessors of Real Estate	X	0.7122	0.9158

TABLE 1.
Industries with High Compatibility Index Scores (CI > .9)

NAICS4	Description	Existing	DI	CI
5312	Offices of Real Estate Agents and Brokers	X	0.6989	0.9222
5313	Activities Related to Real Estate	X	0.7116	0.9406
5321	Automotive Equipment Rental and Leasing	X	0.7785	0.9028
5322	Consumer Goods Rental	X	0.7586	0.9123
5323	General Rental Centers	X	0.7431	0.9068
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	X	0.8167	0.9321
5411	Legal Services	X	0.7714	0.9401
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	X	0.7828	0.9521
5413	Architectural, Engineering, and Related Services	X	0.7912	0.9222
5414	Specialized Design Services	X	0.7555	0.9190
5415	Computer Systems Design and Related Services	X	0.8023	0.9230
5416	Management, Scientific, and Technical Consulting Services	X	0.7853	0.9298
5417	Scientific Research and Development Services	X	0.8268	0.9233
5418	Advertising, Public Relations, and Related Services	X	0.7792	0.9282
5419	Other Professional, Scientific, and Technical Services	X	0.7501	0.9310
5511	Management of Companies and Enterprises	X	0.8231	0.9080
5611	Office Administrative Services	X	0.7259	0.9248
5613	Employment Services	X	0.7275	0.9424
5614	Business Support Services	X	0.7145	0.9299
5615	Travel Arrangement and Reservation Services	X	0.7486	0.9104
5616	Investigation and Security Services	X	0.7071	0.9243
5617	Services to Buildings and Dwellings	X	0.7057	0.9936
5619	Other Support Services	X	0.7258	0.9352
5621	Waste Collection	X	0.6126	0.9370
5622	Waste Treatment and Disposal	X	0.7547	0.9163
5629	Remediation and Other Waste Management Services	X	0.7680	0.9223
6111	Elementary and Secondary Schools	X	0.7016	0.9286
6112	Junior Colleges	X	0.7484	0.8996
6113	Colleges, Universities, and Professional Schools	X	0.7745	0.9356
6114	Business Schools and Computer and Management Training	X	0.6966	0.9484
6115	Technical and Trade Schools	X	0.6789	0.9264
6116	Other Schools and Instruction	X	0.6934	0.9499
6117	Educational Support Services	X	0.6906	0.9282
6212	Offices of Dentists	X	0.7248	0.9249
6214	Outpatient Care Centers	X	0.7869	0.9250
6215	Medical and Diagnostic Laboratories	X	0.7768	0.9205
6216	Home Health Care Services	X	0.7177	0.9245
6231	Nursing Care Facilities (Skilled Nursing Facilities)	X	0.7086	0.9444
6232	Residential Intellectual and Developmental Disability, Mental Health, and Substance Abuse Facil	X	0.7166	0.9188
6233	Continuing Care Retirement Communities and Assisted Living Facilities for the Elderly	X	0.7113	0.9147
6239	Other Residential Care Facilities	X	0.7091	0.9383
6241	Individual and Family Services	X	0.6819	0.9428
6242	Community Food and Housing, and Emergency and Other Relief Services	X	0.6114	0.9243
6243	Vocational Rehabilitation Services	X	0.6785	0.9124
6244	Child Care Services	X	0.6997	0.9246
7112	Spectator Sports	X	0.6977	0.9264
7113	Promoters of Performing Arts, Sports, and Similar Events	X	0.7249	0.9201
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	X	0.7517	0.9102
7121	Museums, Historical Sites, and Similar Institutions	X	0.6985	0.9166
7131	Amusement Parks and Arcades	X	0.6565	0.9078
7139	Other Amusement and Recreation Industries	X	0.6964	0.9393

TABLE 1.
Industries with High Compatibility Index Scores (CI > .9)

NAICS4	Description	Existing	DI	CI
7212	RV (Recreational Vehicle) Parks and Recreational Camps	X	0.7291	0.9442
7213	Rooming and Boarding Houses, Dormitories, and Workers' Camps	X	0.7490	0.9314
7223	Special Food Services	X	0.7163	0.9150
7225	Restaurants and Other Eating Places	X	0.6905	0.9063
8112	Electronic and Precision Equipment Repair and Maintenance	X	0.7329	0.9444
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repai	X	0.7535	0.9347
8114	Personal and Household Goods Repair and Maintenance	X	0.7249	0.9287
8121	Personal Care Services	X	0.7122	0.9254
8122	Death Care Services	X	0.7034	0.9308
8123	Drycleaning and Laundry Services	X	0.7069	0.8974
8129	Other Personal Services	X	0.6963	0.9217
8131	Religious Organizations	X	0.7290	0.9801
8132	Grantmaking and Giving Services	X	0.7581	0.9504
8133	Social Advocacy Organizations	X	0.7646	0.8975
8134	Civic and Social Organizations	X	0.7065	0.9811
8139	Business, Professional, Labor, Political, and Similar Organizations	X	0.7544	0.9372
9261	Administration of Economic Programs		0.6840	0.9231

High Desirability Index (DI) Scores for Five County Region

The ASAP Desirability Index (DI) reflects how well matched each sector is with the community's development goals and priorities. Community goal information is gathered as part of the Community Goal Survey (CGS). ASAP steering committee members recruit community residents using a chain-referral survey sampling technique. The objective of this sampling technique is to gather responses from a wide variety of community constituents in a short time period (approximately eight weeks) at low to no cost. A total of 624 residents in the Five County region participated in the CGS.

The CGS asks participants to perform pair-wise ranking across five statements relevant to three goal categories: economic, environmental, and social. Additionally, CGS participants are asked to rate the quality of nine community amenities such as healthcare, shopping, and K-12 schooling that are included in the CI ranking. The average community values for each of the fifteen goal statements (five in each of three categories) serve as inputs to the ASAP DI. The community survey responses are aggregated and compared to the Business Location Choice Survey scores for economic, environmental and social outcomes. This process results in a DI that reflects how desirable each sector is to the community based on shared goals and priorities. Similar to the CI, the DI also reflects the weight of importance of each of the fifteen goals to the community.

Tables 10 and 11 reflect the average weight ranking for each goal category and relevant indicator in the CGS.

TABLE 2.
Community Development Goal Rankings

Goal	Weight	Rank
Economic Quality	41.80%	1
Environmental Quality	36.90%	2
Social Quality	21.30%	3

TABLE 3.
Community Development Indicator Rankings

Indicator	Weight	Rank
G1.I1 - Every new job generates additional jobs in the community	7.32%	7
G1.I2 - New businesses return profits to the community	8.07%	6
G1.I3 - New businesses hire locally	9.99%	2
G1.I4 - New businesses buy locally	6.10%	9
G1.I5 - New businesses increase the average local wage	10.32%	1
G2.I1 - New businesses do not pollute the water	9.48%	3
G2.I2 - New businesses do not release toxic chemicals in the air	9.15%	4
G2.I3 - New businesses are in compliance with hazardous waste management	8.89%	5
G2.I4 - New businesses do not emit greenhouse gas	5.35%	10
G2.I5 - New businesses do not develop undeveloped land	3.99%	12
G3.I1 - New businesses increase the local tax base	3.56%	13
G3.I2 - New jobs are full-time	5.03%	11
G3.I3 - New jobs offer benefits (health and/or retirement)	6.52%	8
G3.I4 - New jobs provide training programs	3.07%	15
G3.I5 - New businesses support community activities	3.13%	14

Number of observations	624

High Compatibility Index and Desirability Index Sectors

For the Five County Region, the ASAP model developed a compatibility and desirability score for each sector at the four-digit NAICS level. Results of particular interest are sectors with at least a 75% compatibility index and desirability index score for each sector included in the ASAP model along with a notation of whether or not the sector exists in the Five County region. The Five County Region has over 100 sectors at or higher than a .75 compatibility score, that is, they could do business in the Five County area, its assets and resources meet their production requirements. The limiting factor for a potential Five County target industry is its desirability score, does it meet the needs and goals of area residents. In this *"Community Development Indicator Rankings"* listed the top three criteria to be "New businesses increase the average local wage,", "New businesses hire locally", and "New businesses do not pollute the water" in that order of priority. "New businesses do not release toxic chemicals," "New Businesses are in compliance with hazardous waste requirements", and "New businesses return profits to the community" round out the top 6 priorities.

Five County Desirability Index scores for all sectors at a .75 level or above are compiled in the following tables:

TABLE 4.
Community Development Indicator Rankings: High DI and CI Index Score

NAICS4	Description	Existing	DI	CI
5162	Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content F	X	0.8986	0.9346
5161	Radio and Television Broadcasting Stations	X	0.8470	0.9429
2212	Natural Gas Distribution	X	0.8384	0.9373
4861	Pipeline Transportation of Crude Oil	X	0.8001	0.9745
5241	Insurance Carriers	X	0.8118	0.9516
5132	Software Publishers	X	0.8254	0.9363
3341	Computer and Peripheral Equipment Manufacturing	X	0.8213	0.9360
4242	Drugs and Druggists' Sundries Merchant Wholesalers	X	0.8284	0.9251
5182	Computing Infrastructure Providers, Data Processing, Web Hosting, and Related Services	X	0.8056	0.9477
5232	Securities and Commodity Exchanges	X	0.8071	0.9448
5417	Scientific Research and Development Services	X	0.8268	0.9233
5331	Lessors of Nonfinancial Intangible Assets (except Copyrighted Works)	X	0.8167	0.9321
3344	Semiconductor and Other Electronic Component Manufacturing	X	0.8402	0.9069
3342	Communications Equipment Manufacturing	X	0.7903	0.9567
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers	X	0.8216	0.9251
4811	Scheduled Air Transportation	X	0.8119	0.9272
5178	All Other Telecommunications	X	0.7964	0.9395
2121	Coal Mining	X	0.7859	0.9491
5412	Accounting, Tax Preparation, Bookkeeping, and Payroll Services	X	0.7828	0.9521
5231	Securities and Commodity Contracts Intermediation and Brokerage	X	0.8091	0.9255
2211	Electric Power Generation, Transmission and Distribution	X	0.8113	0.9211
5511	Management of Companies and Enterprises	X	0.8231	0.9080
4236	Household Appliances and Electrical and Electronic Goods Merchant Wholesalers	X	0.8077	0.9216
3343	Audio and Video Equipment Manufacturing		0.8019	0.9274
3254	Pharmaceutical and Medicine Manufacturing	X	0.7944	0.9314
5415	Computer Systems Design and Related Services	X	0.8023	0.9230
5223	Activities Related to Credit Intermediation	X	0.7880	0.9360
4812	Nonscheduled Air Transportation	X	0.8027	0.9211
4821	Rail Transportation	X	0.8011	0.9220
4832	Inland Water Transportation	X	0.7811	0.9392
4872	Scenic and Sightseeing Transportation, Water	X	0.7800	0.9386
4247	Petroleum and Petroleum Products Merchant Wholesalers	X	0.7720	0.9442
3311	Iron and Steel Mills and Ferroalloy Manufacturing	X	0.7860	0.9294
5416	Management, Scientific, and Technical Consulting Services	X	0.7853	0.9298
3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	X	0.7994	0.9155
5413	Architectural, Engineering, and Related Services	X	0.7912	0.9222
3241	Petroleum and Coal Products Manufacturing	X	0.7955	0.9173
2131	Support Activities for Mining	X	0.7680	0.9445
6214	Outpatient Care Centers	X	0.7869	0.9250
5411	Legal Services	X	0.7714	0.9401
4249	Miscellaneous Nondurable Goods Merchant Wholesalers	X	0.7796	0.9317
1131	Timber Tract Operations		0.7856	0.9247
4241	Paper and Paper Product Merchant Wholesalers	X	0.7855	0.9248
6113	Colleges, Universities, and Professional Schools	X	0.7745	0.9356
4879	Scenic and Sightseeing Transportation, Other	X	0.7739	0.9349
8132	Grantmaking and Giving Services	X	0.7581	0.9504
4238	Machinery, Equipment, and Supplies Merchant Wholesalers	X	0.7893	0.9190
5418	Advertising, Public Relations, and Related Services	X	0.7792	0.9282
5192	Web Search Portals, Libraries, Archives, and Other Information Services	X	0.7670	0.9399
4237	Hardware, and Plumbing and Heating Equipment and Supplies Merchant Wholesalers	X	0.7846	0.9220
4244	Grocery and Related Product Merchant Wholesalers	X	0.7802	0.9258

TABLE 4.
Community Development Indicator Rankings: High DI and CI Index Score

NAICS4	Description	Existing	DI	CI
5222	Nondepository Credit Intermediation	X	0.7834	0.9215
3259	Other Chemical Product and Preparation Manufacturing		0.7758	0.9287
4245	Farm Product Raw Material Merchant Wholesalers	X	0.7769	0.9268
4883	Support Activities for Water Transportation	X	0.7814	0.9212
4235	Metal and Mineral (except Petroleum) Merchant Wholesalers	X	0.7805	0.9205
4246	Chemical and Allied Products Merchant Wholesalers	X	0.7837	0.9166
4248	Beer, Wine, and Distilled Alcoholic Beverage Merchant Wholesalers	X	0.7888	0.9106
4239	Miscellaneous Durable Goods Merchant Wholesalers	X	0.7663	0.9326
4882	Support Activities for Rail Transportation	X	0.7881	0.9105
4243	Apparel, Piece Goods, and Notions Merchant Wholesalers	X	0.7741	0.9241
2361	Residential Building Construction	X	0.7613	0.9367
6215	Medical and Diagnostic Laboratories	X	0.7768	0.9205
5121	Motion Picture and Video Industries	X	0.7710	0.9254
4233	Lumber and Other Construction Materials Merchant Wholesalers	X	0.7775	0.9188
4412	Other Motor Vehicle Dealers	X	0.7568	0.9392
2111	Oil and Gas Extraction	X	0.7623	0.9327
3251	Basic Chemical Manufacturing	X	0.7801	0.9142
3361	Motor Vehicle Manufacturing		0.7742	0.9201
4869	Other Pipeline Transportation	X	0.7963	0.8954
5171	Wired and Wireless Telecommunications (except Satellite)	X	0.7671	0.9246
8139	Business, Professional, Labor, Political, and Similar Organizations	X	0.7544	0.9372
2382	Building Equipment Contractors	X	0.7629	0.9280
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing		0.7766	0.9140
5629	Remediation and Other Waste Management Services	X	0.7680	0.9223
3346	Manufacturing and Reproducing Magnetic and Optical Media		0.7668	0.9229
4871	Scenic and Sightseeing Transportation, Land	X	0.7683	0.9204
5242	Agencies, Brokerages, and Other Insurance Related Activities	X	0.7765	0.9120
8113	Commercial and Industrial Machinery and Equipment (except Automotive and Electronic) Repair a	X	0.7535	0.9347
3122	Tobacco Manufacturing		0.7609	0.9272
3333	Commercial and Service Industry Machinery Manufacturing	X	0.7519	0.9356
5131	Newspaper, Periodical, Book, and Directory Publishers	X	0.7717	0.9155
3353	Electrical Equipment Manufacturing	X	0.7541	0.9324
4881	Support Activities for Air Transportation	X	0.7558	0.9278
3256	Soap, Cleaning Compound, and Toilet Preparation Manufacturing	X	0.7787	0.9047
2383	Building Finishing Contractors	X	0.7652	0.9178
4841	General Freight Trucking	X	0.7583	0.9235
4231	Motor Vehicle and Motor Vehicle Parts and Supplies Merchant Wholesalers	X	0.7628	0.9188
3252	Resin, Synthetic Rubber, and Artificial and Synthetic Fibers and Filaments Manufacturing	X	0.7620	0.9195
5321	Automotive Equipment Rental and Leasing	X	0.7785	0.9028
5419	Other Professional, Scientific, and Technical Services	X	0.7501	0.9310
3336	Engine, Turbine, and Power Transmission Equipment Manufacturing		0.7580	0.9217
4862	Pipeline Transportation of Natural Gas	X	0.7642	0.9154
3391	Medical Equipment and Supplies Manufacturing	X	0.7566	0.9210
3255	Paint, Coating, and Adhesive Manufacturing	X	0.7554	0.9220
4931	Warehousing and Storage	X	0.7637	0.9122
3315	Foundries	X	0.7509	0.9241
4885	Freight Transportation Arrangement	X	0.7664	0.9085
3365	Railroad Rolling Stock Manufacturing		0.7547	0.9200
5414	Specialized Design Services	X	0.7555	0.9190
4491	Furniture and Home Furnishings Retailers	X	0.7560	0.9178
5622	Waste Treatment and Disposal	X	0.7547	0.9163

TABLE 4.
Community Development Indicator Rankings: High DI and CI Index Score

NAICS4	Description	Existing	DI	CI
5322	Consumer Goods Rental	X	0.7586	0.9123
3339	Other General Purpose Machinery Manufacturing	X	0.7572	0.9100
4411	Automobile Dealers	X	0.7546	0.9122
5221	Depository Credit Intermediation	X	0.7660	0.8993
8133	Social Advocacy Organizations	X	0.7646	0.8975
7114	Agents and Managers for Artists, Athletes, Entertainers, and Other Public Figures	X	0.7517	0.9102
4889	Other Support Activities for Transportation	X	0.7523	0.8772

Targeted Sectors

Forty-eight four-digit North American Industry Classification System (NAICS) sectors were identified as targeted sectors for at least one of the counties in the Five County region. Of those, 20 sectors were targeted by more than one county.

Table 14 reports the county-level targeted sectors along with the average county-level DI and CI as well as the DI and CI generated in the Five County regional ASAP model.

The 48 targeted sectors are reported using NAICS 4-digit level of aggregation. NAICS is the standard classification system used by federal agencies when reporting economics statistics related to business sectors. The NAICS organizational structure is also used by states and for economic reporting and is used by Canada and Mexico to facilitate business sector analysis across all North American Countries.

NAICS sectors can be aggregated at several different levels from 2-digit to 6-digit with the numerical NAICS code increasing as the business sector is further disaggregated. The more disaggregated a sector the more representative the associated information will be for the specific sector.

Targeted Sectors Data Sources

Six distinct information sets are provided for each of the 48 selected sectors. The information sets are as follow:

2012 NAICS Definition
The text description provided for each sector is sourced from the U.S. Census Bureau[2]. All levels of aggregation are reported for each selected sector, though not all sectors are disaggregated at all levels.

Each sector description references closely related sectors as *cross-references* that may or may not be included in this report. Additional information on the related sectors not included in this report or for additional information on NAICS in general access the NAICS webpage at the address in Footnote 3.

Superscripts of "T" within the numerical code text mean that Canadian, Mexican, and United States industries are comparable. For all tables, "NR" means that no data was available for that specific data point.

National NAICS Economic Trends
This table reports national level economic summary statistics for number of establishments, annual payroll, number of employees, average payroll, and average employment for each sector. These measures are reported for each year 2012 through 2015 – presenting annual data side-by-side may reveal economic trends specific to the sector.

The data is sourced for sectors 1131 and above from the U.S. Census American Fact Finder[3] County Business Patterns and for sectors below 1131 from the U.S. Department of Agriculture Census of Agriculture[4]. As of May 2017, for agricultural sectors (those below 1131) 2007 and 2012 are the most current data years available - the most recent data year for all sectors 1131 and higher is 2015.

Top 10 Producer States
This table reports the top 10 producing states in the U.S. for each sector based on total annual payroll. The number of establishments and employees per state is also reported. See *National NAICS Economic Trends* table for data source.

Top 10 Western States
This table reports the top 10 producing states in the Western[5] U.S. for each sector based on total annual payroll. The number of establishments and employees per state is also reported. See *National NAICS Economic Trends* table for data source.

ASAP Business Survey Statistics
These tables report firm responses to a select group of questions presented in the ASAP Business Location Choice Survey (BLCS) that inquire about the importance of physical infrastructure, economic infrastructure, and quality of life to firm relocation decisions. Responses are reported as averages for all firms classified within the 4-digit NAICS of interest. These responses are used in calculating the DI (economic infrastructure and quality of life) and CI (physical infrastructure and quality of life). Data is sourced from the ASAP business database maintained by the University Center for Economic Development (UCED) at the University of Nevada, Reno. The number of firm responses varies by sector – as of April 2018 a total of 2,248 individual firms representing 249 4-digit NAICS sectors have participated in the BLCS.

FIVE COUNTY ASAP PROJECT RESULTS

This information will help the region and its counties and communities focus on potential business and industries that are desirable and compatible with the culture and resources of the region. A strategy to work with Economic Development Corporation of Utah (EDCUtah) and other marketing resources can be developed to create and expand targeted businesses and industry into the Five County area. This implementation will diversify the economy, provide greater job opportunities, and increase the per capita and median family income. Another important ASAP outcome will be the identification of businesses and industry that are more acceptable to the residents of the communities and counties within the Five County area. Comments from county economic development staff and ASAP steering group members have indicated that apathy or even hostility shown by area residents has at times been a major hurdle in successfully creating and expanding economic development in the Five County region.

Implementation - Results of ASAP provides a much clearer vision of the types of business and industry that should be marketed for the Five County region. Information derived through ASAP is intended for use by local elected officials, community, county, and regional economic development professionals, state planning agencies, EDCUtah and other agencies to market targeted businesses and industries for the Five County region. This marketing strategy includes outreach to business and industry currently established in the Five County area, those in the State wishing to expand operations, and those outside of Utah.

Each county will determine the implementation method best suited for their respective jurisdiction to utilize data derived from the ASAP. The Regional ASAP implementation strategy is utilization of the CEDS. Data derived from the ASAP for each county will be included in the CEDS update scheduled for completion in 2023. Immediate use of ASAP data is encouraged and supported by the Five County Association of Governments.

The *"High Ranking Selected NAICS Sectors"* generated from this process is the important results. From this list the respective county or region can further research and do an in-depth-analysis for each.

IMPLEMENTATION STRATEGY – NEXT STEPS

The final step in the ASAP is for each county and the Region to develop an "Implementation Strategy". Next steps in developing this implementation strategy have been outlined for each county and the Region. (See Appendix A – County ASAP Implementation Reports).

Each county will determine the extent to which they will follow these suggested guidelines. Some have already established an implementation team. As opportunities become available, hopefully they can utilize the data derived from this process to strengthen their recruitment effort. Additionally, economic development sections of county or community general plans can be reinforced by ASAP findings.

Regionally the Five County Economic Development District will incorporate the results of the ASAP in their CEDS. As counties and the Region acknowledge recruitment opportunities relative to high-ranking sectors identified through the ASAP, the CEDS can significantly strengthen recruitment proposals.

Five County Association of Governments staff will work with and/or coordinate with member counties on their highest priority strategies. Coordination efforts should be an ongoing process so that Five County staff can understand how to assist the counties with their economic goals. Current county strategies are outlined in each respective county section of appendix A in this document.

CONCLUSION

The Five County ASAP Project has been a big undertaking. The process of collecting data and conducting monthly ASAP meeting in all five counties proved challenging but very worthwhile. Each module not only helped counties understand the ASAP process but brought folks together to strategically discuss their vision of the future for their respective county and community.

The community survey requirement proved to be very encouraging. Over 650 completed surveys were submitted for evaluation. The analyzed results provide economic development practitioners with a much clearer understanding of the types of businesses and industries that meet the expected desirability characteristics of the residents of the Five County region.

APPENDIX

A

County ASAP Implementation Reports

Beaver County, Utah

ASAP Summary and Implementation Report

ASAP AREA SECTOR ANALYSIS PROCESS

Helping communities identify targeted, sustainable economic development.

University of Nevada, Reno
Center for Economic Development

University of Nevada
Cooperative Extension

WESTERN RURAL DEVELOPMENT CENTER
engaging the future

1. Introduction

The economies in many communities and counties in the West are struggling with limited employment opportunities and stagnant wages especially for working class, service and blue-collar jobs. In rural communities, problems are compounded because of declining employment in agriculture, natural resources and manufacturing, historically the primary employers of rural Americans. In more rapidly growing metro and shoulder counties, problems of housing, transportation and accommodating new growth and development complicate the integration of adjacent rural counties into a regional economy. Such is the case with Beaver County. In an effort to assist communities with their regional economic development efforts, the Western Rural Development Center and its partners throughout the western region have developed ASAP (Area Sector Analysis Process), a strategic planning model designed especially for rural or growing metro counties in the Western United States.

2. ASAP Model

The ASAP model and process has been applied or is in the process of being applied, in numerous communities in the West.

The ASAP process consists of six modules that are delivered once each month for six months. Module topics are: 1. Introduction and Overview of the ASAP Process; 2. Community Goals and Assets: Acquiring County Data and Surveys; 3. Overview of County Socioeconomic Factors; 4. Presentation and Discussion of ASAP Output (Target Industry Data Report presented); 5. Quantitative Analysis of ASAP Results Beaver County NAICS Report presented); and 6. Applying ASAP Results to Community Economic Development Efforts (Sanpete County Final Report and Implementing ASAP presented).

During the six-module process, community goals are determined through a survey of county residents. Community infrastructure, economic and quality of life assets are also determined. Finally, survey data from over 2,500 businesses from all geographic regions of the country are reviewed to determine what industries would need to succeed in a target community or county and what benefits the industry would bring to the local community.

The ASAP process then matches community survey and asset input with industry interview data. The ASAP model helps communities determine industries that are both desirable for local residents and compatible with industry needs. Extensive data and information are provided to the community on industries that are both desirable and compatible and are selected by the community for further research and analysis.

Utilizing ASAP output, the ASAP team helps the community team to develop and implement an economic development strategic plan.

Data specific to Beaver County are provided below: included are survey and asset results (Tables 1-3), and target industrial sectors (Table 4).

3. Survey Results (Desirability)

118 Beaver County residents responded to an on-line survey of economic development preferences and goals summarized in Tables 1 and 2. Questions are organized around the business and development implications of factors relating to sustaining and improving the economic, environmental and social quality of county residents. The top three responses, "New businesses hire locally," "New businesses increase the average local wage, " and, "New businesses return profits to the community," reflect the concern of residents for an improvement in the quality of their economic life. Nearly a third of the 118 responses, included one of these top three economic outcomes. These community development choices and preferences comprise a **desirability index** which is one critical component of the ASAP matching process.

4. TABLE 1: Community Development Goal Rankings

Indicator	Weight	Rank
Economic Quality	46.9%	**1**
Environmental Quality	34.1%	2
Social Quality	19.0%	3

TABLE 2: Community Development Indicator Rankings

Indicator	Weight	Rank
G1.I1 - Every new job generates additional jobs in the community	8.3%	5
G1.I2 - New businesses return profits to the community	8.5%	3
G1.I3 - New businesses hire locally	12.7%	**1**
G1.I4 - New businesses buy locally	7.3%	8
G1.I5 - New businesses increase the average local wage	10.0%	2
G2.I1 - New businesses do not pollute the water	8.4%	4
G2.I2 - New businesses do not release toxic chemicals in the air	7.7%	7
G2.I3 - New businesses are in compliance with hazardous waste management	8.3%	6
G2.I4 - New businesses do not emit greenhouse gas	5.6%	9
G2.I5 - New businesses do not develop undeveloped land	4.2%	11
G3.I1 - New businesses increase the local tax base	3.0%	14
G3.I2 - New jobs are full-time	4.0%	12
G3.I3 - New jobs offer benefits (health and/or retirement)	5.5%	10
G3.I4 - New jobs provide training programs	2.9%	15
G3.I5 - New businesses support community activities	3.5%	13

Number of observations	118

5. Asset Evaluation Results (Compatibility)

Table 3 identifies county assets that are important, and in some cases critical for the operation of businesses and industry in Beaver County. Factors such as accessibility, available retail and industrial space, cell phone service, water and power supply are all compared to national standards and evaluated as assets. These assets are then compared to requirements of 2500 businesses and industries interviewed over the past ten years and the results compiled in a data base for ASAP use. These data become a critical part of a **compatibility index** used to match and target industries with community goals and preferences.

6. TABLE 3: ASAP Asset Values

Asset	Description	Source	Asset Values			Asset Value Basis	
			Beaver Co., UT	Baseline	Ratio	Beaver Co., UT	Baseline
S1	Local acreage available (private)	CAI	39,649	---	---		
S2	Local manufacturing space availability (sq ft)	CAI	29,885	---	---		
S3	Local warehouse availability (sq ft)	CAI	29,885	---	---		
S4	Local office space availability (sq ft)	CAI	6,000	---	---		
S5	Local retail space availability (sq ft)	CAI	9,500	---	---		
A1	Access within 30 minutes to interstate	CAI	Yes	---	---		
A2	Access within 30 minutes to package freight	CAI	No	---	---		
A3	Access within 30 minutes to railhead	CAI	Yes	---	---		
A4	Access within 30 minutes to rail freight	CAI	Yes	---	---		
A5	Access within 30 minutes to passenger air	CAI	No	---	---		
A6	Access within 30 minutes to port/harbor	CAI	No	---	---		
A7	Access within 30 minutes to international port	CAI	No	---	---		
A8	Access to natural gas pipeline	CAI	Yes	---	---		
A9 & A10	Driving miles to metropolitan area population > 50,000	CAI	104	282	0.368794326	Saint George, UT	Glasgow, MT
A11	3-phase electric	CAI	Yes	---	---		
A12	Fiber optic lines	CAI	Yes	---	---		
A13	High-volume water supply	CAI	Yes	---	---		
A14	High-volume wastewater disposal	CAI	Yes	---	---		
A15	Solid waste disposal	CAI	Yes	---	---		
A16*	Cell phone service	CAI	N/A	N/A	N/A		
A17	Local public transportation	CAI	No	---	---		
A18	Expansion site	CAI	No	---	---		
A19	High-speed internet	CAI	Yes	---	---		
A20	% of worforce with college degree or equivalent	CAI	0.2	0.54577	0.366454734		Washington, D.C.
A21	% of worforce with HS degree or equivalent	CAI	0.921	0.92773	0.992745734		Montana
A22	% of worforce with less than HS degree	CAI	0.079	0.18211	0.433803745		California
A23	Prevailing yearly wage	CAI	38189	113243	0.337230557		Santa Clara, CA
A24	Workers compensation tax rate	CAI	0.0127	0.0324	0.391975309		California
A25	Business income tax rate	CAI	0.05	0.0999	0.500500501		Pennsylvania
A26*	Local and state government incentives	CAI	N/A	N/A	N/A		
A27*	Union labor	CAI	N/A	N/A	N/A		
A28	Specialized job training programs (excl. college and university)	CAI	No	---	---		
A29	Short- and long-term financing	CAI	Yes	---	---		
A30*	Business/trade association	CAI	N/A	N/A	N/A		
A31	Crime rate	CAI	0.01915	0.08133	0.23546047		St. Louis, MO
A32	Median home price	CAI	129300	1000000	0.1293		San Jose (et.al), CA MSA
A33	Air and water quality	CGS	87.14285714	---	---		
A34	Natural ecosystem	CGS	82.67857143	---	---		
A35	Outdoor recreation opportunities	CGS	78.71559633	---	---		
A36	Social and cultural opportunities	CGS	56.57657658	---	---		
A37	Retail shopping opportunities	CGS	35.80357143	---	---		
A38	Education system (K-12)	CGS	71.33928571	---	---		
A39	Access within 3 minutes to a college or university	CAI	Yes	---	---		
A40	Health care services	CGS	64.73214286	---	---		
A41	Public safety services (e.g. police, fire)	CGS	74.02	---	---		

* =	Not included in ASAP Model

CAI =   Community Asset Inventory - values provided by steering committee; ratio values validated and modified where necessary

CGS =   Community Goal Survey - average of all community survey rankings (1=lowest, 10=highest)

7. Target Industry Sectors

County desirability and compatibility scores are compared with business interview data in the ASAP data base and matches are profiled on a scattergram as four-digit NAICS code industries. Of particular interest are sectors with desirability and compatibility matches greater than .5 plotted on the scattergram. There are more than 200 industries in the Beaver County study with a compatibility match > .60; 30 sectors with a desirability match > .55; and 25 industries with compatibility and desirability scores > .55. Table 4 represents the fourteen industries from the high (>.55) DI and CI list, plus additional compatible industries added because of their potential in Beaver County.

The top three industries selected for further research and in-depth analysis are: NAICS 3261 Plastics Product Manufacturing; 3254 Pharmaceutical and Medicine Manufacturing; Pesticide; and 3312 Steel Product Manufacturing from Purchased Steel. Other sectors receiving support and meriting additional research include, NAICS 3329 Other Fabricated Metal Product Manufacturing; 3333 Commercial and Service Industry Machinery Manufacturing; and, 3115 Dairy Product Manufacturing. (Appendix 1 provides detailed information from IBISWorld and from other sources for these target sectors).

TABLE 4: High Ranking Selected NAICS Sectors

Rank	NAICS4	Description	Existing Sector	DI	CI
3	2211	Electric Power Generation, Transmission and Distribution	X	0.6646	0.5819
7	3111	Animal Food Manufacturing		0.5757	0.7367
2	3115	Dairy Product Manufacturing		0.5641	0.7872
8	3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing		0.5931	0.6684
6	3254	Pharmaceutical and Medicine Manufacturing	X	0.7340	0.5934
10	3274	Lime and Gypsum Product Manufacturing		0.5914	0.7808
9	3312	Steel Product Manufacturing from Purchased Steel		0.5594	0.8311
11	3328	Coating, Engraving, Heat Treating, and Allied Activities		0.5633	0.8181
1	3329	Other Fabricated Metal Product Manufacturing		0.5553	0.7779
Add'l	3331	Agriculture, Construction, and Mining Machinery Manufacturing		0.5967	0.6494
4	3332	Industrial Machinery Manufacturing		0.5636	0.9085
12	3333	Commercial and Service Industry Machinery Manufacturing		0.6264	0.8330
Add'l	3336	Engine, Turbine, and Power Transmission Equipment Manufacturing		0.5642	0.7573
5	4821	Rail Transportation	X	0.5743	0.6870

8. Beaver County Implementation Strategy – Next Steps

Organize economic development team

- Option 1: Task Force specific to ASAP analysis and results is organized to review and implement ASAP
- Option 2: Existing ongoing Economic Development Board is tasked with implementation of ASAP

Identify short term strategies

- Research existing ASAP target industries in Beaver County. Possible BEAR activity
- Research ASAP target industries not currently in county. Possible EDC Utah and GOED assistance for contacts

Organize around economic development strategies

- Encourage local entrepreneurship in high desirable (Desirability Index) and compatible (Compatibility Index) industries
- Assist existing businesses with high DI and CI
- Recruit compatible, desirable industries
- Develop needed infrastructure to increase compatibility with desirable industries

Identify long term strategies

- Infrastructure development
- Industry recruitment

Kane County, Utah

ASAP Summary and Implementation Report

Helping communities identify targeted, sustainable economic development.

University of Nevada, Reno
Center for Economic Development

University of Nevada
Cooperative Extension

WESTERN RURAL DEVELOPMENT CENTER
engaging the future

Implementing ASAP in Kane County, UT

1. Introduction

The economic structure of the United States is changing rapidly. As a consequence, the economies of many communities are struggling with limited employment opportunities and stagnant wages, especially for working class, service, and blue-collar jobs. In rural communities, problems are compounded because of declining employment in agriculture, mining, logging, and manufacturing, historically the primary employers of rural Americans. Such is the case with Kane County, UT. In an effort to assist Kane County and other communities with their economic development efforts, the Western Rural Development Center and its partners throughout the western region have developed ASAP (Area Sector Analysis Process), a strategic planning model designed especially for rural communities in the Western United States.

2. ASAP Model

The ASAP model and process has been applied or is in the process of being applied, in over 40 communities in the West, including communities in Alaska, Arizona, California, Colorado, Hawaii, Idaho, Nevada, New Mexico, and Utah.

The ASAP process consists of six modules that are delivered once each month for six months. Module topics are: 1: Introduction and Overview of the ASAP Process; 2: Community Goals and Assets: Acquiring County Data and Surveys; 3: Overview of County Socioeconomic Factors; 4: Presentation and Discussion of ASAP Output (Target Industry Data Report analyzed and discussed); 5: Quantitative Analysis of ASAP Results; 6: Applying ASAP Results to Community Economic Development Efforts.

During the six-module process, community goals are determined through a survey of residents. Community infrastructure, economic, and quality of life assets are also determined. Finally, survey data from over 2,500 businesses from all geographic regions of the country and a wide range of industrial sectors are reviewed to determine what industries need to succeed in a target community or county and what benefits or costs the industry brings to the local community.

The ASAP process then matches community survey and asset input with industry data. The ASAP model helps communities determine industries that are both desirable for local residents and compatible with industry needs. Extensive data and information are provided to the community on industries that are both desirable and compatible and are selected by the steering committee for further research and analysis. Utilizing ASAP output, the ASAP team helps the community team to develop and implement an economic development strategic plan.

1. Survey Results (Desirability)

A goals survey to determine desirability is provided by the ASAP team and implemented by the local steering committee. A total of 129 residents of Kane County responded to a printed and on-line survey of economic development preferences and goals. Results are summarized in Tables 1 and 2. Questions are organized around the relative importance of economic, environmental and social quality goals for county residents with recognition that there are tradeoffs. Kane County, survey respondents placed top priority on "Environmental Quality." The individual indicator receiving top priority was "New businesses do not pollute the water," a measure of environmental quality. The remaining measures of environmental quality were also highly ranked (2,3,5) "New businesses do not release toxic chemicals in the air," "New businesses are in compliance with hazardous waste management," and "New businesses do not emit greenhouse gases." These community development choices and preferences comprise a **desirability index,** which is one critical component of the ASAP matching process. The top economic quality goal was "New businesses increase the average local wage."

TABLE 1: Community Development Goal Rankings

Goal	*Weight*	*Rank*
Economic Quality	30.60%	2
Environmental Quality	50.00%	**1**
Social Quality	19.00%	3

TABLE 2: Community Development Indicator Rankings

Indicator	*Weight*	*Rank*
G1.I1 - Every new job generates additional jobs in the community	4.44%	10
G1.I2 - New businesses return profits to the community	7.01%	6
G1.I3 - New businesses hire locally	5.81%	9
G1.I4 - New businesses buy locally	4.28%	11
G1.I5 - New businesses increase the average local wage	9.09%	4
G2.I1 - New businesses do not pollute the water	13.35%	**1**
G2.I2 - New businesses do not release toxic chemicals in the air	12.60%	2
G2.I3 - New businesses are in compliance with hazardous waste management	10.45%	3
G2.I4 - New businesses do not emit greenhouse gas	7.45%	5
G2.I5 - New businesses do not develop undeveloped land	6.20%	8
G3.I1 - New businesses increase the local tax base	3.31%	13
G3.I2 - New jobs are full-time	3.99%	12
G3.I3 - New jobs offer benefits (health and/or retirement)	6.27%	7
G3.I4 - New jobs provide training programs	2.74%	14
G3.I5 - New businesses support community activities	2.70%	15

Number of observations	129

4. Asset Evaluation Results (Compatibility)

Table 3 identifies community assets that are important, and in some cases critical for the operation of businesses and industry in Kane County. Factors such as accessibility, available retail and industrial space, cell phone and Internet service, water and power supply are all compared to national standards and evaluated as assets. These assets are then compared to the stated needs of 2,500 businesses and industries from a wide range of sectors from all over the country. These data become a critical part of a **compatibility index** used to match and target industries with community goals and preferences.

TABLE 3: ASAP Asset Values

| Asset | Description | Source | Asset Values | | | Asset Value Basis | |
			Kane Co., UT	Baseline	Ratio	Kane Co., UT	Baseline
S1	Local acreage available (private)	CAI	30,000	---	---		
S2	Local manufacturing space availability (sq ft)	CAI	8,500	—	—		
S3	Local warehouse availability (sq ft)	CAI	6,500	---	---		
S4	Local office space availability (sq ft)	CAI	4,000	—	—		
S5	Local retail space availability (sq ft)	CAI	8,500	---	---		
A1	Access within 30 minutes to interstate	CAI	No	—	—		
A2	Access within 30 minutes to package freight	CAI	No	---	---		
A3	Access within 30 minutes to railhead	CAI	No	—	—		
A4	Access within 30 minutes to rail freight	CAI	No	---	---		
A5	Access within 30 minutes to passenger air	CAI	No	—	—		
A6	Access within 30 minutes to port/harbor	CAI	No	---	---		
A7	Access within 30 minutes to international port	CAI	No	—	—		
A8	Access to natural gas pipeline	CAI	No	---	---		
A9 & A10	Driving miles to metropolitan area population > 50,000	CAI	80.3	282	28.475%	St. George, UT	Glasgow, MT
A11	3-phase electric	CAI	Yes	---	---		
A12	Fiber optic lines	CAI	Yes	—	—		
A13	High-volume water supply	CAI	Yes	---	---		
A14	High-volume wastewater disposal	CAI	Yes	—	—		
A15	Solid waste disposal	CAI	Yes	---	---		
A16*	Cell phone service	CAI	N/A	N/A	N/A		
A17	Local public transportation	CAI	No	---	---		
A18	Expansion site	CAI	Yes	—	—		
A19	High-speed internet	CAI	Yes	---	---		
A20	% of worforce with college degree or equivalent	CAI	0.27	0.781	34.571%		Falls Church City, VA
A21	% of worforce with HS degree or equivalent	CAI	0.669	0.858	77.972%		Daggett Co., UT
A22	% of worforce with less than HS degree	CAI	0.062	0.586	10.580%		Kenedy Co., TX
A23	Prevailing yearly wage	CAI	$ 31,328.00	$ 75,446.00	41.524%		Los Alamos Co., NM
A24	Workers compensation tax rate	CAI	0.011	0.031	34.416%		New York
A25	Business income tax rate	CAI	0.050	0.100	49.550%		Pennsylvania
A26*	Local and state government incentives	CAI	N/A	N/A	N/A		
A27*	Union labor	CAI	N/A	N/A	N/A		
A28	Specialized job training programs (excl. college and university)	CAI	Yes	—	—		
A29	Short- and long-term financing	CAI	Yes	---	---		
A30*	Business/trade association	CAI	N/A	N/A	N/A		
A31	Crime rate	CAI	0.009	0.081	11.608%		St. Louis, MO
A32	Median home price	CAI	$ 236,999.00	$ 1,251,200.00	18.942%		San Jose (et.al), CA MSA
A33	Air and water quality	CGS	82.000	---	---		
A34	Natural ecosystem	CGS	81.736	—	—		
A35	Outdoor recreation opportunities	CGS	90.333	---	---		
A36	Social and cultural opportunities	CGS	50.413	—	—		
A37	Retail shopping opportunities	CGS	33.719	---	---		
A38	Education system (K-12)	CGS	40.167	—	—		
A39	Access within 3 minutes to a college or university	CAI	Yes	---	---		
A40	Health care services	CGS	41.818	—	—		
A41	Public safety services (e.g. police, fire)	CGS	65.372	---	---		

* =   Not included in ASAP Model
CAI =   Community Asset Inventory - values provided by steering committee; ratio values validated and modified where necessary
CGS =   Community Goal Survey - average of all community survey rankings (1=lowest, 10=highest)

5. Target Industry Sectors

The ASAP model develops both a desirability and compatibility score for each industry at the four-digit NAICS level. Results of particular interest are sectors with desirability and compatibility matches greater than 0.60. In Kane County, there were 86 sectors that were both desirable and compatible above the 0.60 level.

After discussion and analysis, the steering committee narrowed the list of potential targeted sectors to 12. The 12 selected sectors and their rankings are presented in Table 4 and have compatibility matches greater than 0.75.

TABLE 4: High Ranking Selected NAICS Sectors

Rank	NAICS4	Description	Existing Sector	DI	CI
1	5182	Data Processing, Hosting, and Related Services	x	0.6934	0.7909
2	7225	Restaurants and Other Eating Places	x	0.5906	0.76
3	5239	Other Financial Investment Activities	x	0.6888	0.8065
4	4872	Scenic and Sightseeing Transportation, Water	x	0.6838	0.8325
5	4461	Health and Personal Care Stores	x	0.6017	0.7735
6	4511	Sporting Goods, Hobby, and Musical Instrument Stores	x	0.6025	0.9182
7	2382	Building Equipment Contractors	x	0.6311	0.7977
8	3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	x	0.6071	0.7900
8	4869	Other Pipeline Transportation	x	0.9128	0.8495
10	8114	Personal and Household Goods Repair and Maintenance	x	0.6171	0.8994
12	2122	Metal Ore Mining		0.6184	0.8404
12	6212	Offices of Dentists	x	0.6086	0.7965

The ASAP team then provided additional information on each of these 12 sectors. Utilizing this information and their knowledge of the community, the steering committee selected three sectors to be the target of future economic development efforts. The three targeted sectors are:

1. Internet Based Sectors – Kane County has exceptional amenity advantages. *It also has exceptional broadband capability and services for a rural county. This resource could and should be the basis for developing and marketing Kane County businesses.* There are a growing number of jobs that are Internet and computer based where it is no longer necessary to be in the office on a daily basis. Many people with these types of jobs would prefer to live in a place like Kane County where they can enjoy the advantages of rural living while taking advantage nearby amenities.

2. Scenic and Retreat Opportunities – Kane County already has some businesses where people can spend time, relax and heal. Similarly, businesses often look for places where they can schedule a retreat. There are extensive opportunities for the expansion of this sector in Kane County. Available activities may include opportunities to view the night sky, photo classes, and zip lining. Of course, this sector does not exclude traditional tourism opportunities, but this sector has many advantages over basic tourism. First, it is less seasonal as some of these activities could occur throughout the year. Second, it creates more skilled jobs. Third this sector could be under local ownership.

3. Improved restaurants and attracting a higher quality of hotels. Improvements of these sectors would help make it easier to achieve the two opportunities listed above and would improve the quality of life for local residents.

Additionally, improvements in this sector would aid in encouraging tourists to stay longer and spend more money.

6. Implementation Strategy – Next Steps

In moving forward, the following steps should be taken:

1. The steering committee should identify potential local, regional, and state partners to help with implementation. Possible partners include the Utah Governor's Office of Economic Development (GOED) and the federal Economic Development Administration (EDA). Implementation efforts should work hand-in-hand with other ongoing economic development efforts such as the governor's 25 for 25 program.

2. The steering committee should maintain an up-to-date asset inventory. The ASAP Asset Value Table (Table 3) could be used as a guide.

3. Updates and possible improvements to Kane County and city websites should be made so that they essentially become a marketing tool. Persons visiting the websites could realize that they could move to Kane County and make a living.

4. Current zoning and other policies should be examined and changed when necessary to assure that the county and communities are business friendly and look clean and prosperous.

5. The implementation team should consider both short-term and long-term strategies. Short-term strategies are those that will result in immediate economic development. Long-term strategies include infrastructure improvements that will aid future development efforts.

6. ASAP is more than a business recruitment tool. *All but one of the twelve targeted industries currently exist in the county. They should be identified, visited and encouraged to expand and grow if feasible. It* should also be used to encourage entrepreneurs to develop industries in the targeted sectors and assist existing businesses to remain in the community and possibly expand. Strategies for this include:
   a. Providing technical assistance to existing firms and new start-ups and building and facilitating networking opportunities.
   b. Provide an inventory of resources/services available to entrepreneurs.
   c. Develop a coding program in schools and/or community program.

Iron County, Utah

ASAP Summary and Implementation Report

ASAP AREA SECTOR ANALYSIS PROCESS

Helping communities identify targeted, sustainable economic development.

University of Nevada, Reno — **Center for Economic Development**

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WESTERN RURAL DEVELOPMENT CENTER
engaging the future

Implementing ASAP in Iron County

1. Introduction

The economies in many communities and counties in the West are struggling with limited employment opportunities and stagnant wages especially for working class, service and blue-collar jobs. In rural communities, problems are compounded because of declining employment in agriculture, natural resources and manufacturing, historically the primary employers of rural Americans. In more rapidly growing metro and shoulder counties, problems of housing, transportation and accommodating new growth and development complicate the integration of adjacent rural counties into a regional economy. Such is the case with Iron County comprised of both rural and rapidly urbanizing communities and with growth and expansion on the horizon from an expanding regional economy located adjacent to world class national parks and recreation opportunities. In an effort to assist communities with their regional economic development efforts, and to help provide a more diversified menu of development options, the Western Rural Development Center and its partners throughout the western region have developed ASAP (Area Sector Analysis Process), a strategic planning model designed especially for rural or growing metro counties in the Western United States.

2. ASAP Model

The ASAP model and process has been applied or is in the process of being applied, in over 40 communities in the West including all of the counties in the southern half of the State of Utah.

The ASAP process consists of six modules that are delivered once each month for six months. Module topics are: 1. Introduction and Overview of the ASAP Process; 2. Community Goals and Assets: Acquiring County Data and Surveys; 3. Overview of County Socioeconomic Factors; 4. Presentation and Discussion of ASAP Output (Target Industry Data Report presented); 5. Quantitative Analysis of ASAP Results Sanpete County NAICS Report presented); and 6. Applying ASAP Results to Community Economic Development Efforts.

During the six-module process, community goals are determined through a survey of county residents. Community infrastructure, economic and quality of life assets are also determined. Finally, survey data from over 2,500 businesses from all geographic regions of the country are reviewed to determine what industries would need to succeed in a target community or county and what benefits the industry would bring to the local community.

The ASAP process then matches community survey and asset input with industry interview data. The ASAP model helps communities determine industries that are both desirable for local residents and compatible with industry needs. Extensive data and information are provided to the community on industries that are both desirable and compatible and are selected by the community for further research and analysis.

Utilizing ASAP output, the ASAP team helps the community team to develop and implement an economic development strategic plan.

Data specific to Iron County are provided below: included are survey and asset results (Tables 1-3), and target industrial sectors (Table 4).

3. Survey Results (Desirability)

261 Iron County residents responded to an on-line survey of economic development preferences and goals summarized in Tables 1 and 2. Questions are organized around the business and development implications of factors relating to sustaining and improving the economic, environmental and social quality of county residents. The top three responses were "New businesses hire locally," "New businesses return profits to the community," and, "New businesses are in compliance with hazardous waste management," reflect the concern of residents for an improvement in the quality of their economic life and the protection of their pristine environment. These community development choices and preferences comprise a **desirability index** which is one critical component of the ASAP matching process.

TABLE 1: Community Development Goal Rankings

Goal	Weight	Rank
Economic Quality	42.5%	**1**
Environmental Quality	32.6%	2
Social Quality	24.9%	3

TABLE 2: Community Development Indicator Rankings

Indicator	Weight	Rank
G1.I1 - Every new job generates additional jobs in the community	8.0%	5
G1.I2 - New businesses return profits to the community	8.6%	2
G1.I3 - New businesses hire locally	9.9%	**1**
G1.I4 - New businesses buy locally	6.1%	10
G1.I5 - New businesses increase the average local wage	7.8%	6
G2.I1 - New businesses do not pollute the water	8.3%	4
G2.I2 - New businesses do not release toxic chemicals in the air	7.4%	8
G2.I3 - New businesses are in compliance with hazardous waste management	8.3%	3
G2.I4 - New businesses do not emit greenhouse gas	4.8%	12
G2.I5 - New businesses do not develop undeveloped land	2.8%	15
G3.I1 - New businesses increase the local tax base	4.8%	13
G3.I2 - New jobs are full-time	6.1%	9
G3.I3 - New jobs offer benefits (health and/or retirement)	7.8%	7
G3.I4 - New jobs provide training programs	3.9%	14
G3.I5 - New businesses support community activities	5.4%	11

Number of observations	261

4. Asset Evaluation Results (Compatibility)

Table 3 identifies county assets that are important and, in some cases critical for the operation of businesses and industry in Iron County. Factors such as accessibility, available retail and industrial space, cell phone service, water

and power supply are all compared to national standards and evaluated as assets. These assets are then compared to requirements of 2500 businesses and industries interviewed over the past ten years and the results compiled in a data base for ASAP use. These data become a critical part of a **compatibility index** used to match and target industries with community goals and preferences.

TABLE 3: ASAP Asset Values

Asset	Description	Source	Asset Values			Asset Value Basis	
			Iron Co., UT	Baseline	Ratio	Iron Co., UT	Baseline
S1	Local acreage available (private)	CAI	333,588	---	---		
S2	Local manufacturing space availability (sq ft)	CAI	1,441,000	—	—		
S3	Local warehouse availability (sq ft)	CAI	1,441,000	---	---		
S4	Local office space availability (sq ft)	CAI	680,000	—	—		
S5	Local retail space availability (sq ft)	CAI	1,650,000	---	---		
A1	Access within 30 minutes to interstate	CAI	Yes	—	—		
A2	Access within 30 minutes to package freight	CAI	Yes	---	---		
A3	Access within 30 minutes to railhead	CAI	Yes	—	—		
A4	Access within 30 minutes to rail freight	CAI	Yes	---	---		
A5	Access within 30 minutes to passenger air	CAI	Yes	—	—		
A6	Access within 30 minutes to port/harbor	CAI	No	---	---		
A7	Access within 30 minutes to international port	CAI	No	—	—		
A8	Access to natural gas pipeline	CAI	Yes	---	---		
A9 & A10	Driving miles to metropolitan area population >50,000	CAI	45	282	15.957%	St. George, UT	Glasgow, MT
A11	3-phase electric	CAI	Yes	---	---		
A12	Fiber optic lines	CAI	Yes	—	—		
A13	High-volume water supply	CAI	Yes	---	---		
A14	High-volume wastewater disposal	CAI	Yes	—	—		
A15	Solid waste disposal	CAI	Yes	---	---		
A16*	Cell phone service	CAI	N/A	N/A	N/A		
A17	Local public transportation	CAI	Yes	---	---		
A18	Expansion site	CAI	Yes	—	—		
A19	High-speed internet	CAI	Yes	---	---		
A20	% of workforce with college degree or equivalent	CAI	0.304	0.781	38.924%		Falls Church City, VA
A21	% of workforce with HS degree or equivalent	CAI	0.245	0.858	28.555%		Daggett Co., UT
A22	% of workforce with less than HS degree	CAI	0.076	0.586	12.969%		Kenedy Co., TX
A23	Prevailing yearly wage	CAI	$ 34,436.00	$ 75,446.00	45.643%		Los Alamos Co., NM
A24	Workers compensation tax rate	CAI	0.030	0.031	97.403%		New York
A25	Business income tax rate	CAI	0.050	0.100	50.050%		Pennsylvania
A26*	Local and state government incentives	CAI	N/A	N/A	N/A		
A27*	Union labor	CAI	N/A	N/A	N/A		
A28	Specialized job training programs (excl. college and university)	CAI	Yes	—	—		
A29	Short- and long-term financing	CAI	Yes	---	---		
A30*	Business/trade association	CAI	N/A	N/A	N/A		
A31	Crime rate	CAI	0.022	0.081	27.413%		St. Louis, MO
A32	Median home price	CAI	$ 183,100.00	$ 1,251,200.00	14.634%		San Jose (et.al), CA MSA
A33	Air and water quality	CGS	8.625	---	---		
A34	Natural ecosystem	CGS	8.217	—	—		
A35	Outdoor recreation opportunities	CGS	9.050	---	---		
A36	Social and cultural opportunities	CGS	6.984	—	—		
A37	Retail shopping opportunities	CGS	4.892	---	---		
A38	Education system (K-12)	CGS	6.409	—	—		
A39	Access within 30 minutes to a college or university	CAI	Yes	---	---		
A40	Health care services	CGS	6.953	—	—		
A41	Public safety services (e.g. police, fire)	CGS	7.803	---	---		

* = Not included in ASAP Model
CAI = Community Asset Inventory - values provided by steering committee; ratio values validated and modified where necessary
CGS = Community Goal Survey - average of all community survey rankings (1=lowest, 10=highest)

5. Target Industry Sectors

There are more than 250 industries in the Iron County study with a compatibility match > .80, a remarkable number for an isolated rural county; 48 sectors with a desirability match > .55; and 47 industries with compatibility and desirability scores > .55; again, a higher-than-expected number for Iron County. Table 4 represents the fifteen industries from the high (>.55) DI and CI list, plus additional compatible industries added because of their potential in Iron County.

The top four industries selected for further research and in-depth analysis are: NAICS 3364, Aerospace Product and Parts Manufacturing; 5182 Data Processing, Hosting and Related Services; 5191 Other Information Sources; and 3254 Pharmaceutical and Medicine Manufacturing.

TABLE 4: High Ranking Selected NAICS Sectors

Rank	NAICS4	Description	Existing Sector	DI	CI
1	5182	Data Processing, Hosting, and Related Services	X	0.5617	0.9441
2	3364	Aerospace Product and Parts Manufacturing	X	0.5346	0.9013
3	5415	Computer Systems Design and Related Services	X	0.5819	0.8558
4	5191	Other Information Services	X	0.5425	0.9364
5	3254	Pharmaceutical and Medicine Manufacturing	X	0.6798	0.9246
6	5112	Software Publishers	X	0.5338	0.9273
7	3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing		0.6153	0.9085
8	3344	Semiconductor and Other Electronic Component Manufacturing	X	0.7545	0.7704
9	3261	Plastics Product Manufacturing	X	0.4763	0.9376
10	5417	Scientific Research and Development Services	X	0.6388	0.8871
11	3353	Electrical Equipment Manufacturing	X	0.6021	0.9261
12	5414	Specialized Design Services	X	0.4589	0.8916
13	5241	Insurance Carriers	X	0.5992	0.9489
14	3274	Lime and Gypsum Product Manufacturing		0.5071	0.9068
15	3251	Basic Chemical Manufacturing	X	0.6123	0.9087

6. Iron County Implementation Strategy – Next Steps

Organize economic development team:

- Option 1: Task Force specific to ASAP analysis and results is organized to review and implement ASAP
- Option 2: Existing ongoing Economic Development Board is tasked with implementation of ASAP

Identify short term strategies:

- Research existing ASAP target industries in Iron County. Possible BEAR activity
- Research ASAP target industries not currently in county. Possible EDC Utah and GOED assistance for contacts
- Further analysis of target sectors – supply chain analysis for example

Organize around economic development strategies:

- Encourage local entrepreneurship in high desirable (Desirability Index) and compatible (Compatibility Index) industries
- Assist existing businesses with high DI and CI
- Recruit compatible, desirable industries
- Develop needed infrastructure to increase compatibility with desirable industries

Identify long term strategies:

- Infrastructure development
- Industry recruitment

Washington County, Utah

ASAP Implementation Report

Helping communities identify targeted, sustainable economic development.

University of Nevada, Reno
Center for Economic Development

University of Nevada
Cooperative Extension

WESTERN RURAL DEVELOPMENT CENTER
engaging the future

Implementing ASAP in Washington County, UT
1. Introduction

The economic structure of the United States is changing rapidly. As a consequence, the economies of many communities are struggling with limited employment opportunities and stagnant wages, especially for working class, service, and blue-collar jobs. In rural communities, problems are compounded because of declining employment in agriculture, mining, logging, and manufacturing, historically the primary employers of rural Americans. Other counties are experiencing rapid growth, and decisions need to be made to target sectors that best meet the needs of community residents. Washington County, UT has experienced very rapid growth in recent decades, and it makes sense for community leaders to target sectors that best meet the economic, environmental and social needs of residents. In an effort to assist Washington and other communities with their economic development efforts, the Western Rural Development Center and its partners throughout the western region have developed ASAP (Area Sector Analysis Process), a strategic planning model designed especially for communities in the Western United States.

2. ASAP Model

The ASAP model and process has been applied or is in the process of being applied, in over 40 communities in the West, including communities in Alaska, Arizona, California, Colorado, Hawaii, Idaho, Nevada, New Mexico, and Utah.

The ASAP process consists of six modules that are delivered once each month for six months. Module topics are: 1: Introduction and Overview of the ASAP Process; 2: Community Goals and Assets: Acquiring County Data and Surveys; 3: Overview of County Socioeconomic Factors; 4: Presentation and Discussion of ASAP Output (Target Industry Data Report analyzed and discussed); 5: Quantitative Analysis of ASAP Results; 6: Applying ASAP Results to Community Economic Development Efforts.

During the six-module process, community goals are determined through a survey of residents. Community infrastructure, economic, and quality of life assets are also determined. Finally, survey data from over 2,500 businesses from all geographic regions of the country and a wide range of industrial sectors are reviewed to determine what industries need to succeed in a target community or county and what benefits or costs the industry brings to the local community.

The ASAP process then matches community survey and asset input with industry data. The ASAP model helps communities determine industries that are both desirable for local residents and compatible with industry needs. Extensive data and information are provided to the community on industries that are both desirable and compatible and are selected by the steering committee for further research and analysis. Utilizing ASAP output, the ASAP team helps the community team to develop and implement an economic development strategic plan.

3. Survey Results (Desirability)

A goals survey to determine desirability is provided by the ASAP team and implemented by the local steering committee. A total of 206 randomly selected residents of Washington County responded to a printed or on-line survey of economic development preferences and goals. Results are summarized in Tables 1 and 2. Questions are organized around the relative importance of economic, environmental and social quality goals for county residents with recognition that there are trade-offs. For example,

extensive economic growth may have environmental and social costs. In Washington County, survey respondents placed top priority on "Economic Quality." The individual indicator receiving top priority was a measure of economic quality, "New businesses hire locally." Another economic measure given high importance by residents was "New businesses increase the average local wage." Washington County residents, however, placed almost equal weight on environmental quality. Three of the five highest raked sectors were measures of environmental quality. They included, "New businesses do not release toxic chemicals into the air," "New businesses are in compliance with hazardous waste management," and "New businesses do not pollute the water." In sum, it is apparent that Washington County residents desire clean businesses that hire local residents and pay well. A high-growth area like Washington County can afford to be picky and businesses that do not meet these criteria should be discouraged. These community development choices and preferences comprise a **desirability index,** which is one critical component of the ASAP matching process.

TABLE 1: Community Development Goal Rankings

Goal	*Weight*	*Rank*
Economic Quality	41.80%	**1**
Environmental Quality	39.00%	2
Social Quality	19.20%	3

TABLE 2: Community Development Indicator Rankings

Indicator	*Weight*	*Rank*
G1.I1 - Every new job generates additional jobs in the community	7.23%	7
G1.I2 - New businesses return profits to the community	7.86%	**6**
G1.I3 - New businesses hire locally	10.66%	1
G1.I4 - New businesses buy locally	6.48%	8
G1.I5 - New businesses increase the average local wage	9.61%	3
G2.I1 - New businesses do not pollute the water	9.28%	5
G2.I2 - New businesses do not release toxic chemicals in the air	9.87%	2
G2.I3 - New businesses are in compliance with hazardous waste management	9.59%	4
G2.I4 - New businesses do not emit greenhouse gas	5.38%	10
G2.I5 - New businesses do not develop undeveloped land	4.84%	11
G3.I1 - New businesses increase the local tax base	3.44%	13
G3.I2 - New jobs are full-time	4.65%	12
G3.I3 - New jobs offer benefits (health and/or retirement)	5.64%	9
G3.I4 - New jobs provide training programs	2.98%	14
G3.I5 - New businesses support community activities	2.48%	15
NUMBER OF OBSERVATIONS		206

1. Asset Evaluation Results (Compatibility)

Table 3 identifies community assets that are important, and in some cases critical for the operation of businesses and industry in Washington County. Factors such as accessibility, available retail and industrial space, cell phone service, skills of the workforce, water and power supply are all compared to national standards and evaluated as assets. These assets are then compared to the stated needs of 2,500 businesses and industries. These data become a critical part of a **compatibility index** used to match and target industries with community goals and preferences.

TABLE 3: ASAP Asset Values

Asset	Description	Source	Asset Values Washington Co.,UT	Asset Values Baseline	Asset Values Ratio	Asset Value Basis Washington Co.,UT	Asset Value Basis Baseline
S1	Local acreage available (private)	CAI	25	---	---	*max requirement across all sectors	
S2	Local manufacturing space availability (sq ft)	CAI	245,375	---	---		
S3	Local warehouse availability (sq ft)	CAI	245,375	---	---		
S4	Local office space availability (sq ft)	CAI	125,712	---	---		
S5	Local retail space availability (sq ft)	CAI	490,750	---	---		
A1	Access within 30 minutes to interstate	CAI	Yes	---	---		
A2	Access within 30 minutes to package freight	CAI	Yes	---	---		
A3	Access within 30 minutes to railhead	CAI	No	---	---		
A4	Access within 30 minutes to rail freight	CAI	Yes	---	---		
A5	Access within 30 minutes to passenger air	CAI	Yes	---	---		
A6	Access within 30 minutes to port/harbor	CAI	No	---	---		
A7	Access within 30 minutes to international port	CAI	No	---	---		
A8	Access to natural gas pipeline	CAI	Yes	---	---		
A9 & A10	Driving miles to metropolitan area population > 50,000	CAI	0	282	0.000%	St. George, UT	Glasgow, MT
A11	3-phase electric	CAI	Yes	---	---		
A12	Fiber optic lines	CAI	Yes	---	---		
A13	High-volume water supply	CAI	Yes	---	---		
A14	High-volume wastewater disposal	CAI	Yes	---	---		
A15	Solid waste disposal	CAI	Yes	---	---		
A16*	Cell phone service	CAI	N/A	N/A	N/A		
A17	Local public transportation	CAI	Yes	---	---		
A18	Expansion site	CAI	Yes	---	---		
A19	High-speed internet	CAI	Yes	---	---		
A20	% of worforce with college degree or equivalent	CAI	0.282	0.781	36.108%		Falls Church City, VA
A21	% of worforce with HS degree or equivalent	CAI	0.643	0.858	74.942%		Daggett County, UT
A22	% of worforce with less than HS degree	CAI	0.076	0.586	12.969%		Kenedy County, TX
A23	Prevailing yearly wage	CAI	$ 30,937.00	$ 75,446.00	41.005%		Los Alamos County, NM
A24	Workers compensation tax rate	CAI	0.011	0.031	34.416%		New York
A25	Business income tax rate	CAI	0.050	0.100	50.050%		Pennsylvania
A26*	Local and state government incentives	CAI	N/A	N/A	N/A		
A27*	Union labor	CAI	N/A	N/A	N/A		
A28	Specialized job training programs (excl. college and univers	CAI	Yes	---	---		
A29	Short- and long-term financing	CAI	Yes	---	---		
A30*	Business/trade association	CAI	N/A	N/A	N/A		
A31	Crime rate	CAI	0.039	0.078	49.095%		St. Louis, MO
A32	Median home price	CAI	$ 304,400.00	$ 1,251,200.00	24.329%		San Jose (et.al), CA MSA
A33	Air and water quality	CGS	83.750	---	---		
A34	Natural ecosystem	CGS	80.598	---	---		
A35	Outdoor recreation opportunities	CGS	93.098	---	---		
A36	Social and cultural opportunities	CGS	71.141	---	---		
A37	Retail shopping opportunities	CGS	63.750	---	---		
A38	Education system (K-12)	CGS	65.000	---	---		
A39	Access within 3 minutes to a college or university	CAI	Yes	---	---		
A40	Health care services	CGS	80.109	---	---		
A41	Public safety services (e.g. police, fire)	CGS	78.315	---	---		

* =	Not included in ASAP Model
CAI =	Community Asset Inventory - values provided by steering committee; ratio values validated and modified where necessary
CGS =	Community Goal Survey - average of all community survey rankings (1=lowest, 10=highest)

4. Target Industry Sectors

The ASAP model develops both a desirability and compatibility score for each industry at the four-digit NAICS level. Results of particular interest are sectors with desirability and compatibility matches greater than 0.6. In Washington County, most sectors were compatible – that is they would like to do business in Washington County. The limiting factor needs to be desirability – does it meet the needs of residents. In this case, is it clean, and does it hire locally and pay well.

After discussion and analysis, the steering committee sectors 13 sectors with high desirability and compatibility for more detailed examination. The 13 selected sectors and their rankings are presented in Table 4.

TABLE 4: High Ranking Selected NAICS Sectors

Rank	NAICS4	Description	Existing Sector	DI	CI
3	2211	Electric Power Generation, Transmission and Distribution	X	0.7068	0.9286
2	3254	Pharmaceutical and Medicine Manufacturing	X	0.7117	0.9378
7	3341	Computer and Peripheral Equipment Manufacturing	X	0.6062	0.8668
5	3344	Semiconductor and Other Electronic Component Manufacturing	X	0.7691	0.8248
9	3345	Navigational, Measuring, Electromedical, and Control Instruments Manufacturing	X	0.6377	0.9234
11	3353	Electrical Equipment Manufacturing	X	0.6035	0.9386
13	4931	Warehousing and Storage	X	0.6167	0.9201
12	5179	Other Telecommunications	X	0.6117	0.9448
10	5239	Other Financial Investment Activities	X	0.6222	0.9116
8	5413	Architectural, Engineering, and Related Services	X	0.6005	0.9110
6	5415	Computer Systems Design and Related Services	X	0.6017	0.9090
1	5417	Scientific Research and Development Services	X	0.6578	0.9174
4	9261	Administration of Economic Program	X	0.6953	0.9356

The ASAP team then provided additional information on each of these 13 sectors. Utilizing this information and their knowledge of the community, the steering committee selected four sectors to be the target of future economic development efforts. The targeted sectors are:

1. Advanced Manufacturing – this includes the NAICS codes of:

   a. 3341 – Computer and peripheral equipment manufacturing

   b. 3344 – Semiconductor and other component manufacturing

   c. 3345 – Navigational, measuring, electromedical and control instruments manufacturing

2. Expertise in Research and Information Technology

a. 5413 – Architectural, engineering and related services

b. 5415 – Computer system design and related services

c. 5417 – Scientific research and development services

Both clusters of sectors meet the criteria established by the model. They are high wage industries that do not pollute.

5. I-15 Corridor Analysis

Washington County has important economic connections with nearby Clark County and the Las Vegas metropolitan area. As an addendum to the standard ASAP process, three economic impact scenarios were generated for Washington County, UT. The objective of the scenarios was to examine the economic linkages between Washington County, UT and Clark County, NV. IMPLAN, an input-output modeling software, served as the economic basis for all three scenarios, reflecting the scale and structure of interindustry transactions within each county and across the two counties. IMPLAN reports on the economic impacts of interindustry transactions within a single year. The basis year for all three Washington County, UT scenarios was 2017. Secondary data was used to estimate scale and structure of all three impacts.

Las Vegas Visitor travel patterns were sourced from 2016 Year End Summary data compiled by the Las Vegas Convention and Visitors Authority (LVCVA) https://www.lvcva.com/stats-and-facts/visitor-statistics/ to compile estimates of direct tourism impacts. Las Vegas international visitor travel patterns and budget characteristics was sourced from the 2017 LVCVA Top Overseas Markets and scaled to conform to scenario assumptions (Table 1 - attached). Secondary data sourced from the Southern Nevada Tourism Infrastructure Committee (SNTIC) 'Impact Summary Las Vegas Stadium/Development and Operations' https://drive.google.com/file/d/1AoClqcIpTuQVXwNpqbgeT3ZYXzJ_SNqB/view - direct output for the one-time construction costs were used to estimate impacts for the Raider's stadium.

Two of the scenarios examined indirect and induced impacts to Washington County related to direct economic impacts to Clark County – a) construction of the Raider's stadium (Table2.1), and b) assuming a 1% increase in international tourism visitor to Las Vegas (Table 2.2). The third scenario examined the direct, indirect, and induced impacts to Washington County assuming a 1% increase in baseline international visitors to Las Vegas who also visited either Zion National Park or Bryce National Park (Table 2.3). Direct impacts to a county are defined by spending that occurs directly in the county. Indirect impacts result from interindustry transactions related to increase industry demands related to the initial direct spending. Induced impacts result from household spending related to total increased labor compensation received by households following economic stimulus from direct and indirect impacts.

Of the three scenarios, Washington County, UT received the largest total impact from the one-time direct construction costs of the Raider's stadium in Clark County, NV ($16.6 million). Total impacts are influenced by the strength of inter-industry linkages assumed in the 2017 IMPLAN county-level models. See Table 3 for detail on the top ten Washington County sectors most impacted under this scenario.

The second largest impact is reported in Table 4 and is related to an assumed 1% increase in the 2017 baseline total of international visitors to Las Vegas who also visit Zion or Bryce National Parks ($1.7 million). While second in annual impacts of the three scenarios, it is important to keep in mind that this impact can be realized annually. In addition, this is the only scenario of the three that realizes direct impacts. Moreover, the assumption of a 1% increase is equivalent to just under 3,000 additional international visitors per year and is based on a total daily per person budget of $113. Actual impacts may vary based on actual number of visitors and spending per person.

Table 5 reports the smallest impact to Washington County, UT at $56,750 per year due to a 1% increase in international visitors to Las Vegas, an increase of approximately 67,000 people spending $113 per day per person on average. Indirect and induced impacts are realized by Washington County for two reasons – a) given reported patterns of Las Vegas visitors also visiting nearby areas, a slight increase to Washington County destinations is expected; b) any increase in direct Clark County spending in sectors with inter-industry linkages in Washington County results in increased economic impacts.

6. Washington County Implementation Strategy – Next Steps

In moving forward, the following steps should be taken:

1. The steering committee should identify how potential local, regional, and state partners can help with implementation strategies. Partners include Utah's GOED (Governor's Office of Economic Development) and federal agencies such as Economic Development Administration (EDA). Other regional and county resources as well as economic development partners from Clark County and Nevada's Governor's Office for Commerce and Development are other possible resources.
2. The steering committee should maintain an up-to-date asset inventory. The ASAP Asset Value Table (Table 3) could be used as a guide.
3. Updates and possible improvements to Washington County and city websites should be made so that they essentially become a marketing tool.
4. Lists of businesses within the targeted sectors from selected geographic regions should be obtained. For example, the committee may decide that there are good opportunities to convince businesses currently located in California to relocate to Washington County. Contact information for these businesses can be obtained from sources such as Mergent Intellect and Nexis Uni and contacts made by personal contact or by using brochures or

handouts created for this purpose.

5. Current zoning and other policies should be examined and changed when necessary to assure that the county and communities are business friendly and look clean and prosperous.

6. The implementation team should consider both short-term and long-term strategies. Short-term strategies are those that will result in immediate economic development and include recruitment and business retention and expansion activities. Long-term strategies include infrastructure improvements that will aid future development efforts such as solidifying water availability, workforce development, and cluster development around strategic sectors.

7. ASAP is more than a business recruitment tool. It should also be used to encourage entrepreneurs to develop industries in the targeted sectors and assist existing businesses to remain in the community and possibly expand. Strategies for this include:

    a. Providing technical assistance to existing firms and new start-ups and building and facilitating networking opportunities.

8. Regular discussion with counterparts in Las Vegas and Clark County may result in opportunities to utilize and enhance the information presented in the I-15 Corridor analysis.

The WRDC is happy to provide help and support in every way possible. Please feel free to contact us anytime.

Garfield County, UT

Area Sector Analysis Process
(ASAP)
Summary and Implementation
Report

Helping communities identify targeted, sustainable economic development.

University of Nevada, Reno
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Cooperative Extension

WESTERN RURAL
DEVELOPMENT CENTER
engaging the future

Implementing ASAP in Garfield County, UT

1. Introduction

The economic structure of the United States is changing rapidly. As a consequence, the economies of many communities are struggling with limited employment opportunities and stagnant wages, especially for working class, service, and blue-collar jobs. In rural communities, problems are compounded because of declining employment in agriculture, mining, logging, and manufacturing, historically the primary employers of rural Americans. Such is the case with Garfield County, UT. In an effort to assist Garfield County and other communities with their economic development efforts, the Western Rural Development Center and its partners throughout the western region have developed ASAP (Area Sector Analysis Process), a strategic planning model designed especially for rural communities in the Western United States.

2. ASAP Model

The ASAP model and process has been applied or is in the process of being applied, in over 50 communities in the West, including communities in Alaska, Arizona, California, Colorado, Hawaii, Idaho, Nevada, New Mexico, and Utah.

The ASAP process consists of six modules that are delivered once each month for six months. Module topics are: 1: Introduction and Overview of the ASAP Process; 2: Community Goals and Assets: Acquiring County Data and Surveys; 3: Overview of County Socioeconomic Factors; 4: Presentation and Discussion of ASAP Output (Target Industry Data Report analyzed and discussed); 5: Quantitative Analysis of ASAP Results; 6: Applying ASAP Results to Community Economic Development Efforts.

During the six-module process, community goals are determined through a survey of residents. Community infrastructure, economic, and quality of life assets are also determined. Finally, survey data from over 2,500 businesses from all geographic regions of the country and a wide range of industrial sectors are reviewed to determine what industries require to operate successfully in a target community or county and what benefits or costs the target industry would bring to the local community.

The ASAP process then matches community survey and asset input with industry data. The ASAP model helps communities determine industries that are both desirable for local residents and compatible with industry needs. Extensive data and information are provided to the community on industries that are both desirable and compatible and are selected by the steering committee for further research and analysis. Utilizing ASAP output, the ASAP team helps the community team to develop and implement an economic development strategic plan.

3. Survey Results (Desirability)

A goals survey to determine desirability is provided by the ASAP team and implemented by the local steering committee. A total of 55 residents of Garfield County responded to a printed and on-line survey of economic development preferences and goals. Results are summarized in Tables 1 and 2. Questions are organized around the relative importance of economic, environmental and social quality goals for county residents with recognition that there are tradeoffs. Garfield County, survey respondents placed top priority on "Environmental Quality." The individual indicator receiving top priority was "New businesses do not pollute the water," a measure of environmental quality. The remaining measures of environmental quality were also highly ranked (2,3,9) "New businesses do not release toxic chemicals in the air," "New businesses are in compliance with hazardous waste management," and "New businesses do not emit greenhouse gases." The top economic quality goal was "New businesses hire locally". These community development choices and preferences comprise a **desirability index,** which is one critical component of the ASAP matching process.

Table 1: Garfield, UT Community Development Goal Rankings

Goal	Weight	Rank
Economic Quality	33.60%	2
Environmental Quality	42.00%	1
Social Quality	24.40%	3

Table 2: Community Development Indicator Rankings

Indicator	Weight	Rank
G1.I1 - Every new job generates additional jobs in the community	6.38%	8
G1.I2 - New businesses return profits to the community	7.12%	6
G1.I3 - New businesses hire locally	7.59%	4
G1.I4 - New businesses buy locally	5.07%	11
G1.I5 - New businesses increase the average local wage	7.43%	5
G2.I1 - New businesses do not pollute the water	11.13%	1
G2.I2 - New businesses do not release toxic chemicals in the air	10.42%	2
G2.I3 - New businesses are in compliance with hazardous waste management	10.37%	3
G2.I4 - New businesses do not emit greenhouse gas	5.92%	9
G2.I5 - New businesses do not develop undeveloped land	4.16%	13
G3.I1 - New businesses increase the local tax base	3.66%	14
G3.I2 - New jobs are full-time	5.88%	10
G3.I3 - New jobs offer benefits (health and/or retirement)	6.76%	7
G3.I4 - New jobs provide training programs	3.56%	15
G3.I5 - New businesses support community activities	4.51%	12

Number of observations	55

4. Asset Evaluation Results (Compatibility)

Table 3 identifies community assets that are important and, in some cases, critical for the operation of businesses and industry in Garfield County. Factors such as accessibility, available retail and industrial space, cell phone and Internet service, water and power supply are all compared to national standards and evaluated as assets. These assets are then compared to the stated operational needs of 2,500 businesses and industries from a wide range of sectors from all over the country. These data become a critical part of a **compatibility index** used to match and target industries with community goals and preferences.

TABLE 3: ASAP Asset Values

		Asset Values		Asset Value Basis
Asset	**Description**	**Garfield, UT**	**Baseline**	**Baseline**
S1	Local acreage available (private)	115,500	---	
S2	Local manufacturing space availability (sq ft)	-	---	
S3	Local warehouse availability (sq ft)	-	---	
S4	Local office space availability (sq ft)	100,000	---	
S5	Local retail space availability (sq ft)	100,000	---	
A1	Access within 30 minutes to interstate	Yes	---	
A2	Access within 30 minutes to package freight	No	---	
A3	Access within 30 minutes to railhead	No	---	
A4	Access within 30 minutes to rail freight	No	---	
A5	Access within 30 minutes to passenger air	No	---	
A6	Access within 30 minutes to port/harbor	No	---	
A7	Access within 30 minutes to international port	No	---	
A8	Access to natural gas pipeline	Yes	---	
A9 & A10	Driving miles to metropolitan area population > 50,000	118	282	Glasgow, MT
A11	3-phase electric	Yes	---	
A12	Fiber optic lines	Yes	---	
A13	High-volume water supply	Yes	---	
A14	High-volume wastewater disposal	Yes	---	
A15	Solid waste disposal	Yes	---	

| Asset | Description | Asset Values | | Asset Value Basis |
		Garfield, UT	Baseline	Baseline
A16*	Cell phone service	N/A	N/A	
A17	Local public transportation	No	---	
A18	Expansion site	Yes	---	
A19	High-speed internet	Yes	---	
A20	% of workforce with college degree or equivalent	61.3%	81.8%	Falls Church City, VA
A21	% of workforce with HS degree or equivalent	92.7%	98.9%	Falls Church City, VA
A22	% of workforce with less than HS degree	7.3%	73.5%	Kenedy Co., TX
A23	Prevailing yearly wage	$ 37,620.00	$ 84,000.00	Falls Church City, VA
A24	Worker's compensation tax rate	0.9%	2.5%	NJ
A25	Business income tax rate	7.1%	10.0%	PA
A26*	Local and state government incentives	N/A	N/A	
A27*	Union labor	N/A	N/A	
A28	Specialized job training programs (excl. college and university)	Yes	---	
A29	Short- and long-term financing	Yes	---	
A30*	Business/trade association	N/A	N/A	
A31	Crime rate	3.7%	8.0%	St. Louis, MO
A32	Median home price	$ 212,000.00	$ 1,251,200.00	San Jose (et.al), CA MSA

5. Target Industry Sectors

The ASAP model develops both a desirability and compatibility score for each industry at the four-digit NAICS level. Results of particular interest are sectors with desirability and compatibility matches greater than 0.60. In Garfield County, there were 86 sectors that were both desirable and compatible above the 0.60 level. The data from the ASAP analysis indicates that Garfield County has increasing attraction to industries compatible with the assets and development goals of county residents. The 12 highest selected sectors with compatibility matches greater than 0.75 and their rankings are presented in Table 4.

TABLE 4: High Ranking Selected NAICS Sectors

Rank	NAICS4	Description	Existing Sector	DI	CI
1	5182	Data Processing, Hosting, and Related Services	x	0.6934	0.7909
2	7225	Restaurants and Other Eating Places	x	0.5906	0.76
3	5239	Other Financial Investment Activities	x	0.6888	0.8065
4	4872	Scenic and Sightseeing Transportation, Water	x	0.6838	0.8325
5	4461	Health and Personal Care Stores	x	0.6017	0.7735
6	4511	Sporting Goods, Hobby, and Musical Instrument Stores	x	0.6025	0.9182
7	2382	Building Equipment Contractors	x	0.6311	0.7977
8	3371	Household and Institutional Furniture and Kitchen Cabinet Manufacturing	x	0.6071	0.7900
8	4869	Other Pipeline Transportation	x	0.9128	0.8495
10	8114	Personal and Household Goods Repair and Maintenance	x	0.6171	0.8994
12	2122	Metal Ore Mining		0.6184	0.8404
12	6212	Offices of Dentists	x	0.6086	0.7965

The ASAP team has provided additional information on compatible and desirable sectors. Utilizing this information and the steering group's knowledge of the community, the ASAP team has identified three

sectors as potential targets of future economic development efforts. The three targeted sectors are:

1. Internet Based Sectors – Garfield County has exceptional amenity advantages. *It also has exceptional broadband capability and services for a rural county. This resource could and should be the basis for developing and marketing Garfield County businesses.* There are a growing number of jobs that are Internet and computer based where it is no longer necessary to be in the office on a daily basis. Many people with these types of jobs would prefer to live in a place like Garfield County where they can enjoy the advantages of rural living while taking advantage of nearby amenities.

2. Scenic and Retreat Opportunities – Garfield County already has some businesses where people can spend time, relax and heal. Similarly, businesses often look for places where they can schedule a retreat. There are extensive opportunities for the expansion of this sector in Garfield County. Available activities may include opportunities to view the night sky, photo classes, and zip lining. Of course, this sector does not exclude traditional tourism opportunities, but this sector has many advantages over basic tourism. First, it is less seasonal as some of these activities could occur throughout the year. Second, it creates more skilled jobs, and, third this sector could be under local ownership.

3. Improved restaurants and attracting a higher quality of hotels. Improvements of these sectors would help make it easier to achieve the two opportunities listed above and would improve the quality of life for local residents. Additionally, improvements in this sector would aid in encouraging tourists to stay longer and spend more money.

6. Implementation Strategy – Next Steps

In moving forward, the following steps should be taken:

1. The steering committee should identify potential local, regional, and state partners to help with implementation. Possible partners include the Utah Governors Office of Economic Development (GOED) and the federal Economic Development Administration (EDA). Implementation efforts should work hand-in-hand with other ongoing economic development efforts such as the governor's 25 for 25 Program.
2. The steering committee should maintain an up-to-date asset inventory. The ASAP Asset Value Table provided them as part of the ASAP process (Table 3) could be used as a guide.
3. Updates and possible improvements to Garfield County and city websites should be made so that they essentially become a marketing tool. Persons visiting the websites could realize that they could move to Garfield County and make a living.
4. Current zoning and other policies should be examined and changed when necessary to assure that the county and communities are business friendly and look clean and prosperous.

5. The implementation team should consider both short-term and long-term strategies. Short-term strategies are those that will result in immediate economic development. Long-term strategies include infrastructure improvements that will aid future development efforts.

6. ASAP is more than a business recruitment tool. *All but one of the twelve targeted industries currently exist in the county. They should be identified, visited and encouraged to expand and grow if feasible. It* should also be used to encourage entrepreneurs to develop industries in the targeted sectors and assist existing businesses to remain in the community and possibly expand. Strategies for this include:
   a. Providing technical assistance to existing firms and new start-ups and building and facilitating networking opportunities.
   b. Provide an inventory of resources/services available to entrepreneurs.
   c. Develop a coding program in schools and/or community program.

7.ASAP Contacts

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APPENDIX
B

DEFINITIONS and GLOSSARY of TERMS

- ASAP
"Area Sector Analysis Process". The Area Sector Analysis Process (ASAP) is an economic development tool that identifies the most desirable and compatible industries for a single community.

- BCLS
"Business Choice Location Survey"

- CAI
"Community Asset Inventory"

- CEDS
"Comprehensive Economic Development Strategy". The goals, objectives, and strategies identified in the comprehensive strategic plan, support the economic development goals of the region, as well as those of the counties and communities that comprise the region.

- CGS
"Community Goal Survey". The CGS asks participants to perform pair-wise ranking across five statements relevant to three goal categories: economic, environmental, and social.

- CI
"Compatibility Index". The CI ranks how well the community's asset infrastructure (e.g., location, workforce) meets each industry's production needs.

- DI
"Desirability Index". The DI ranks how well the business practices and priorities for each industry match with the community's economic, environmental, and social goals.

- EDA
"Economic Development Administration"

- EDCUtah
"Economic Development Corporation of Utah"

- FCAOG
"Five County Association of Governments". The Five County Association of Governments (FCAOG) is a regional organization serving the Utah counties of Beaver, Garfield, Kane, Iron and Washington. FCAOG also serves as the regional economic development district as a planning partner with the U.S. Economic Development Administration (EDA).

- FCEDD
"Five County Economic Development District"

- IMPLAN
An input-output model commonly used by economic development professionals and others interested in better understanding how regional inter-industry activity generates economic and fiscal impacts to households, sectors, and municipalities.

- NAICS
  "North American Industrial Classification System"

- UCED
  "University Center for Economic Development"