Demographic Summary

```
def plot_job_sectors(co_name, long):
    sectors = ['RETL','FOOD','MANU','WSLE','OFFI','GVED','HLTH','OTHR','AGRI','MING','CONS
    bar_sectors = long.loc[long['CO_NAME'] == co_name]
    bar_sectors = bar_sectors.loc[bar_sectors['Variable'].isin(sectors)]

    df = px.data.tips()
    fig = px.histogram(bar_sectors, x="Variable", y="Value", text_auto='.2s',
                 color='Type', barmode='group',
                 height=400)
    fig.update_layout(
        xaxis_title="Job Type",
        yaxis_title="Number of Jobs",
        legend_title="Data Type"
    )
    #fig.update_xaxes(tickangle=90)
    fig.show()
```

Box Elder

Variable	ControlTotal	Model	Diff	%Diff
TOTHH	18369	10130	-8238	-45
HHPOP	56542	30296	-26246	-46
HH_Size	3	3	-0	-3
ALLEMP	30480	16973	-13507	-44
RETL	2756	1754	-1002	-36
FOOD	1663	1111	-552	-33
MANU	6460	2522	-3938	-61
WSLE	2724	715	-2009	-74
OFFI	993	712	-280	-28
GVED	3399	2312	-1087	-32
HLTH	2022	1434	-588	-29
OTHR	5655	4234	-1420	-25
AGRI	1539	390	-1149	-75
MING	67	17	-50	-75
CONS	2261	1254	-1007	-45
HBJ	941	518	-423	-45
Job_HH	2	2	0	1
ENROL_ELEM	nan	2703	nan	nan
ENROL_MIDL	nan	1093	nan	nan

Variable	ControlTotal	Model	Diff	%Diff
ENROL_HIGH	nan	1661	nan	nan

```
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Figure 1: Box Elder Control Total vs. Modeled Number of Jobs by Job Type

Weber

Variable	ControlTotal	Model	Diff	%Diff
TOTHH	86141	86141	0	0
HHPOP	249841	249842	1	0
HH_Size	3	3	0	0
ALLEMP	142482	142482	0	0
RETL	15279	15279	0	0
FOOD	8250	8250	0	0
MANU	15224	15224	0	0
WSLE	8189	8189	0	0
OFFI	9083	9083	0	0
GVED	23865	23865	0	0
HLTH	14497	14497	0	0
OTHR	34562	34562	0	0
AGRI	1482	1481	-1	-0
MING	143	143	0	0
CONS	8672	8672	0	0
HBJ	3236	3233	-3	-0
Job_HH	2	2	0	0
ENROL_ELEM	nan	26958	nan	nan
ENROL_MIDL	nan	11524	nan	nan
ENROL_HIGH	nan	11230	nan	nan

```
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Figure 2: Weber Control Total vs. Modeled Number of Jobs by Job Type

Davis

Variable	ControlTotal	Model	Diff	%Diff
TOTHH	110496	110496	-0	-0
HHPOP	356443	356442	-0	-0
HH_Size	3	3	-0	-0
ALLEMP	197873	197853	-20	-0
RETL	20064	20064	0	0
FOOD	10863	10863	0	0
MANU	14769	14769	0	0
WSLE	10730	10730	0	0
OFFI	18991	18991	0	0
GVED	40714	40719	5	0
HLTH	15859	15859	0	0
OTHR	46724	46724	0	0
AGRI	957	956	-1	-0
MING	150	150	0	0
CONS	13618	13618	-0	-0
HBJ	4434	4431	-3	-0
Job_HH	2	2	0	0
ENROL_ELEM	nan	41660	nan	nan
ENROL_MIDL	nan	18712	nan	nan
ENROL_HIGH	nan	17226	nan	nan

```
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Figure 3: Davis Control Total vs. Modeled Number of Jobs by Job Type

Salt Lake

Variable	ControlTotal	Model	Diff	%Diff
TOTHH	399636	399634	-2	-0
HHPOP	1.15899e+06	1.15898e+06	-8	-0
HH_Size	3	3	0	0
ALLEMP	950865	949309	-1556	-0
RETL	85849	85852	3	0
FOOD	56206	56208	2	0
MANU	59851	59852	1	0
WSLE	84870	84870	0	0
OFFI	118808	118810	2	0

Variable	ControlTotal	Model	Diff	%Diff
GVED	140842	140844	2	0
HLTH	73790	73791	1	0
OTHR	248020	248021	1	0
AGRI	1211	1209	-2	-0
MING	3526	3526	-0	-0
CONS	52061	52058	-3	-0
HBJ	25831	25823	-8	-0
Job_HH	2	2	-0	-0
ENROL_ELEM	nan	106386	nan	nan
ENROL_MIDL	nan	44618	nan	nan
ENROL_HIGH	nan	55514	nan	nan

```
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```

Figure 4: Salt Lake Control Total vs. Modeled Number of Jobs by Job Type

Utah

Variable	ControlTotal	Model	Diff	%Diff
TOTHH	178928	178923	-5	-0
HHPOP	628931	628926	-5	-0
HH_Size	4	4	0	0
ALLEMP	377067	376875	-192	-0
RETL	43048	42976	-72	-0
FOOD	20840	20837	-3	-0
MANU	21610	21610	0	0
WSLE	15416	15352	-64	-0
OFFI	54354	54355	1	0
GVED	58393	58387	-6	-0
HLTH	32868	32868	0	0
OTHR	85420	85402	-18	-0
AGRI	3462	3440	-22	-1
MING	667	667	0	0
CONS	30203	30206	3	0
HBJ	10786	10778	-8	-0
Job_HH	2	2	-0	-0
ENROL_ELEM	nan	79682	nan	nan

Variable	ControlTotal	Model	Diff	%Diff
ENROL_MIDL	nan	32449	nan	nan
ENROL_HIGH	nan	34727	nan	nan

```
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```

Figure 5: Utah Control Total vs. Modeled Number of Jobs by Job Type

Checking SE File for inconsistencies:

Below are the TAZIDs where the Sum of Employment Categories are not within 0.5 of the ALLEMP value:

```
[582, 583, 598, 677, 683, 684, 689, 740, 775, 794, 924]
```