

Comprehensive Plan (*Plan*) Update 2036:
Land Capacity Analysis

Draft Employment Capacity Analysis

SAN JUAN COUNTY
COUNTY COUNCIL JANUARY 27, 2020
DEPARTMENT OF COMMUNITY DEVELOPMENT
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Will help answer the question:

Is there sufficient commercial and industrial land capacity to accommodate the forecast of 2036 population and jobs?

Note: Throughout this presentation, "commercial capacity" refers to both commercial and industrial land capacity.

Purpose

Provide an overview of the methodology and results of the Employment Capacity Analysis (ECA).

Presentation Overview

- Background about the Land Capacity Analysis and ECA
- Outline the ECA methodology
- Summarize the ECA results
- What's next

Background

Land Capacity Analysis (LCA)

More information is posted at: <https://www.sanjuanco.com/1306/Comprehensive-Plan-Elements>

- The LCA is required by the Growth Management Act.
- It requires us to determine whether our land use designations can accommodate our 2036 population and employment forecast.
- To do that, we looked at the amount of future development possible based on:
 - existing development, and
 - current densities and regulations.

Background

Employment Capacity Analysis (ECA)

More information is posted at: <https://www.sanjuanco.com/1306/Comprehensive-Plan-Elements>

- The ECA is the final component of the LCA.
- In the LCA, Commercial/Industrial capacity for development on developable land is shown as building square footage.
- The ECA is required to compare commercial capacity, projected population, and future employment.

Background

Draft Employment Capacity Analysis (ECA)

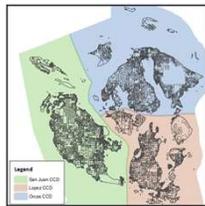
- The draft Employment Capacity Methodology established five steps for comparing forecasted population growth to commercial land capacity.
- The methodology was presented to Planning Commission on Dec. 20, 2019.
- No substantive comments were received.
- Staff performed the ECA.

Draft Employment Capacity Methodology (ECM)

- The Washington Employment Security Department (ESD) and Department of Commerce (Commerce) provided guidance:
 - ESD recommended employment data sources, and
 - Commerce recommended example methodologies and provided comments on the draft ECA.
 - Commerce agreed with the steps in the proposed methodology and that it was more detailed than most rural communities' methodologies.

Data Sources

- U.S. Census Bureau *On the Map* web application
 - Uses several U.S. Census Bureau data sets
 - Provides jobs information from 2002 to 2017
- County adopted 2036 Population Forecast
- Draft Land Capacity Analysis Report



Map of U.S. Census County Divisions (CCD) in San Juan County

Data Limitations

- Most recent employment data per CCD is from 2017. Jobs are those covered by unemployment insurance.
- CCD employment statistics do not identify the number of jobs in UGAs. The proposed ECM addresses this.
- The SJC population 2016 forecast (per-island population) is the best available information.

One More Caveat:

- This analysis provides general information about developable land and employment capacity.
- It does not address capacity for specific types of uses or developments.
- For example, it does not show how much land capacity is specifically available for employment in the healthcare field. It only shows general employment capacity.

Draft ECA Methodology

FIVE STEPS USED FOR THE EMPLOYMENT CAPACITY ANALYSIS

Five Steps in the ECA

- Step 1: Calculate the ratio of 2016 jobs to 2016 households
- Step 2: Forecast new jobs in 2036
- Step 3: Calculate the ratio of existing jobs to existing building square footage
- Step 4: Calculate how many jobs can be accommodated in forecasted commercial capacity in building square footage
- Step 5: Determine if there is a future employment capacity (jobs) surplus or deficit

Step 1: Jobs to Households Ratio

- Will help to determine the 2036 jobs in the next steps.
- A ratio of 2016 jobs to 2016 households relates employment and population.
- Describes the rate at which jobs occur relative to population.

Jobs to Households Ratio =

$$\frac{\text{Total Jobs in each CCD}}{\text{Households in each CCD}}$$

Jobs to Households in Each CCD

January 13, 2020 Staff Report
Page 4, Table 34

Table 1. Jobs to Households in Each Census County Division (CCD)

CCD	2016 Population	2016 Households	2016 Jobs	2016 Jobs per Household
San Juan without Friday Harbor	5,652	2,771	742	0.268
Lopez	2,858	1,401	623	0.445
Orcas	5,514	2,703	1,760	0.651

Source: U.S. Census Bureau and SJC 2036 Population Forecast adopted in Resolution 27-2017 and 2017 Technical Memorandum.

Step 2: 2036 New Jobs Forecast

- 2016 jobs to households ratio (Step 1) is compared with the forecasted population in households.
- Assumes that employment will grow in proportion with population.

Forecasted 2036 New Jobs =

(Projected 2036 Households X Jobs to Household Ratio) – 2017 Existing Jobs

2036 New Jobs Forecast

January 13, 2020 Staff Report
Page 5, Table 35

Table 2. 2036 Jobs per U.S. Census County Division (CCD).

CCD	2036 Forecasted Population	2036 Forecasted Households	Jobs per Household	Total Forecasted 2036 Jobs	2017 Existing Jobs	Forecasted 2036 New Jobs
San Juan w/o Friday Harbor	6,255	3,067	0.268	822	787	35
Lopez	3,403	1,668	0.445	742	646	96
Orcas	6,565	3,218	0.651	2,095	1,753	342

Source: U.S. Census Bureau and SJC 2036 Population Forecast adopted in Resolution 27-2017.

2036 New Jobs Forecast

January 13, 2020 Staff Report
Page 6, Table 36

Table 3. Job Growth Allocation for Eastsound and Lopez Village UGAs.

Island	Total 2036 New Jobs in CCD	Fifty Percent of 2036 New Jobs Allocated to the UGA
Orcas (Eastsound UGA)	342	171
Lopez (Lopez Village UGA)	96	48

Source: U.S. Census Bureau and SJC 2036 Population Forecast adopted in Resolution 27-2017.

Step 3: Calculate the ratio of existing jobs to existing building square footage

- Compares 2017 jobs data and 2017 commercial/industrial building square footage on fully developed parcels.
- The ratio identifies the rate at which building square footage occurs per job.

$$\text{Commercial/Industrial Building Square Feet Per Job} = \frac{\text{Existing Commercial/Industrial Building Square Feet in the CCD}}{\text{Existing Jobs in the CCD}}$$

Existing Jobs to Building Square Feet

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Table 4. Existing Building Square Feet per Job by U.S. Census County Division.

Area	2017 Nonresidential Building Square Feet*	2017 Existing Jobs	Building Square Ft./Job
San Juan CCD w/o Friday Harbor	247,697	787	314.7
Lopez CCD	268,264	646	415.2
Orcas CCD	930,839	1,753	530.9

*Fully developed commercial and industrial square footage from the November LCA Report.
Source: U.S. Census Bureau and SJC Land Capacity Analysis Report data.

Step 4: Future Employment Capacity

- Compares the existing rate of building square feet per job (step 3) with commercial/industrial capacity.
- Assumes that the ratio of jobs per building square foot will remain constant.

$$\text{2036 Employment Capacity} = \frac{\text{Commercial/Industrial Land Capacity per CCD}}{\text{Building square feet per Job per CCD}}$$

2036 New Jobs Forecast

UGA Allocation

January 13, 2020 staff report, Attachment A, Table 36.

Table 3. Job Growth Allocation for Eastsound and Lopez Village UGAs.

Island	Total 2036 New Jobs in CCD	Fifty Percent of 2036 New Jobs Allocated to the UGA
Orcas (Eastsound UGA)	342	171
Lopez (Lopez Village UGA)	96	48

Source: January 13, 2020 staff report, Attachment A, Table 36.

Employment Capacity Surplus or Deficit

Step 5

Table 6. Non-UGA Employment Capacity Surplus or Deficit.

Area	2036 Job Capacity in New Jobs (Steps 3 & 4)	2036 New Jobs Forecast (Steps 1 & 2)	2036 Job Capacity +/-
San Juan CCD without Friday Harbor	2,787	35	2,745
Lopez CCD, Non-UGA*	9,166.8	48	9,118.8
Orcas CCD, Non-UGA	427.7	171	256.7

Source: January 13, 2020 staff report, Attachment A, Table 39
*Notes: this includes the substantial RGU area on Decatur Island.

Employment Capacity Surplus or Deficit

Step 5

Lopez Village UGA

Table 7. Lopez Village UGA Employment Capacity Surplus or Deficit.

Scenario	2036 Job Capacity in Possible New Jobs	2036 New Jobs Forecast	2036 Job Capacity +/-
Scenario A Mixed-Use 100% Commercial	5,561.1	48	5,513.1
Scenario B 50/50% Commercial and Residential	2,780.5	48	2,732.5
Scenario C 100% Residential	0	48	-48

Source: January 13, 2020 staff report, Attachment A, Table 39

Employment Capacity Surplus or Deficit

Step 5

Eastsound Village UGA

Scenario	2036 Job Capacity in Possible New Jobs	2036 New Jobs Forecast	2036 Job Capacity +/-
Scenario A Mixed-Use 100% Commercial	1,119.3	171	948.3
Scenario B 50/50% Commercial and Residential	603.4	171	432.4
Scenario C 100% Residential	487.6	171	316.6

Source: January 13, 2020 staff report, Attachment A, Table 39

Summary

Overall, the ECA results indicate that there is sufficient land capacity in building square footage in existing commercial and industrial land use designations to accommodate the forecasted job growth through 2036.

What's Next?

- Discuss urban land use issues in February.
- Discuss rural and resource land use issues in March.

General *Plan* Update Comments

Send public comments to compplancomments@sanjuanco.com

Staff reports are posted under the 'Land Capacity Analysis' tab at <https://www.sanjuanco.com/1306/Comprehensive-Plan-Elements>

Questions?

Employment Capacity Unincorporated San Juan CCD

Land Use Designation	Future Employment Capacity in Jobs
Rural General Use	1,642.6
Master Planned Resort	1,144.8
Total	2,787.5

Source: January 13, 2020 staff report, Attachment A, Table 38.A

Employment Capacity Lopez CCD outside UGA

Land Use Designation	Future Employment Capacity in Jobs
Rural General Use	8,683.7
Rural Industrial	24.2
Marine Center	112.9
Island Center	345.9
Subtotal	9,166.8

Source: January 13, 2020 staff report, Attachment A, Table 38.B

Employment Capacity Lopez Village UGA

Land Use Designation	Future Employment Capacity in Jobs
Scenario A (100% commercial)	5,561.1
Scenario B (50/50 commercial and residential)	2,780.5
Scenario C (100% residential)	0

Source: January 13, 2020 staff report, Attachment A, Table 38.B

Employment Capacity Orcas CCD outside UGA

Land Use Designation	Future Employment Capacity in Jobs
Rural Industrial	32
Island Center	76.9
Deer Harbor Hamlet Commercial	37.1
Deer Harbor Hamlet Industrial	41.9
Orcas Village Commercial	64.1
Master Planned Resort	4.4
Country Corner Commercial	0.9
Service Park	170.1
Subtotal	427.7

Source: January 13, 2020 staff report, Attachment A, Table 38.C

Employment Capacity Eastsound UGA

Land Use Designation	Future Employment Capacity in Jobs
Scenario A (100% commercial)	1,119.3
Scenario B (50/50% commercial and residential)	603.4
Scenario C (100% residential)	487.6

Source: January 13, 2020 staff report, Attachment A, Table 38.C

Note: Service and Light Industrial is not a mixed-use designation and provides capacity for 487.60 jobs
