

COMPREHENSIVE PLAN

SECTION B, ELEMENT 10

Economic Development Element

September 4, 2019 DRAFT

Red strike out / underline: Planning Commission recommended changes

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ECONOMIC DEVELOPMENT ELEMENT

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1 **10.1 INTRODUCTION**

2 **10.1.A Overview**

3 San Juan County’s share of the global ecosystem is a rich, temperate and increasingly unique niche consisting of
4 its geology, soils, air, water, and all living organisms. Its internal workings are of a complexity not well understood,
5 supporting both agricultural and marine productivity. Its aesthetics, novelty of experience and opportunity for
6 knowledge and contemplation enhance domestic tranquility, ~~our strong experience economy~~ and residents’
7 health and wellbeing.

8 These non-monetary benefits, more fundamental than money itself, also attract visitors, seasonal residents and
9 investors who amplify the monetary economy. Preservation of the county’s natural capital¹ as a public good
10 maximizes its availability for continuing support of the county’s monetary economy, and preserves a high standard
11 of living coupled with a rural quality of life.

12 The county’s economy is measured in terms of money. The public recognizes that priority of this valuation
13 inexorably diminishes natural capital and the rural quality of life that holds its inhabitants and draws visitors from
14 near and far. That said, a high quality of life cannot be maintained without a vibrant economy. Accordingly, this
15 EDE is the product of the public’s effort to develop and support such an economy in balance with the county’s
16 natural capital and its consequent rural character; together these provide the county’s increasingly rare high
17 quality of life.

18 For purposes of this Economic Development Element of the San Juan County Comprehensive Plan (“EDE”), the
19 term “rural character” refers to the aesthetic and social experience of life in a geographic region that consists
20 predominantly of agricultural lands, uncultivated open lands, and forests or other natural habitats. It is consistent
21 with improving the county’s strong educational, economic, technological, and other infrastructure to maintain a
22 high standard of living. It is understood that inasmuch as the population of the county is rising and expected to
23 continue to rise, and that Washington State Ferries and other entities (ports, airports) currently serve nearly 2
24 million visitors and expect passenger increases of 43% in the next 10 years², preservation of rural character will
25 inevitably require preservation of this aesthetic and social experience, the quality of which will depend upon
26 achieving the goals of the comprehensive plan as a whole.

27 **10.1.B Overarching Goals**

28 To maintain its share of natural capital and develop its human assets while achieving and enhancing a balanced
29 county economy, four interrelated goals for this Economic Development Element (EDE) of the county’s
30 comprehensive plan have been identified. They are expanded upon in section 10.3.B.

31 **Goal 1: CREATE LIVING WAGE JOBS:** Establish and maintain a sound, stable, year-round, and locally based
32 diversified economy that creates living wage jobs in community and environmentally friendly industries consistent
33 with rural character.

34 **Goal 2: DEVELOP A BROADLY COMPETENT WORK FORCE:** Train a resident work force to support and attract
35 diverse businesses (in harmony with the county’s natural resources), perform work otherwise done by labor and
36 skills sourced from outside the county, and supplement an aging talent pool.

37 **Goal 3: IMPROVE INFRASTRUCTURE AND COMMUNITY ASSETS AND SERVICES³:** Improve and maintain
38 infrastructure such as but not limited to community assets and environmental resources, ferry service, and
39 telecommunications infrastructure, particularly in support of living wage job creation, the enhancement of

¹ Natural capital is taken to include all natural elements and processes such as: marine, terrestrial, and freshwater habitats; shorelines, wetlands, water bodies, and aquifers; native biota (flora, fauna, fungi, and microbes); dark skies; clean air; natural soundscapes; soil and bedrock; open spaces.

² <https://www.wsdot.wa.gov/NR/rdonlyres/F5735A06-1A07-44A6-83B8-76FE997785EA/0/AnacortesPreDesignPkg.pdf>, page 6

³ Community assets include natural, social, or built systems/features within the County that benefit the San Juan County community.
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Economic Development Element

- 1 economic, environmental, and community resilience, and to protect environmental services and natural assets as
- 2 consistent with rural character.
- 3 **Goal 4: ENHANCE ECONOMIC RESILIENCE:** Enhance economic resilience to natural and economic perturbations,
- 4 both rapid (natural disasters, drought, recessions, etc.) and long-term (climate change, resource limitation, long-
- 5 term economic or industry shifts, changing property values).

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1 **10.2 AUTHORITY, PURPOSE, and OTHER ELEMENTS**

2 **10.2.A Authority**

3 This EDE is adopted pursuant to RCW 36.70A.070 (7) of the Washington Growth Management Act (GMA) which
4 mandates that the county’s comprehensive plan include: “[a]n economic development element establishing local
5 goals, policies, objectives, and provisions for economic growth and vitality and a high quality of life.” This is subject
6 to an overarching instruction preceding this mandate relating specifically to the economic element: “Encourage
7 economic development throughout the state that is consistent with adopted comprehensive plans, promote
8 economic opportunity for all citizens of this state, especially for unemployed and for disadvantaged persons, and
9 encourage growth in areas experiencing insufficient economic growth, all within the capacities of the state’s
10 natural resources, public services, and public facilities.” RCW 36.70A.020(5). For purposes of this EDE, this
11 language regarding biological resources is interpreted to include and encourage only those activities or industries
12 whose impact on those resources does not impair their sustainability.

13 **10.2.B Purpose**

14 The purpose of this EDE is to execute the legislative mandate set forth above by setting goals and establishing
15 policies, objectives, and actions to attain economic growth and vitality consistent with the distinctive quality of
16 life in the county.

17 Economic development is the specific and concerted expenditure of time and money by communities and policy
18 makers in order to create and maintain the economic viability of a region. Sound economic development seeks
19 to foster sustainable wealth by creating jobs and infrastructure that sustain and enhance the quality of life of the
20 populace without net cost to the county’s natural capital.

21 Proactive economic development seeks out business development opportunities based on an area’s competitive
22 advantages, market characteristics, and community values. Smart economic development recognizes that
23 prosperity both depends upon and is coupled with benign reliance on the county’s natural capital supporting its
24 quality of life. In turn, sustaining the current structure, nature, and diversity of the county community will depend
25 on maintaining and nurturing a successful economy.

26 Economic resilience is essential to the wellbeing of county residents. Its elements are: diversification of industries
27 (particularly those less reliant on fluctuations in the local, regional, and national economy); planning for
28 foreseeable changes in the local and national economy, in population, in technology, and in the environment; and
29 readiness for likely disasters. Economic resilience supports social resilience and the public peace. Economic
30 resilience expressly includes provision for low-income housing for “unemployed and low-income persons” as
31 mandated by RCW 36.70A.020(5).

32 The economy of the San Juan Islands is inextricably linked to its environment. The county’s economic plans are
33 driven by county residents’ goals for the future of the community itself as set forth in the Vision Statement of this
34 comprehensive plan (<https://www.sanjuanco.com/1306/Comprehensive-Plan-Elements>).

35 **10.2.C Relationship to Other Comprehensive Plan Elements**

36 This EDE is intended to integrate with and govern the economic aspects of the other elements of this
37 Comprehensive Plan. In addition, this EDE also provides a stand-alone action plan that recognizes that economic
38 development affects the entire county including its marine areas, and that implementation responsibilities may
39 be shared among the Town of Friday Harbor, San Juan County, and many other quasi- (e.g. ports, OPALCO) and
40 non-governmental (e.g. private sector, non-profit) partners, while recognizing that the comprehensive plan’s legal
41 mandate is upon the county alone.

1 **10.3 ECONOMIC VISION, FRAMEWORK, & GOALS**

2 **10.3.A Economic Vision & Framework**

3 **Economic Vision**

4 Strategic economic development provides a crucial mechanism for maintaining and enhancing community vitality
5 and prosperity for the long-term, consistent with the community ethos (defined as the guiding beliefs, culture,
6 and spirit within a community) embodied in the Vision Statement of the comprehensive plan (*ibid*). Initiatives to
7 strengthen infrastructure, training programs, transportation, and communications networks benefit business, as
8 well as resident and visitor populations. Efforts to create more high-quality employment opportunities are not
9 only about creating jobs but also about enhancing a rich social network of healthy families and active community
10 members.

11 Economic development must also sustain and strengthen the county’s natural assets. These assets do not vote
12 but do provide, ~~without charge~~, significant environmental benefits and services that residents, visitors, and
13 businesses depend upon. These components of the county economy require continuous balancing of the interests
14 involved as conditions – natural, human-caused, and in combination – change over time. The comprehensive plan
15 of which this EDE is a part looks only twenty years ahead. Planning with respect to natural capital requires a far
16 longer planning horizon than monetary economics. The failure to plan and regulate the use of the county’s natural
17 capital may take many generations to repair, while extinctions are irreparable with as-yet unknown future
18 consequences.

19 **Economic Development Framework**

20 The County seeks to retain and enhance an economy that reinforces the county’s diverse character and allows
21 both capitalization on and conservation of its assets, including: pristine natural beauty, diverse agricultural
22 activities, history and heritage, and the high educational attainment, diverse skills, cultural creativity, can-do
23 attitude, and problem-solving skills of its residents. The county seeks to maintain or encourage sustainability,
24 the county’s rural quality and natural resources, and its historical agricultural and maritime industries.

25 The goals and actions proposed below are founded in a core set of assumptions, as follows:

- 26 1. Most county residents would see economic growth as a controllable means for maintaining economic
27 vitality and a high quality of life, while preserving what is dear: the rural character and natural
28 characteristics of their county. All elements of the environment and the best qualities of the economy
29 must be nurtured because together they determine the quality of life. Quality of life is defined as the
30 general wellbeing of individuals and communities, particularly in ecology, inclusiveness of economic
31 opportunity, health and welfare, openness and civility of political society, and breadth and depth of
32 culture.
- 33 2. The purpose of this EDE is to guide regulatory policy, decision-making, and private and government
34 investment. Therefore, proposed strategies should be designed with the county, the Town of Friday
35 Harbor, the ports, potential business investors, proposed urban growth areas, and hamlets as the principal
36 audience. Implementation of this EDE will entail participation by many entities and private sector partners
37 in addition to the various municipal jurisdictions, all in a manner intended to benefit the people of the
38 county.
- 39 3. Proposed economic development strategies must be based on island realities and be designed holistically,
40 with a view to keeping an island-scale economy and the preservation and enhancement of each island’s
41 quality of life, rural character, and precious natural resources. In adopting policies consistent with these
42 strategies, emphasis should be placed on the most promising, wage-generating, and locally appropriate
43 economic emphasis areas consistent with the ethos embodied in the Vision Statement (*ibid*) and
44 consistent with the character of the respective islands.

- 1 4. The San Juan County Council recognizes the limits of its authority to direct economic development, and
2 further recognizes that economic development is ultimately determined by the tolerance for risk on the
3 part of those with access to capital sufficient to start and maintain a business, however small. This EDE
4 confirms the county’s government’s intention to cooperate with all toward developing an economy
5 consistent with the Vision Statement.

6 **10.3.B Economic Goals, Policies & Actions**

7 The following goals, policies and their execution by the actions set forth below are intended to be consistent
8 with the Vision Statement:

9 **GOALS (10.3.B.1-4)**

10 **GOAL 1: CREATE LIVING WAGE JOBS**

11 **Goal:** Establish and maintain a sound, stable, year-round, and locally based diversified economy that creates living
12 wage jobs in community and environmentally friendly industries consistent with rural character.

13 *Comment:* Living-wage jobs may include (among others) trades jobs that serve residents, or high tech, engineering,
14 scientific, or “knowledge work”⁴ that brings in income from outside the County. However, this goal is not intended
15 to diminish any existing business, enterprise, or trade. This category also includes the self-employed and the
16 home, office, or shop that may or may not have additional employees, and to that extent, this goal overlaps with
17 GOAL 2, “DEVELOP A BROADLY COMPETENT RESIDENT WORK FORCE,” below.

18 A living wage is defined as net income that can meet a worker’s basic needs for food, housing, child care, and
19 other necessities, ~~as defined by livingwage.mit.edu (Accessed June, 2019)~~. We categorize jobs that exceed this
20 threshold – so as to maintain a safe, healthy, and decent standard of full-time living within the community – as
21 living wage jobs.

22 **Policies (10.3.B.1, 1 – 8)**

- 23 1. Consider how changes in regulatory, permitting, and zoning affect businesses and natural resources to
24 maximize business opportunities while preserving and enhancing natural capital.
- 25 2. Seek to create an environment conducive to long-term job growth that encourages the creation of new
26 businesses, and retention and expansion of existing businesses, within a framework that preserves and
27 enhances the natural assets and rural character of the county.
- 28 3. Encourage locally-focused retention and expansion of the county’s business and employment base rather
29 than seeking mainland or nationally-franchised businesses to (1) emphasize the county’s distinctive
30 economy and lifestyle that attract visitors and hold its inhabitants, and (2) to avoid the “leakage” that
31 occurs when profits and royalties are paid to out-of-county businesses and franchisors.
- 32 4. Encourage diversified and sustainable practices in the tourism and construction industries to reduce the
33 negative impacts that these industries may have on the natural assets that they, other industries, and
34 residents depend upon.
- 35 5. Encourage workforce development (GOAL 2) to enhance the capacity of county inhabitants to attract and
36 meet the needs of clients wherever located.
- 37 6. Address the local insufficiency of long-term healthcare to meet the needs of the increasingly large
38 percentage of elderly among the population, resulting in an economy that fails to involve a growing
39 segment of the county population, and so evicts from the county both the infirm and the attendant jobs.
- 40 7. Encourage agricultural enterprises and activities in order to enhance agricultural viability and create a
41 thriving local food economy.

⁴ “Knowledge work” includes jobs (programming, writing, editing, scientific consulting, and many others) that can be done remotely because they do not involve making a physical product or require in-person contact.

8. Encourage cottage industries enterprises in order to enhance arts and small-scale, low-impact manufacturing viability and create a thriving local arts, crafts, value added agricultural products, small scale manufacturing, and tech economy.

4 **Actions (10.3.B.1, 1 – 22)**

1. Work with all three county ports, the Washington State Department of Commerce, Department of Ecology, and other entities to help support the development of underutilized and abandoned commercial properties.
2. Alone, or in cooperation with the Town of Friday Harbor or any other entity, study and execute a plan to enable the financially feasible development of one or more long-term healthcare facilities.
3. Increase the county’s commercial intangible assets by funding initiatives to expand access to local and regional markets, such as the Island Grown and the San Juan Islands Made programs. Promote efforts to distinguish the county’s historical agricultural character and create a market for its agricultural products.
4. Enact feasible tax breaks, code and zoning allowances, or other regulatory changes to encourage startup or expansion of low-impact business activities, such as light manufacturing (in appropriate locations), cottage industries enterprises, value added agricultural product production, software/online/remote businesses, freelancing/consulting, small-scale farming/market stands, food trucks, call centers, childcare services, aging-in-place services, etc.
5. Clarify, streamline, and eliminate redundancy in the application and permitting of home occupation and cottage industry enterprise related to growing the local economy.
6. Support initiatives such as Launch San Juan Islands and Startup Washington that support and encourage startup entrepreneurship.
7. Recruit entrepreneurs including remote workers.⁵
8. Work to develop “encore entrepreneurs” – helping retired island entrepreneurs to create new businesses that would result in broader hiring and on-the-job training.
9. Work with the San Juan County Economic Development Council, the San Juan Islands New Economy Fund and other entities to improve the health of existing small businesses, including for example, creation of a resource center for small businesses.
10. Work to streamline the permitting process to make it easier and less expensive for businesses and contractors to plan and execute projects.
11. Permit more sustainable and environmentally friendly construction methods (e.g. LEED or similar green building) than standard or minimally required construction methods in order to both mitigate effects of construction on natural assets and encourage innovations that could be exported from the county.
12. Implement those zoning and regulatory changes that would benefit quality of life and the natural environment, consistent and balanced with the economy envisioned in this EDE; review and update enforcement mechanisms to encourage compliance regardless of financial means.
13. Implement loan and grant programs or tax incentives for new business creation or existing business expansion when business creation/expansion is done in a manner that preserves and protects both natural assets and rural character.
14. Foster, develop, and/or financially support programs to enhance cooperation within and among industries (in particular scientific/technological and knowledge work, agricultural, trades, and manufacturing

⁵ While attraction of outside entrepreneurs and skilled labor is necessary, this action must be matched by additional affordable housing for existing low and middle-income residents who will otherwise be priced out of the market for shelter. This EDE is expressly intended to prioritize the welfare and quality of life of county residents and natural assets over monetary increase in the county economy for its own sake.

1 industries) through: information and contact sharing; land, infrastructure, facilities, or tool sharing; peer
2 mentoring; events/programs to encourage permanent and seasonal residents and visitors to meet; and
3 maker or incubator spaces.

4 15. Invest in the balanced long-term health of the primary economic sectors – construction and tourism – as
5 consistent with preservation of natural capital and rural character of the locale involved.

6 16. Assist new farmers in acquiring access to capital, agricultural land, housing, equipment, knowledge, and
7 farm infrastructure, and encourage their success by supportive commissions.

8 17. Identify and implement policies that facilitate the expansion of genetically modified organism (GMO)-free
9 seed and crop production in the islands.

10 18. Allow agricultural activities as defined by RCW 7.48.310 (1) ⁶.

11 19. Foster economic growth through allowing accessory uses identified in RCW 36.70A.177 Section (3)(b)(i) ⁷,
12 that enhance or preserve the overall agricultural use of the property applicable to ARL, RFF.

13 20. Support the expansion of the Cottage Food Operation laws and passage of food freedom legislation
14 introduced in WA State.

15 21. Harmonize San Juan County Code with WA RCW to clarify that marijuana is not an agricultural product
16 and create a regulatory framework in San Juan County for marijuana production that does not negatively
17 impact local food and fiber production or natural resources such as shorelines, wetlands, and forests.

18 22. Enact zoning and regulatory changes that address farm labor and farm succession issues consistent with
19 rural character and encourage locating housing in clusters with existing development or on non-prime
20 agricultural soils.

21 23. ~~Identify drivers of high rent and land prices—such as the high percentage of properties used as seasonal,
22 recreational, or occasional use properties or investment properties and the low inventory of multi-family
23 housing (see Housing Needs Assessment draft⁸ in this Comprehensive Plan)—and adopt policies and
24 actions to reduce or compensate for those drivers;~~ Engage an independent study of the economic and
25 environmental risks and benefits of vacation rental businesses. ~~—including, but not limited to, emergency
26 services and disaster management, visitor and owner spending, effects on the long-term housing market,
27 and water and infrastructure use — to inform future decision making regarding VRBO classification,
28 regulation, permitting, and fees.~~

29 **GOAL 2: DEVELOP A BROADLY COMPETENT RESIDENT WORK FORCE**

30 **Goal:** Train a resident work force to support and attract diverse businesses (in harmony with the county’s natural
31 resources), perform work otherwise done by labor and skills sourced from outside the county, and supplement an
32 aging talent pool.

33 *Comment:* This goal is a necessary counterpart to Goal 1, “CREATE LIVING WAGE JOBS,” above, as out-of-county
34 labor causes “leakage” of local dollars. An untrained, unemployed/underemployed local population reduces
35 economic productivity and drains public resources.

36 **Policies (10.3.B.2, 1-7)**

37 1. In all industries, local workers need to continually hone their skills to adapt to changes in the economy,
38 climate, natural resources, and technology; therefore, support the education, training and counseling of

⁶ Revised Code of Washington: <https://apps.leg.wa.gov/RCW/default.aspx?cite=7.48.310>

⁷ Revised Code of Washington: <https://app.leg.wa.gov/rcw/default.aspx?cite=36.70A.177>

⁸ Kuller, L. & Zack, A. (2019). *Housing Needs Assessment, Draft 3*. [https://www.sanjuanco.com/DocumentCenter/View/18231/2019-03-](https://www.sanjuanco.com/DocumentCenter/View/18231/2019-03-28_DCD_DRAFT_HNA_PC_04-19-2019)

[28_DCD_DRAFT_HNA_PC_04-19-2019](https://www.sanjuanco.com/DocumentCenter/View/18231/2019-03-28_DCD_DRAFT_HNA_PC_04-19-2019)

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1 county residents to expand their professional opportunities, emphasizing those areas of trade or practice
2 currently served by imported talent.

3 2. Support the education, training and counseling of county residents toward internships in existing high
4 wage local trades to supplement and replace an aging talent pool.

5 3. Support the study and analysis of areas of economic activity to target specific activities or employers the
6 initiation or expansion of whose activities would be environmentally benign and economically beneficial
7 to the community.

8 4. Support the training of county residents in those areas of high wage trade or practice in areas of economic
9 activity targeted for initiation or expansion within the county.

10 5. Develop and sustain an infrastructure that enables low- and middle-income people to work and reside
11 within the county [and see Goal 3: IMPROVE INFRASTRUCTURE AND COMMUNITY ASSETS & SERVICES].

12 6. Support the education, training and counseling of county residents toward internships in agriculture to
13 supplement and replace an aging talent pool.

14 7. Support educational training programs and business development for agriculture and value-added
15 processing of local agricultural products.

16 **Actions (10.3.B.2, 1-8)**

17 1. Map gaps in small businesses' needs in order to create new jobs (e.g., do businesses collectively need
18 more bookkeepers?).

19 2. Provide financial or other support for job skills training, and mentoring, counseling, educational support
20 – including for necessary licensing – to county residents, or to training facilities, to strengthen existing
21 businesses and attract new industries and entrepreneurs.

22 3. Prioritize workforce training programs that support sustainable practices and either fill critical existing
23 needs of local businesses and residents (e.g. construction and repair trades, marine transportation/tech,
24 or gaps identified in Goal 2, Action 1) or support development of low-environmental impact businesses
25 that produce exportable products or services (e.g. in light manufacturing, sustainable agricultural or
26 natural resource industries, sci/tech, or information/knowledge work industries).

27 4. To provide or improve workforce training opportunities, work with and fund as appropriate those
28 organizations that support workforce development; such organizations may include local libraries, local
29 colleges and educational providers (e.g. Skagit Valley College, local schools, Friday Harbor Labs), trade and
30 community organizations (e.g. the San Juan County Economic Development Council, the Workforce
31 Council, the San Juan County Trades Foundation, and San Juan County New Economy Fund), and other
32 organizations.

33 5. Whenever feasible, hire county residents at apprentice or trainee level to establish a pool to replace
34 resigning or retiring members of the county work force.

35 6. Whenever feasible, issue contracts providing for or permitting apprentice or trainee participation on the
36 work contracted for.

37 7. Seek approval from the appropriate union to authorize local apprenticeships in needed trades and
38 encourage local sponsorships toward that end.

39 ~~8. Seek necessary funding to supplement wages below state mandated minimum wage in cases where a~~
40 ~~employer is contributing training to nonunion apprentices or trainees whose room and board are~~
41 ~~otherwise provided for.~~

1 Support efforts of the San Juan County Health Department to encourage a healthy workforce through
2 workforce wellness programs, community vaccination outreach, walkable spaces projects, mental health
3 programs, and other programs.

4 **GOAL 3: IMPROVE INFRASTRUCTURE AND COMMUNITY ASSETS AND SERVICES**

5 **Goal:** Improve and maintain infrastructure such as but not limited to community assets and environmental
6 resources, ferry service, and telecommunications infrastructure, particularly in support of living wage job creation,
7 the enhancement of economic, environmental, and community resilience, and to protect environmental services
8 and natural assets as consistent with rural character.

9 **Comment:** This goal overlaps with Goal 4: ENHANCE ECONOMIC RESILIENCE with respect to infrastructure and
10 services. This goal also treats the county's natural capital as essential infrastructure much of which is owned or
11 regulated by the county, the state of Washington, or the federal government.

12 **Policies (10.3.B.3, 1 – 11)**

- 13 1. Encourage provision of adequate infrastructure that is supportive of a healthy economy and environment
14 while preserving those unique features valued by inhabitants and the subject of interest and pleasure to
15 visitors, as well as those natural elements that underlie and support those features.
- 16 2. Analyze the costs of constructed infrastructure additions and improvements; determine whether the cost
17 of the work would be subsidized by residents, in favor of tourists and visitors (thereby evidencing the net
18 economic burden of tourism), or whether the cost would be subsidized by tourist and visitor income
19 (evidencing the net benefit of the tourist economy).
- 20 3. Support development of reliable high-speed (100 Mbps or higher, or the current standard for urban
21 regions of the U.S., whichever is higher) broadband infrastructure that enables the creation of jobs and
22 improved educational opportunities for islanders, and increased competitiveness for the county.
- 23 4. Encourage Washington State Ferries to improve San Juan Islands ferry service, vessels, and infrastructure
24 including by encouraging the training and licensing of the necessary personnel and investing in new,
25 quieter, and more efficient ferries for the San Juan Islands route.
- 26 5. Support alternative energy and energy storage capability, and increased redundancy of both power and
27 telecommunications infrastructure, and in so doing, create a long-term, sustainable energy plan to offset
28 increases in electric rates and promote energy independence and resilience.
- 29 6. Support improvements in programs to manage solid waste locally and efficiently.
- 30 7. Encourage cooperation with US Customs and Border Patrol and other agencies to increase commerce and
31 transportation between the county and Canada, including without limitation, scheduled flights, coupled
32 with regulatory scheduling to prevent over-intensive surges of visitors.
- 33 8. Foster a thriving local food economy by investing resources in the development of supporting
34 infrastructure.
- 35 9. Recognize the ecosystem services performed by healthy soil as fundamental and essential county assets
36 and support regenerative stewardship activities.
- 37 10. Recognize the critical necessity of the preservation and restoration of fragile and essential ecological
38 assets as economic assets – such as False Bay tidelands, Garry Oak habitat, and our dark skies – assets
39 which can provide sustenance to iconic San Juan Islands species such as the Southern Resident Killer
40 Whales and Island Marble butterflies.
- 41 11. Work within the bounds of state and federal law to implement code that ensures protection of wildlife
42 and ecological systems within the county.

1 **Actions (10.3.B.3, 1-26)**

- 2 1. Identify and adopt a standard for valuation of natural capital and assets, ecosystem services, and rural
3 character to support prioritizing resource allocation, and balancing community, environmental, and
4 commercial interests; regularly review and update this standard based on available scientific information
5 and community input.
- 6 2. Maintain, protect and establish adequate infrastructure that is supportive of a healthy local economy and
7 environment, including community facilities, and other assets emphasizing their use year-round.
- 8 3. Support the development of public base infrastructure in Eastsound, Friday Harbor, Lopez Village and the
9 other urban growth areas, including parking, garbage, sewer, and water.
- 10 4. Design built infrastructure to incorporate the natural environment as a part thereof to help fulfill its
11 function and over time, reduce its financial and/or environmental costs.
- 12 5. Use permeable asphalt or concrete as top layer paving or deeper, to allow drainage from roadways (which
13 themselves act as collectors and stormwater conduits in the denser areas) to penetrate into base soil to
14 slow storm drain rate of flow and allow breakdown of soaps, detergents, agricultural, petrochemical and
15 other toxics to dilute and decompose before reaching drinking water and the Salish Sea. By expressly
16 including the portions of county roads and barge sites so constructed or treated as municipal stormwater
17 control facilities, provide for financial contribution by the existing storm water utility to defray the cost of
18 such work.
- 19 6. Identify facilities for water-borne transportation for tourism and export.
- 20 7. Improve waterfront infrastructure and access, particularly barge landing access throughout the county,
21 by working with the ports and other entities to renovate existing barge landings or create new landing
22 sites if found necessary and if consistent with preservation of the environment (e.g. shorelines, marine
23 habitats) and human neighborhoods.
- 24 8. Provide adequate infrastructure and encourage zoning that is supportive of reliable community high-
25 speed broadband infrastructure.
- 26 9. Encourage jobs and businesses that require few resources and/or bring revenues into the county, such as
27 software, high-tech or small-scale manufacturing, and science/engineering businesses, or remote/online
28 work by providing or encouraging the necessary infrastructure.
- 29 10. Enact degrees of regulatory preference for those businesses that take affirmative steps to reduce their
30 environmental impact, with specific preference for the quietest means of marine and overland propulsion,
31 e.g. electric vehicle and vessel propulsion replacing internal combustion propulsion with special emphasis
32 in the case of marine propulsion to those frequencies needed for cetacean communication.
- 33 11. Using cost-benefit analysis including social and environmental costs, ensure that tourism infrastructure
34 and facilities (including way-finding signs) are updated and improved to a level only sufficient to serve the
35 existing tourist industry unless a greater level is required for residents.
- 36 12. Inventory the county's total permanent and seasonal carrying capacity of natural resources, consistent
37 with their preservation. [For example, but not in limitation: make an inventory of the county's water
38 supply and usage and measure its carrying capacity in the face of population or visitor increases, climate
39 change, emergency use, or civil unrest; improve mapping of soils and risks to soil health]. Using data from
40 the inventory of each natural resource, enact a regulatory scheme for response and mitigation should
41 those limits become – or threaten to become – exceeded.
- 42 13. Research the full extent of county powers to protect its natural capital in response to changed or newly
43 discovered conditions; seek state legislation to authorize necessary powers toward that end to permit the
44 county to protect its natural capital and thereby its economy, and its rural quality of life.

- 1 14. Enact and enforce local legislation to protect the county's and state's natural capital as authorized by
2 legislation sought pursuant to Action 13, above.
- 3 15. Use Lodging Tax funds to create or support protection, stewardship, environmental education, and
4 restoration programs in fragile ecological areas.
- 5 16. Create programs to preserve fragile and essential ecological assets such as False Bay tidelands and Garry
6 Oak habitat, using methods and programs like the Friends of Haystack Rock program in Cannon Beach,
7 OR⁹, including monitoring programs, education programs, volunteer stewardship programs, signage,
8 fencing and other deterrents to over- and misuse.
- 9 17. ~~Ensure that villages and roads are kept attractive by conducting habitat restoration~~ Encourage habitat
10 restoration in appropriate places using native plants wherever possible. ~~or landscaping on empty land~~
11 ~~such as the gravel pit property, and by encouraging innovative leases for empty storefronts.~~
- 12 18. Cultivate low-impact tourism by encouraging ecotourism, agritourism, and the building of low-impact,
13 appropriate-scale tourism venues; target promotions for ecotourism and agritourism rather than all
14 markets; enforce regulations that protect those features that attract ecotourism and agritourism visitors;
15 and encourage agritourism as an accessory activity on farms whose primary business activity is agriculture
16 defined in RCW 4.24.830¹⁰.
- 17 19. Ensure that view corridors and scenic roads are preserved, with due consideration for owners' property
18 rights, traffic safety, and emergency response; actively enforce laws, regulations and rules protecting the
19 county's natural capital.
- 20 20. Encourage use of lighting options that reduce light pollution and enhance safety by limiting glare.
- 21 21. Encourage arts tourism attractions – e.g. visual arts, writing, cuisine, music – that will provide activities
22 for both residents and visitors and showcases for locally produced artistic works.
- 23 22. Encourage county staff, residents, and visitors to use “leave no trace” principles by signage with
24 appropriate regulatory warnings and identification of county projects directed to environmental
25 protection or enhancement to encourage unity of purpose among all parties.
- 26 23. Support development of infrastructure, such as commercial hubs and cold storage facilities, necessary for
27 the production and distribution of agricultural products and related value-added products on San Juan,
28 Orcas and Lopez Islands; encourage dual use for disaster preparedness (as part of Goal 4).
- 29 24. Expand the leasing of agricultural lands held in public trust to farmers and invest in infrastructure such as
30 fencing, water and housing on those lands to support agricultural production.
- 31 25. Encourage County programs (i.e. Affordable Housing program and Land Bank) to collaborate in the
32 development of affordable farmer/farm worker housing and supporting Ag infrastructure in functional
33 proximity to agricultural lands held in public trust.
- 34 26. Re-evaluate the saturation and location of vacation rentals allowed County-wide to determine
35 appropriate legislation.

36 **GOAL 4: ENHANCE ECONOMIC RESILIENCE**

37 **Goal:** Enhance economic resilience to natural and economic perturbations, both rapid (natural disasters, drought,
38 recessions, etc.) and long-term (climate change, resource limitation, long-term economic or industry shifts,
39 changing property values).

40 **Comment:** This goal is integral to the long term success of Goals 1, 2, and 3.

⁹ <http://friendsofhaystackrock.org/> (accessed Mar. 2019)

¹⁰ Revised Code of Washington: <https://app.leg.wa.gov/RCW/default.aspx?cite=4.24.830>

1 **Policies (10.3.B.4, 1-8)**

- 2 1. Identify and support opportunities to diversify economy among and within sectors.
- 3 2. Include disaster management planning in infrastructure and economic development programs, and seek
4 synergies between job creation and disaster preparedness programs.
- 5 3. Identify and encourage means to reduce the cost of living and doing business in the County.
- 6 4. Encourage the reduction and/or substitution of fossil fuel consumption to reduce the competitive
7 handicap suffered by businesses and work force alike due to the cost of importing such fuels into the
8 county.
- 9 5. Encourage community and governmental disaster preparedness for infrastructure on which industries
10 depend.
- 11 6. Increase local food production and promote land stewardship and food security as core components of
12 economic resilience.
- 13 7. Encourage and improve spill prevention, spill response preparedness, and spill response capacity for oil
14 spills or other HAZMAT events that threaten the county's natural capital and resources, economy, or
15 public health.
- 16 8. Encourage community and governmental awareness, preparedness, and action regarding negative
17 impacts from climate change.

18 **Actions (10.3.B.4, 1-23)**

- 19 1. Identify high impact ways to increase economic diversity, such as investing in programs to support small
20 local industries that provide county exports (e.g. agriculture and natural resource industries, software and
21 information, high-tech manufacturing, etc.).
- 22 2. Maintain and support a regularly meeting joint inter-agency, inter-non-governmental organizational body
23 to coordinate preparedness for, and actions in response to, natural disasters, acts of war, civil unrest or
24 catastrophic accidents in order to assure communications, evacuations, medical treatment and
25 sustenance during such events; incorporate appropriate inter-local and other agreements to carry out this
26 mission.
- 27 3. Involve local citizens in disaster preparedness including by publicizing the county's vulnerability to
28 transportation and communications interruptions, and its oil spill risk due to its close proximity to
29 commercial vessel traffic, refineries, and terminals.
- 30 4. Define the county as an oil spill landfall oil boom staging area with a 4-hour response time within the
31 county, coordinated with state and federal (particularly concerning but not limited to shoreline managed
32 by the federal Bureau of Land Management) and other county, state, federal and Canadian efforts in the
33 event of any spill within or threatening the county. This may require paid professional spill response
34 personnel and their equipment to be resident in the county, so that they can be onsite anywhere in the
35 county within that time period and seek cost-sharing contribution from the state and federal
36 governments.
- 37 5. Support positioning of an Emergency Response Towing Vessel in San Juan County.
- 38 6. Build oil spill response capacity (equipment, personnel, and volunteers) in San Juan County, including
39 wildlife response capacity, e.g. by providing adequate and sustainable funding for the Islands Oil Spill
40 Association or a similar organization.
- 41 7. Support increased protections of marine species and waters from the impacts of vessel traffic and
42 encourage updating WAC 173-182-370 to improve oil spill response capacity by requiring the 4- and 6-
43 hour planning standards to be resident.

- 1 8. Develop alternative and improved transportation to move goods and services between the islands and
2 the mainland for necessary resilience.
- 3 9. Enact appropriate land use regulations to encourage distributed energy generation and cooperate with
4 OPALCO and to encourage the use of electric energy from local providers as an economically favorable
5 alternative to fossil fuels.
- 6 10. Continue and increase county acquisition of fully electric vehicles for its own use as and when financially
7 advantageous over the life of the vehicle and advertise by published notices or bulletins the savings
8 realized by to encourage residents to obtain similar savings.
- 9 11. Enhance workforce resilience by: increasing support for and protection of victims of domestic violence to
10 ensure the welfare of the workforce and their children who constitute the future workforce; encouraging
11 local provision of mental health, prenatal/OB, and other locally deficient medical services; encouraging
12 coverage for medically necessary air transport.
- 13 12. Enhance business resilience by supporting the study and creation of a workforce pool to help businesses
14 survive disasters (e.g. the sudden illness or injury of key personnel).
- 15 13. Enact regulatory incentives for guest accommodation businesses to maintain supplies of food, water,
16 generators, and/or fuel as appropriate for guests, seasonal workers, and regular staff in case of natural
17 disaster.
- 18 14. Enact regulatory incentives for energy efficient housing and commercial construction such as but not
19 limited to permitting taller multi-floor terraced sod-roofed construction that maximizes natural light to its
20 environs while increasing the productive volume over a smaller footprint.
- 21 15. Work with organizations and private capital sources to encourage, enable, and support safe, adequate,
22 environmentally-friendly, and affordable housing – especially multi-resident buildings – to maintain a
23 viable labor and trades force within the county.
- 24 16. Adjust land use regulations to encourage low and middle income clustered and multifamily housing
25 developments that share and so reduce utility costs, sited and designed to be consistent with the available
26 natural resources, infrastructure and rural character. Such housing may include housing designed to
27 promote economic opportunities for unemployed or disadvantaged persons specifically designated by
28 statute (RCW 36.70A.020(5)) as parties to be served, whose skills and talents may be developed to enrich
29 the pool of talent available to the county economy.
- 30 17. Enact zoning or regulatory changes that reduce the loss of contiguous stretches of agricultural, timber,
31 and undeveloped land to single family housing and vacation homes, while encouraging construction of
32 multi-unit housing in zones created to preserve open space, forests, and agricultural lands elsewhere.
- 33 18. Enact regulatory incentives for the preservation and enhancement of farmland, working farms and
34 implementation of best management practices that support soil health.
- 35 19. Secure funding to conduct an analysis of the current and projected economic impact of local food in San
36 Juan County, to be completed no later than 2021 and updated every five years after that, including direct,
37 indirect and induced impacts, to measure progress and help inform future initiatives and policy decisions.
- 38 20. Secure funding for creating a local food system plan that lays out specific strategies, timeline, and
39 benchmarks to move our County toward greater local food resilience. (see Whatcom Community Food
40 Assessment).
- 41 21. Support and promote agricultural best management practices that build resilience in the face of climate
42 change, water shortage, and changing disease pressures.
- 43 22. Identify opportunities to utilize the geographic isolation of San Juan County to introduce programs that
44 would build agricultural resilience and create economic opportunity.

1 **Specific Projects:**

2 Key to achieving these five overarching goals will, among other things, be by implementation of specific
3 projects, including but not limited to the following list of eligible project types for the Public Facilities Financing
4 Assistance Program (PFFAP), compiled and approved by San Juan County Council in May of 2018. For projects
5 to be eligible for PFFAP funding, they must be designed to increase capacity and not address a deficiency,
6 unless that deficiency is a direct impediment to economic development. Notwithstanding the foregoing,
7 nothing in the following list is intended to limit the action items set forth above in this EDE.

8 **Agriculture/Aquaculture/Timber**

- 9 ▪ Product processing facilities, such as: commercial kitchens, seed production facilities, timber mills,
10 silviculture land
- 11 ▪ Product sales, marketing and distribution facilities, such as: Food hubs, farmers’ markets, cold and dry
12 storage and locker freezers

13 **Alternative Energy**

- 14 ▪ [Local, sustainable energy generation](#)
- 15 ▪ [Energy storage systems](#)
- 16 ▪ [Energy distribution infrastructure](#)

17 **Economic Development Projects**

- 18 ▪ Shared workspaces, business incubators, trades & business training facilities, business parks
- 19 ▪ Personnel in economic development ([Associate Development Organizations](#)) offices and economic
20 development infrastructure

21 **Health Care**

- 22 ▪ Public hospitals and/or Long-term care facilities

23 **Maritime Industries**

- 24 ▪ Marine research facilities
- 25 ▪ Boat building, repair facilities
- 26 ▪ Marine industry incubators and/or training facilities

27 **Telecommunications**

- 28 ▪ Broadband/communication infrastructure, such as: cell/communication towers, fiber optic
29 installations, joint use wireless facilities

30 **Tourism**

- 31 ▪ Park and/or event facilities, such as: public pools, public restrooms and signage
- 32 ▪ Public access to shorelines and/or trails
- 33 ▪ Ecological preservation programs
- 34 ▪ Dark skies light retrofitting

35 **Transportation**

- 36 ▪ Roads including intersection improvements
- 37 ▪ Public transportation improvements, such as: bridges, non-motorized pathways, public parking,
38 boardwalks
- 39 ▪ Public marina improvements, such as: barge landings, boat launches, docks
- 40 ▪ Public airport improvements, such as: buildings [and](#) emergency medical transportation infrastructure
- 41 ▪ Ferry landing and parking improvements

42

1 **Utilities**

- 2 ▪ Water, wastewater and stormwater systems
- 3 ▪ Solid waste, recycling and composting facilities

DRAFT

1 **10.4 ECONOMIC PROFILE OF SAN JUAN COUNTY**

2 **10.4.A Key Opportunities & Challenges**

3 **Overview**

4 San Juan County stands at a crossroads. Its equable climate is nationally recognized. Its vistas appear in national
5 and international real estate and travel materials. It is remote, yet it is within a day’s surface travel to Seattle,
6 Portland Oregon and Vancouver British Columbia. It hosts not only varied plants and wildlife, including the iconic
7 Southern Resident Killer Whales, but an enterprising and well-educated human population.

8 The provisions that follow necessarily focus on monetary economics, but in San Juan County, the monetary
9 economy discussed below has value only to the extent that the county’s natural capital is nurtured at a greater
10 rate than it is depleted, an example being the iconic (yet declining) Southern Resident Killer Whales, which are
11 themselves a substantial economic driver of the county economy. If the county is successful in conserving and
12 nurturing its natural capital, the people of the county should profit from longer, richer and more peaceful lives.

13 **Environmental Components**

14 Preservation of San Juan County’s ecosystem is essential to maintenance of all of the region’s key industries.
15 According to the San Juan Islands Visitor Study, the most important reason for both visiting and living on the San
16 Juan Islands is “Natural/Rural Scenery”¹². Tourism, the real estate industry, agriculture, marine industries, and
17 the quality of life are maintained when the natural surroundings are preserved, protected, and affirmatively
18 supported.

19 **Economic drivers**

20 **Tourism**

21 Tourism is a major driver of the county economy, which also depends upon natural assets while posing risks to
22 those assets. Marine mammals (particularly Orcas) are one of the major draws for tourists and residents alike¹³;
23 however, the Southern Resident Killer Whales are under stress from multiple factors¹⁴. In San Juan County, whale
24 watching boat tours alone contribute approximately \$4 million directly to the San Juan County economy¹⁵ and it
25 is clear that millions of dollars and many jobs could be lost in the county if the Southern Resident Killer Whales
26 were to die out.

27 In addition to whale watching, there are other potential draws – such as bioluminescent seas, exceptional
28 biodiversity of intertidal and pelagic ecosystems, dark skies, etc. – that are not currently focuses of advertising
29 campaigns and tour companies. These are also quite sensitive to damage, but a leave-no-trace approach to
30 diversifying visitor activities may reduce the stress on marine mammals and popular attractions, while providing
31 awareness and incentives to protect natural characteristics that people do not think about as frequently.

32 This EDE takes it as axiomatic that a settled human presence inherently detracts from the status quo of the natural
33 environment, and the presence of an overabundance of humans – through tourism or settlement – inherently

¹² Whittaker, D. Shelby, B. & Shelby, D. (2018). *San Juan Islands Visitor Survey*. <https://www.sanjuanco.com/1391/San-Juan-Islands-Visitor-Study>.

¹³ *Ibid.*

¹⁴ *Southern Resident Orca Task Force Report and Recommendations, November 16, 2018.*

https://www.governor.wa.gov/sites/default/files/OrcaTaskForce_reportandrecommendations_11.16.18.pdf

¹⁵ *Washington State Department of Revenue data for San Juan County taxable retail sales in 2017; NAICS code 487210 (Scenic and Sightseeing Transportation, Water). The taxable retail sales for this sector does not include contributions from land based whale watching or spending on other activities, food, or lodging by visitors who come primarily for boat tours. A recent study suggests that these additional contributions total tens of millions of dollars or more (Van Deren, M., et al. 2019. *The Whales in Our Waters. Earth Economics. Tacoma, WA.* <https://www.eartheconomics.org/all-publications/srkw>).*

1 detracts further from that as well as from the rural character of the islands. Accordingly, this EDE recognizes the
2 necessity for affirmative countervailing actions and regulations.¹⁶

3 Factors relating to tourism have been summarized as follows¹⁷:

4 **Social Benefits**

- 5 • Brings in outside dollars to support community
- 6 facilities and services that otherwise might not
- 7 be developed.
- 8 • Encourages civic involvement and pride.
- 9 • Provides cultural exchange between hosts and
- 10 guests.
- 11 • Encourages the preservation and celebration of
- 12 local festivities and cultural events.
- 13 • Facilities and infrastructure developed for
- 14 tourism can also benefit residents.
- 15 • Encourages the learning of new languages and
- 16 skills.
- 17 • Tourism-related funds have contributed towards
- 18 schools.
- 19 • Identifying future Islanders

20 **Social Costs**

- 21 • May attract visitors whose lifestyles and ideas
- 22 conflict with the community's. An example may
- 23 be the visitors' use of drugs and alcohol or just
- 24 the pace of behavior.
- 25 • May change individual behavior and family
- 26 relationships.
- 27 • May lead to an increase in diseases.
- 28 • Loss of traditional values, culture and rural
- 29 character through imitation of visitor behavior,
- 30 or cultural diffusion resulting from faster-paced
- 31 interaction.
- 32 • May create crowding and congestion.
- 33 • May compete with residents for available
- 34 services, facilities, and existing recreation
- 35 opportunities.
- 36 • May result in harassment of visitors perceived to
- 37 be wealthy and an increase in crime.
- 38 • Can involve violation of human and property
- 39 rights when visitors trespass upon and abuse
- 40 private property.

41 **Environmental Benefits**

- 42 • Can foster conservation and preservation of
- 43 natural, cultural and historical resources.

- 44 • Encourages community beautification and
- 45 revitalization.

- 46 • Could be considered a clean industry.

47 **Environmental Costs**

- 48 • May threaten specific natural resources such as
- 49 Orcas, endangered plants and animals and
- 50 historical sites.
- 51 • May increase litter, noise, and pollution.
- 52 • Brings increased competition for limited
- 53 resources such as water and land, resulting in
- 54 land degradation, loss of wildlife habitats and
- 55 deterioration of scenery.
- 56 • Directly contributes to sewage, solid waste and
- 57 visual pollution.
- 58 • Emissions generated by forms of transport are a
- 59 serious environmental problem of tourism.

60 **Economic Benefits**

- 61 • Helps diversify and stabilize the local economy.
- 62 • Provides governments with extra tax revenues
- 63 each year through accommodation and
- 64 restaurant taxes, airport taxes, sales taxes, park
- 65 entrance fees, etc..
- 66 • Creates local jobs and business opportunities.
- 67 These include those jobs directly related to
- 68 tourism (hotel and tour services) and those that
- 69 indirectly support tourism (such as food
- 70 production and housing construction).
- 71 • The **multiplier effect**:
- 72 o Brings new money into the economy. Tourist
- 73 money is returned to the local economy as it
- 74 is spent over and over again.
- 75 o Helps attract additional businesses and
- 76 services to support the tourist industry.
- 77 • Is labor-intensive. Earns valuable out-of-county
- 78 income.

79 **Economic Costs**

- 80 • Tourism development of infrastructure (airports,
- 81 roads, etc.) can cost the local government a
- 82 great deal of money.
- 83 • May inflate property values and prices of goods
- 84 and services.

¹⁶ Pawson, E. and The Biological Economics Team. (2018). *The New Biological Economy*. Auckland University Press.

¹⁷ Substantially derived from work of [Barcelona Field Studies Centre S.L. https://geographyfieldwork.com/TourismProsCons.htm](https://geographyfieldwork.com/TourismProsCons.htm) (accessed Feb. 2019)

- 1 • Leakages:
- 2 o If outside interests own the tourism
- 3 development, most of the economic benefits
- 4 will leave the community
- 5 o Considerable amounts of revenues leak back
- 6 out of the local economy for tourism-related
- 7 imports. This would, however, encourage
- 8 local production of these goods.
- 9 • Employment tends to be seasonal. Workers may
- 10 be laid off for the fall, winter and spring seasons.
- 11 • Many jobs in the tourism industry are poorly
- 12 paid. This is a problem particularly in less-
- 13 developed areas where the local workforce lacks
- 14 the skills to fill better-paid positions.
- 15 • Tourism as an industry is particularly susceptible
- 16 to fluctuations in the state, national and global
- 17 economy; numbers can be adversely affected by
- 18 events beyond the control of the destination e.g.
- 19 terrorism, economic recession.
- 20 • Badly-managed tourism follows a "product life
- 21 cycle", with a final stage of decline, where the
- 22 destination no longer offers new attractions for
- 23 the tourist, and the quality has diminished with
- 24 the rise of competition and tourist saturation.

25 In terms of the ultimate intended beneficiaries of a tourist economy, one study¹⁸ indicates that as tourism comes
 26 to provide over 25% or retail sales (and presumably services) revenue – which is the case for San Juan County –
 27 the desirability of additional tourism development decreases significantly, and the favorability of special tourism
 28 taxes increases.

29 Real Estate

30 Real estate transaction earnings support many brokers and agents active in an area where many people desire to
 31 live. Transaction taxes from these activities provide county revenues. Because the county's desirability as a place
 32 to live and visit is regionally and nationally known, the segment of the county economy concerning real estate is
 33 largely driven by regional and national factors and so is not amenable to county policies or actions beyond those
 34 regarding land use, including environmental regulations.

35 However beneficial to the county itself, the involvement of county real estate in the regional and national markets
 36 has distorted the local market resulting in a lack of low and middle-income housing, in turn limiting the county's
 37 ability to gain and retain lower- and middle-class participants necessary to broaden the county economy;
 38 additionally, significant real estate development may degrade the environmental assets which drive tourism. The
 39 large proportion of high-end properties has consumed much of the space for development, resulting in a shortage
 40 of building trades workforce, which in turn increases the cost of real estate development for the lower tiers of the
 41 economy, exacerbating a housing shortage faced by a full-time workforce. Although this EDE seeks to respond to
 42 this challenge, the distortion of the local housing market imposed by the regional and national markets remains a
 43 challenge.

44 Further information concerning real estate can be found at pp. 41-42 below. See also Housing, at p. 40 below.

45 Construction

46 Construction is a key industry that provides both living-wage jobs and housing – it is driven by people's desire to
 47 live in the county due to the its natural beauty; however, clearing, shoreline modification, and water use can
 48 degrade the natural and rural character that draw people to reside here. Water rights and use, garbage and
 49 recycling services, low-impact transportation, and land clearing all have a profound effect on the islands.
 50 Maintaining a construction industry over the long term will depend on identifying ways to balance continued
 51 construction with preservation of natural resources and assets and rural character. The policies and actions
 52 outlined above (Goal 1 & 4) seek to identify approaches for doing so.

53 Further information concerning construction can be found at pp. 41-42 below.

54 The climate and natural environment continue to draw new residents to the county; the strength of this draw is
 55 likely to increase due to climate change and crowding in nearby metro areas and their suburbs. Net immigration
 56 puts additional stress on environmental services, housing, and infrastructure; however, immigration of skilled

¹⁸ Perdue, R.R. & Long P.T. & Allen, L. (1987). *Rural Resident Tourism Perception and Attitudes*. *Annals of Tourism Research*. 14. 420-429.
 10.1016/0160-7383(87)90112-5.

1 workers and entrepreneurs brings income from out of the county, provides skills that are in short supply, and
 2 provides a customer base to sustain year-round activity in other industries.

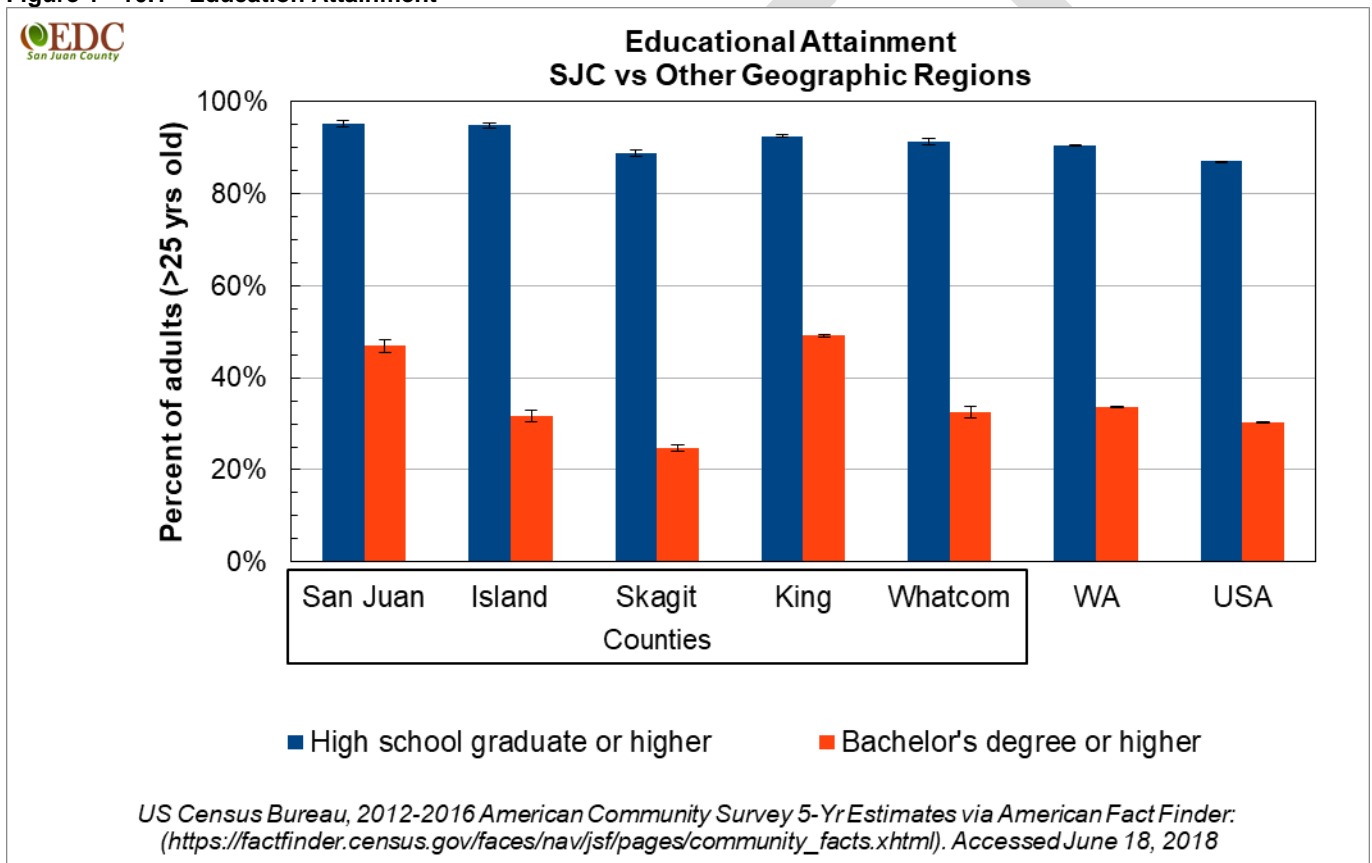
3 The local climate (specifically the rain shadow) provides opportunities for solar and distributed power on the
 4 islands; however, if climate change reduces rainfall, it may increase stress on water resources for residents,
 5 visitors, agriculture, and natural habitats.

6 **Population**

7 **Education**

8 The San Juan County populace is highly educated (Figure 10.1)¹⁹: a substantially higher percentage (47%) of people
 9 have bachelor’s degrees or higher in San Juan County than the state (34%) and national (30%) averages. The San
 10 Juan County population’s educational attainment is comparable to King County’s (49%) despite the absence of a
 11 university or 4-year college in the islands. High school degree rates are also high relative to other geographic areas.
 12

13 **Figure 1 - 10.1 - Education Attainment**

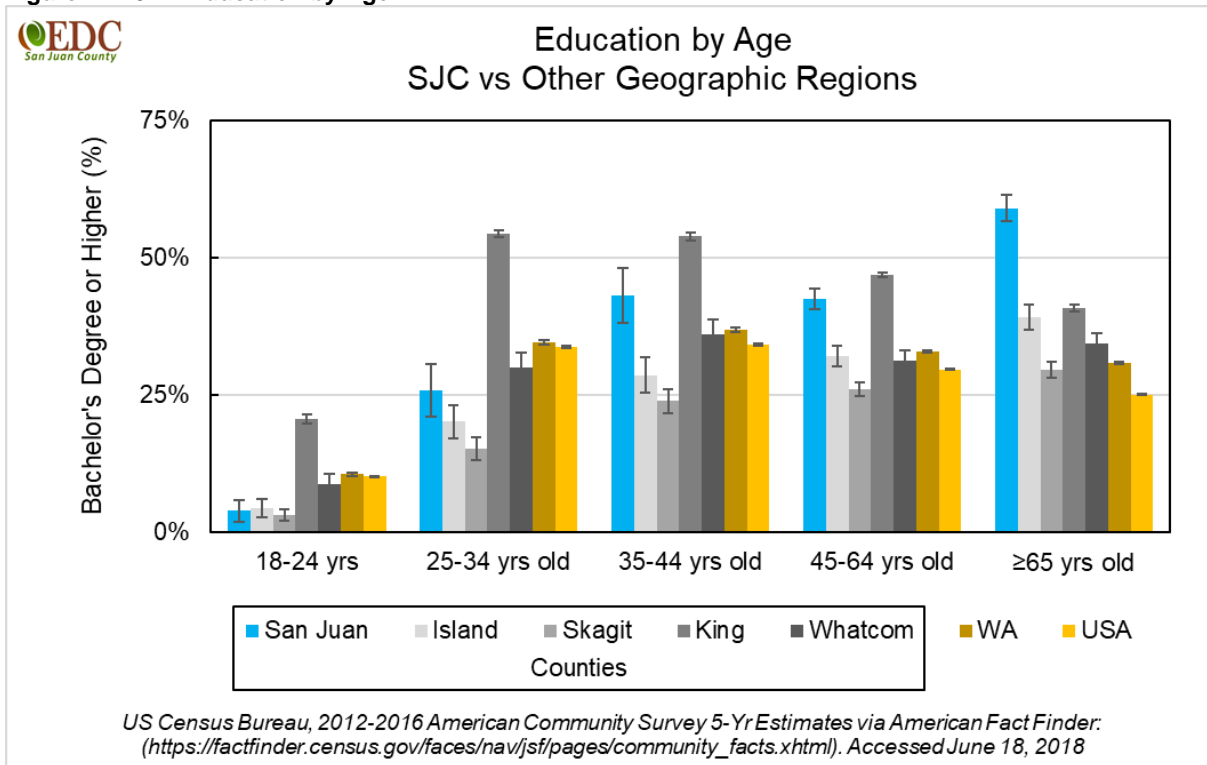


14 Although the educational level for the population as a whole is high, it is skewed towards older residents,
 15 particularly those over 65 (Figure 10.2). The percentage of younger San Juan County residents (18 – 34 yrs old)
 16 who have bachelor’s degree or higher is substantially lower than the state or national average. This may pose a
 17 challenge for developing high tech and knowledge work sectors. The small population of the county, and difficulty
 18 travelling among islands, presents an additional barrier to interactions that could catalyze thriving high-tech,
 19 scientific/engineering, and related knowledge worker sectors (based on discussions at the EDC’s Knowledge
 20 Worker meetup, Oct. 24th, 2018). Attendees comments at the EDC’s first Knowledge Worker Network meeting
 21 (Oct. 24, 2018) suggest that the perception of competition for small numbers of local clients provides another
 22
 23

¹⁹ U.S. Census Bureau, 2012-2016 American Community Survey 5-Year Estimates via American Fact Finder: https://factfinder.census.gov/faces/nav/jsf/pages/community_facts.xhtml
 N:\LAND USE\LONG RANGE PROJECTS\PCOMPL-17-0001 Comp_Plan\Public Record\Eco Dev\Current Draft\2019-09-04_Eco_Dev_Element_PC_Changes_VC_MVD.docx
 Economic Development Element

1 barrier to cooperation among local knowledge and tech workers. Programs to connect local knowledge/tech
 2 workers with local and out-of-county businesses, or encourage cooperation (e.g. with finders fees, meet ups, or
 3 mentoring programs) might help catalyze growth in this sector.

4 **Figure 2 - 10.2 - Education by Age.**



5
6
7

Income, employment, and community service

8 The following two charts show the contrast between personal income per capita in 2016 versus average annual
 9 wage income, with a comparison between neighboring and King counties.

10 Per capita income is quite high in San Juan County in comparison to most nearby counties, or the state as a whole
 11 (Figure 10.3); per capita income in San Juan County is second only to King County.²⁰ “Personal income” is defined
 12 as *all* income, aggregated, including passive income such as investment and pension income, and wage income.
 13 “Personal income per capita” means the aggregate of income earned in San Juan County, divided by all residents
 14 of San Juan County (adults and children). The county’s retired and semi-retired residents may account for the
 15 high personal income per capita. The beauty of the archipelago has attracted many retirees from around the
 16 nation. This provides a potential pool for investment – of both capital and knowledge – in local businesses that
 17 the county could tap into with actions that encourage engagement between part-year, retiree, and working
 18 residents.

19 In contrast to income, wages are quite low in San Juan County relative to the rest of the state (Figure 10.4). “Wage
 20 income” is defined as income earned through work. Average annual wage income was \$33,890, among the lowest
 21 in Washington state (state average was \$59,073, King County was \$76,830) for the year 2016. Average pay in all
 22 the top sectors (except government and utilities) is quite low, and wages have not kept up with inflation.²¹
 23 “Average” means the aggregate of all wage income, divided by the number of workers. One reason that wages
 24 are low in San Juan County is that many jobs here are seasonal and part-time, and jobs in unskilled service sectors
 25 predominate in the economy (Figure 10.14).

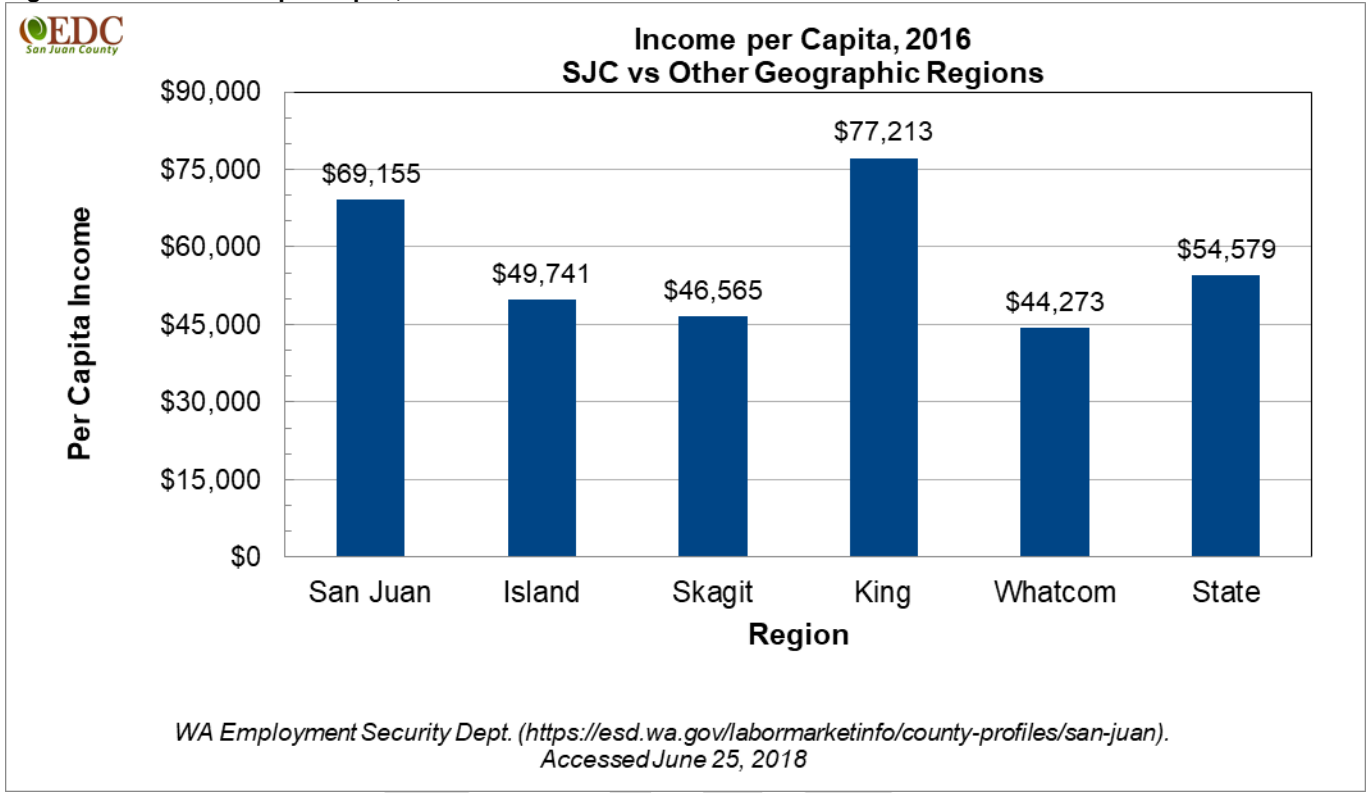
26 As a consequence of the low wages, islanders frequently have multiple jobs in multiple industries. This, combined

²⁰ Data: Washington Employment Security Department, accessed June 25, 2018.

²¹ Ibid

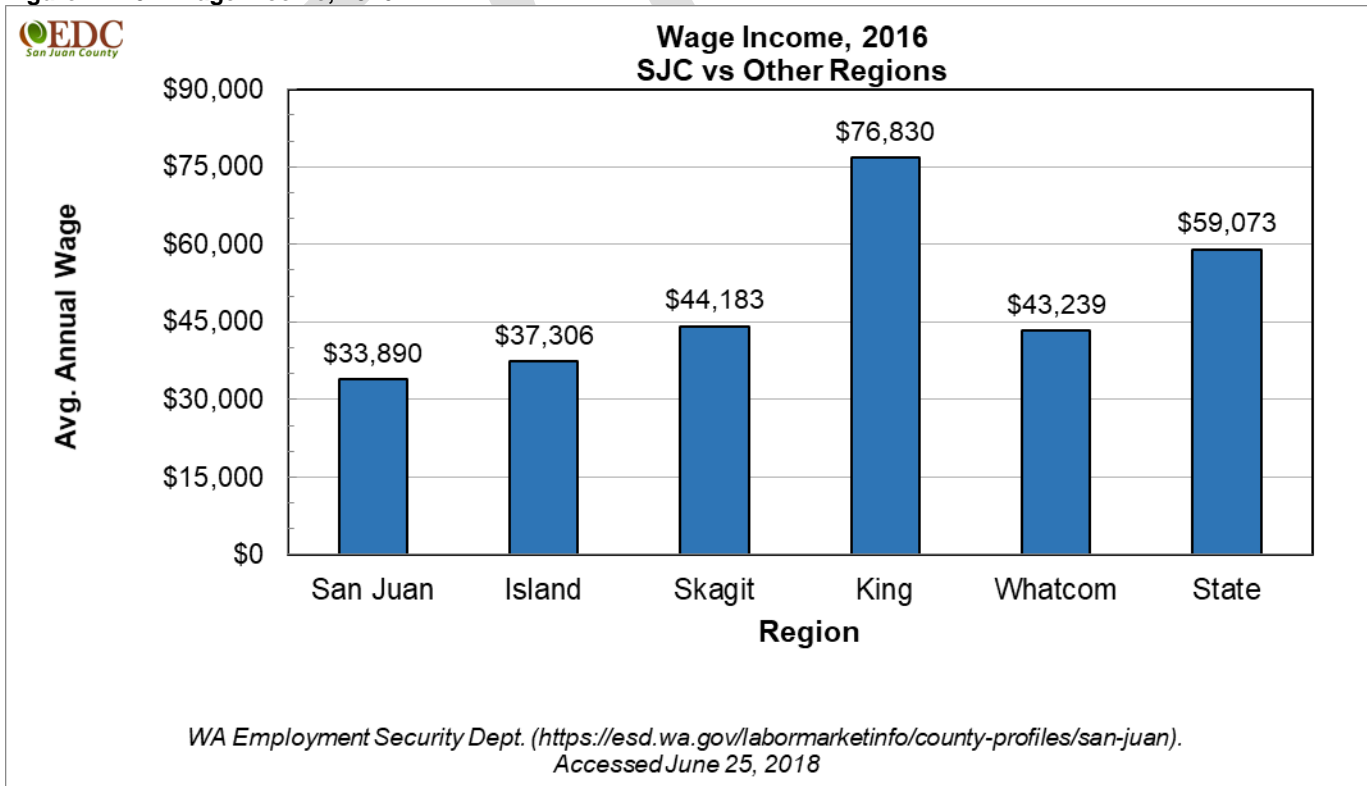
1 with extensive participation in volunteer organizations, would be expected to facilitate cross-industry
2 communication and might be leveraged to encourage innovative new business ventures.
3

4 **Figure 3 - 10.3 - Income per Capita, 2016.**



5
6
7

Figure 4 - 10.4 Wage Income, 2016



8
9

1 **Transportation Components**

2 The county is unique in that it is the only county in Washington state entirely surrounded by water and without a
3 bridge connecting it to the mainland. San Juan, Orcas, Lopez, and Shaw Islands are served by the Washington State
4 Ferry System, which is the primary transportation link between the county and mainland U.S. and Canada,
5 followed by private and commercial air and marine transportation. The many other islands comprising the rest of
6 the county rely entirely on private or seasonal commercial transportation.

7 San Juan County – a part of the San Juan Archipelago – has a total area of 621 square miles, of which 174 square
8 miles are land and 447 square miles are marine waters. The county includes more shoreline than any other county
9 in the continental United States: more than 428 linear miles of shoreline on more than 400 islands and rocks with
10 elevations above mean high tide.

11 The Washington State Ferry System is also the primary delivery system for commercial products and materials
12 destined for island businesses or sold directly to residents. A small number of commercial passenger ferries serves
13 the San Juan Islands with limited schedules; a handful of private vessels regularly barge commodities such as fuel,
14 water, and gravel onto the islands, weather permitting. Also, there are currently at least two freight companies
15 operating from island airports.

16 Public and private facilities for air travel are available throughout the county. Several private air charter and
17 scheduled air services exist, with private and public airports on most of the inhabited islands. Private and public
18 marine transportation companies serve many of the islands. It will be critical to work with US Customs and Border
19 Patrol to increase commerce and transportation between the islands and Canada, including scheduled flights.

20 Besides the Washington State Ferry docks on San Juan, Orcas, Lopez, and Shaw, San Juan County has numerous
21 public and private marinas, haul-out facilities, and community and private docks. The Port of Friday Harbor is the
22 largest marina in the San Juan Islands with 464 moorages.

23 The county does not meet Washington State’s population requirements for creating its own regional
24 transportation planning organization (RTPO), but is eligible to join the Skagit-Island RTPO or one from a
25 neighboring region. The County has chosen not to join a local RTPO at this point in time.

26 San Juan County is surrounded by areas with significant—and potentially increasing—oil spill risk. Because
27 negative economic and environmental impacts from an oil spill could be catastrophic, oil spill prevention has been
28 determined as the highest environmental priority for the county, as ranked by the Local Integrating Organization.

29 The county is surrounded by marine waters with high volumes of both recreational and commercial vessel traffic
30 that is cooperatively managed by US and Canadian Vessel Traffic Services. The VTRA [Vessel Traffic Risk
31 Assessment] 2015 Final Report²² finds that within the Salish Sea up to the 49th parallel the majority of the
32 potential oil spill risk (by spill volume) from actual 2015 commercial vessel traffic is in Rosario Strait and connecting
33 waterways on the eastern side of San Juan County. However, the greatest increase in oil spill risk (by spill volume)
34 from proposed and permitted new and expanding terminal projects occurs on the northwest and western side of
35 San Juan County, where Southern Resident Killer Whales and other species congregate.

36 Several strategies for protection have been identified, including: 1. an increase in oil spill prevention measures by
37 stationing an emergency response towing vessel (ERTV) in San Juan County, and 2. supporting the increased
38 protection of marine water quality, habitat and local species from vessel traffic impacts. An ERTV is estimated to
39 cost between \$4.3 and \$6.2 million annually, in comparison to conservatively estimated costs of oil spills (\$87 to
40 \$504 million per spill)²³.

²² Van Dorp, J.R., Merrick, J. (2017). Final Report: VTRA 2015. <https://fortress.wa.gov/ecy/publications/documents/1708009.pdf>

²³ Page, R., Van Deren, M., Soares, J., Kerr, N. (2019). San Juan County Oil Spill Risk Consequences Assessment. Earth Economics, Tacoma, WA. https://www.sjcmrc.org/media/18754/sanjuancooilspill-riskconsequencesassessment_earthconomics_030119.pdf

1 Other risks associated with transportation include the difficulty of obtaining mutual aid for large emergencies (fire,
2 earthquake, etc), risk of isolation if ferry terminals or docks on outer islands are damaged, and losses to all major
3 industries when ferry service is disrupted by even minor breakdowns.

4 Travel within the county relies almost entirely on fossil fuels. Consequently, the added cost of transportation of
5 these fuels to the county places county business and residential uses at a competitive disadvantage with
6 businesses and residential costs on the near mainland. However, the traffic congestion and the high cost of living
7 in Seattle and its immediate surroundings partially balances these added costs.

8 **Infrastructure Components**

9 Potential economic development can be either encouraged or discouraged by the availability of public
10 infrastructure – electricity, water, fiber, sewer services, and transportation. The issues are partially addressed in
11 the Capital Facilities Element of the Comprehensive Plan. As with the Housing and Transportation Elements, this
12 issue must be addressed here.

13 Electrical power is supplied by Bonneville Power Authority and distributed via submarine cable by the locally-
14 owned nonprofit Orcas Power and Light Cooperative (OPALCO). Sewer and water services are available in the
15 Town of Friday Harbor, the Eastsound Subarea, Lopez Village, and in some areas by community associations.

16 Planning for water, wastewater, and storm water management is the responsibility of the Town of Friday Harbor
17 and the county under the provisions of the GMA. Outside the designated urban growth areas and hamlets, the
18 responsibility for planning rests with the county. Some areas of the islands do not have access to sufficient fresh
19 water, which limits growth. Water planning is currently managed by the San Juan County Health & Community
20 Services Department, and more information is available here: <http://www.sanjuanco.com/health/ehswrm.aspx>

21 Broadband internet services are provided by commercial subsidiary of nonprofit OPALCO, a nationally-owned
22 cable franchise, a nationally-owned telephone franchise, and in a much more limited role by mainland providers.
23 There are also private Internet service providers on the three main islands. While much progress has been made
24 by our local RockIsland company, a significant portion of the county does not have access to speeds higher than
25 1.5Mbps. The lack of county-wide high-speed broadband is a major concern for the county. This needs to continue
26 to be addressed from an economic development standpoint.

27 Fast broadband connections help ensure economic sustainability and competitiveness in the global marketplace
28 and they will spur economic development. As applications become more bandwidth-intensive, the need for a
29 fast, fully symmetrical broadband connection will become even more evident. San Juan County's quality of life is
30 associated with its rural feeling. High-speed broadband will contribute to the retention of this rural environment
31 by providing high-wage jobs to residents who could choose to work from home or develop specialized tech-related
32 businesses.

33 **Housing**

34 Another key challenge to the economic development of San Juan County is the current shortage of affordable
35 housing. In this county, affordable housing should be considered not just for those earning below 80% of the
36 median family income for the area but, also those earning up to 150% of the area median family income because
37 the cost of housing here is exceptionally high. A large percentage of County residents are considered cost
38 burdened²⁴ (spending $\geq 30\%$ of income on housing) despite the County's high per capita income. Affordable
39 housing for all these citizens is a necessary component of economic development for a healthy and diverse
40 population. Affordable housing is discussed in detail in Section B, Element 5, Housing of the San Juan County
41 Comprehensive Plan.

42 **Permitting/Zoning Considerations**

43 Entrepreneurship, home occupations, and cottage enterprises are a thriving and critical component of the San
44 Juan County economy that is contingent on permitting and zoning policies.

²⁴ 2019 Housing Needs Assessment for San Juan County (appendix 5 of the Comprehensive Plan).

1 Below are shown number of parcels and acreage for various land use types in San Juan County in 2014.

2 **Table 1 - 10.1 - Commercial, industrial, and Institutional parcels and acreage.**

Land Use Type	Commercial	Industrial	Institutional
Total Parcels	7,954	568	13,740
Total Acreage	51,176	2,356	64,668

3 **The above includes rural areas of the County as well as those subject to the Eastsound, Waldron, and Shaw*
4 *subarea plans. While there are quite a few land use zones that allow some commercial, industrial and institutional*
5 *uses, in many cases the types of businesses that are allowed is quite limited. Also, much of the land designated as*
6 *Rural General Use is located on Decatur Island which is of little use to businesses and organizations trying to*
7 *provide services to the more populated islands.*

8 In addition to the parcels and acreage listed above, the land use codes allow home occupations and cottage
9 enterprises in many land use designations, provided the operation meets the limitations of the code.

10 The above does not include land use designations where the allowable use is extremely limited, areas covered by
11 the Town of Friday Harbor, Roche Harbor, or Rosario Master Planned Resorts, or areas subject to activity center
12 plans.

13 **10.4.B Major Industries**

14 **Construction/Real Estate**

15 Construction in San Juan County represents 19% (2017 data; Figure 10.7) of the County's gross business income
16 as calculated by the Washington State Department of Revenue.

17 Construction and real estate sales in San Juan County have historically been vulnerable to fluctuations in the US
18 and world economy. With the Great Recession of 2008-2011, real estate values plummeted nearly 30% and have
19 not yet fully recovered, although gains have been made over the past few years. Construction has recovered to
20 2008 levels as of 2017 (Figure 10.8).

21 Other considerations:

- 22 1. Large construction projects (e.g., Peacelsland Hospital project) seem beyond the bonding capacity of local
23 contractors causing major construction projects to default to out-of-county contractors.
- 24 2. The real estate decline post-Great Recession has made homes more affordable, but many high-end
25 properties are not selling.
- 26 3. Lack of potable water in some areas of the islands continues to hamper some construction.
- 27 4. Training in the building, repair, and maintenance trades will help enable employees in these industries
28 garner higher wages and will improve the quality of service that county tradespeople offer.
- 29 5. Monitoring of regulations and permit fees to ensure that San Juan County is attractive to entrepreneurs
30 considering starting a business here, will be critical.

31 **Professional/Scientific/Technical, Information, & Finance/Insurance**

32 In recent years, as infrastructure has improved, San Juan County has become a comfortable place for many non-
33 resource-dependent businesses to set up shop; however, more work must be done. Industry classification data
34 (Figure 10.10) shows stagnation in the finance and insurance sector and the professional, scientific, and technical
35 services sector, while the information sector kept pace with Washington State as a whole.

36 Although these sectors have struggled in San Juan County, a few of the characteristics of these businesses could
37 contribute to their future success in San Juan County and enhance their value to the County: they have few
38 employees, require little space, operate year-round, have little environmental impact, and – in large part – have
39 comparable business costs when compared to off-island competitors. Currently representing approximately 10%
40 of the county's economy by GBI (Figure 10.7), these sectors are critically important to the county's financial health,

1 particularly as these jobs are some of the few higher wage jobs available to workers in the area. Improved
2 broadband speeds are likely to benefit these sectors as islanders find ways to earn income through the internet
3 and as people relocate here bringing their tech businesses or employment with them.

4 **Accommodations/Dining/Tourism**

5 Tourism plays an important role within the economy and affects other sectors. Tourism contributes the major
6 share to Accommodation and Dining sector (12 % of GBI), and contributes to the Retail, Arts and Recreation, and
7 Transportation sectors (Figure 10.7). While many residents would agree that sustainable tourism is a healthy
8 component of the county's economy, groups like the San Juan Islands Visitors' Bureau and the chambers of
9 commerce should work hard to mitigate negative impacts of tourism. Studies have shown that most negative
10 impacts occur when the number of visitors is greater than the infrastructure and environment's ability to cope
11 with the visitor volume. These groups should work to encourage the preservation of sociocultural and
12 environmental authenticity of the islands' communities.

13 Environmental conservation, historical preservation, and support for scenic byways have been imperative to
14 tourism initiatives to ensure that the islands remain welcoming, beautiful, and meaningful places both for locals
15 and visitors. This effort to maintain and preserve local assets should continue.

16 Critical to the continued success of the San Juan Islands as a tourism destination will be the encouragement of
17 leisure opportunities that preserve the environment and jobs.

18 Policies that must be explored include encouraging the preservation of the natural environment which attracts
19 residents and visitors, and which provides living wage employment; the encouragement and promotion of
20 ecotourism and conservation; and the protection of our county's rural character and cultural heritage.

21 Policies should enable county powers to protect wildlife and ecological systems within the county, including
22 without limitation, those portions of ecological systems within the county that extend beyond the county, e.g.
23 Orca and salmon habitat, to prevent deterioration of the county's greatest assets underlying its tourist industry.

24 **Manufacturing**

25 The manufacturing sector, while small at about 4% of the total gross business income (Figure 10.7), represents an
26 important one for the county in that manufacturing employees tend to receive higher wages than many other
27 major San Juan County sectors (Figure 10.14) and manufacturing brings in income from out of the county. Small-
28 scale manufacturing has grown steadily in the county and some of the county's most innovative firms are from
29 this sector, including a manufacturer of thin foil band-pass filters, a manufacturer of fish tagging and tracking
30 systems, and a manufacturer of small heating stoves.

31 Challenges continue to include goods transportation and the lack of highly-skilled workers. Creation of trades
32 training of younger residents will enable increased growth of this industry sector.

33 Small, local producers can harness low-cost technology and changing markets to sell hundreds and thousands of
34 locally produced consumer products. Most of these small manufacturing companies require very small
35 commercial real estate footprints and can offer high-wage jobs to a few employees. The manufacturing industry
36 could benefit from county-wide efforts to find synergies with local knowledge workers with skills such as
37 marketing and web development, computer aided design and engineering, or 3D printing.

38 **Marine Resources**

39 Marine resource-related employment and revenue have long been a core piece of island social and economic
40 fabric. Yet, little data is available to quantify just how important these marine related jobs and entities are. Friday
41 Harbor Labs and other research organizations are major employers whose employees, students, and conference
42 and research guests contribute to the local economy. Shoreline protection efforts can also bring in funding and
43 research and restoration jobs through state and federal grants, while providing benefits to industries such as
44 tourism and fisheries that depend on healthy shorelines (e.g. via supporting food sources for Southern Resident
45 Killer Whales). Numerous small firms create marine-related products such as wild fish tags, and boat sales

1 generate significant sales tax revenue. Traditional and widespread marine harvests are not currently viable²⁵, but
2 there is potential for growth in new sustainable, niche products (such as kelp, sea salt, etc.). Additional research
3 in this and other marine-related industry opportunities will be required to determine overall viability and best
4 prospects. Additionally, marine services such as shipyards and ports are important to the county's economy.

5 **Agriculture Sector**

6 Open space and the Rural Character of San Juan County is maintained in large part by our working farms. Tourism,
7 real estate, and the local food economy are all supported by our agricultural base. The San Juan Islands Visitor
8 Study conducted in 2018 found that "Natural/rural scenery" was the highest ranked reason that visitors and
9 residents alike gave for visiting or moving to San Juan County. Out of 14 choices both visitors and residents agreed
10 that "Local Food" was ranked 7th. In recognition that working farms preserve island culture, rural character and
11 open space it is difficult to calculate the true economic impact of agriculture.

12 According to the Economic Analysis of Resource Lands (2017)²⁶ the farm income reported from San Juan County
13 in 2015 was \$7.1 million and both the number of farms and the total farm employment are either increasing, or
14 are projected to increase, in the coming years. Since 1990, agriculture in San Juan County has grown by about
15 39.5% (1.3% average annual growth). This rate of growth is higher than the average across Washington state (2.4%
16 total growth) and the United States (-0.7%). There is much written about the multiplier effect of dollars spent on
17 the local food economy and although we have no data specific to San Juan County we can extrapolate from state
18 and national sources that those dollars in reported farm sales double or triple the dollar for dollar impact on the
19 local economy due to indirect and induced economic impacts. Conducting an analysis of the current and projected
20 economic impacts of local food in San Juan County will be an essential step in the near-term to help inform future
21 initiatives and policy decisions.

22 Farms in San Juan county produce beef, pork, lamb, goat, poultry, mixed vegetables, grains, orchard crops,
23 aquaculture crops, fiber, hay, eggs, and dairy products. Many farms are diversified and rely on multiple income
24 streams. According to the Economic Analysis of Resource Lands the average farm size has been in decline since
25 1992, falling from 132 acres per farm to 57 acres in 2012. San Juan County's agriculture sector today is
26 characterized by a larger number of smaller farms.

27 According to the 2012 USDA Census there has been a 6% reduction in the number of farms and a 27% reduction
28 in farmland acreage since 2007. These numbers speak to the urgency of protecting farmland from development
29 which makes it unusable for agricultural activities in the future. The loss of agricultural lands is happening for
30 several reasons including: lack of owner interest, owners' responses to regulatory incentives, conversion from
31 agricultural management to estate management, land sales into other uses, and conversions of larger farms into
32 smaller parcels which may not be able to support agricultural production. The San Juan County Land Bank and
33 local non-profits with the mission to preserve open space and agricultural lands can play a crucial role in preserving
34 our agricultural resources and provide access to these resources through long term leases. The agricultural
35 activities which define our pastoral landscapes need farmers and access to agricultural land is an increasing
36 challenge in San Juan County.

37 On farm employment is rising and expected to continue to rise in San Juan County as opposed to the declining
38 state and national numbers. Over 50% of principal operators state that farming is their primary income and 40%
39 of those are women. The average age of the island farmer is 60 years old and speaks to the need for new farmer
40 incentives, training, and succession strategies so that we ensure we have a robust agricultural economy for years
41 to come. Working to help new farmers to establish successful farms, developing adequate access to ag-processing
42 infrastructure, expanding local and regional marketing opportunities, and adopting scale-appropriate state and
43 local regulations could be an important way to foster farm businesses and support a thriving local farm economy.

²⁵ Fishing represented 0.6 % of total earnings in San Juan County in 2013, the most recent year for which data is available from the U.S. Bureau of Economic Analysis (www.bea.gov; table CAINC5N, accessed Nov. 20, 2018).

²⁶ C. Mefford, et al. (2017). *Economic Analysis of Resource Lands*. Community Attributes Inc. (

https://www.sanjuanco.com/DocumentCenter/View/14432/2018-1-2_Natural_Resource_Lands_Analysis-

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1 Value-added products are defined as follows: A change in the physical state or form of the product (such as milling
2 wheat into flour, making strawberries into jam or manure into compost). Whether the producer is adding value,
3 or the producer sells their raw commodity to a local business who is creating a value-added product, these tend
4 to increase the multiplier effect of local food dollars and job creation. There are infrastructure constraints to many
5 value-added processes. There are many overlapping jurisdictions in the current regulatory environment. High
6 capital investment can hinder creativity. However, access to shared facilities such as commercial kitchens and
7 storage facilities can help local entrepreneurs and food innovators grow this important sector of the food
8 economy. The Island Grown Cooperative’s USDA mobile slaughter unit is a prime example of how shared
9 infrastructure has enabled growth.

10 Although San Juan County farmers face challenges ranging from geographic isolation, transportation costs, small
11 local market, lack of farm services and suppliers, high labor costs, insufficient affordable housing, and the rising
12 value of land prices, there are also promising development opportunities. Many of these issues can be addressed
13 through creative policy that commits to supporting the infrastructure and regulatory environment needed for the
14 farms in San Juan County to flourish. Opportunities for agriculture exist in the following areas: high-value direct
15 markets, production of value added products, year round vegetable production, agritourism, geographic isolation
16 and the GMO-free status of the county, and the entrepreneurial spirit of farmers.

17 **Entrepreneurship**

18 The primary strength of San Juan County and the Town of Friday Harbor is the fact that the San Juan Islands’
19 environment is what brought most people here and why they stay. Whether fourth-generation resident or first-
20 time visitor, the islands have a way of capturing the imagination and inspiring people to somehow, some way, stay
21 a little longer. In spite of, and probably because there are limited employment opportunities, a strong and long-
22 standing culture of entrepreneurship has evolved in the islands. Many of those who contributed their
23 observations and suggestions during development of this plan report holding multiple jobs, some just to make
24 ends meet, others to supplement income during the “off-season.” To be sure, island residents are quite
25 resourceful in finding ways to “make a buck” and San Juan County boasts more business proprietors per capita
26 than any other county in the state²⁷.

27 **10.4.C. Historical Economic Context**

28 The San Juan Islands were seasonally occupied by Coastal Salish people for approximately 5,000 years. The
29 population of native peoples of the San Juan islands declined by over 90 percent within 100 years of the arrival of
30 Europeans, due to the introduction of disease and by the removal of all land rights under the Elliott Point Treaty
31 in 1855. A number of Native-American properties and burial sites exist within the county and are protected by
32 Federal laws.

33 Permanent settlement in the islands generally began in 1850, when the Hudson's Bay Company established a
34 saltery on the southern tip of San Juan Island, and later, a Lime Kiln at Roche Harbor, subsequently purchased by
35 the Tacoma & Roche Harbor Lime Company and then John McMillin. Within 20 years European settlers had spread
36 to Lopez, Shaw, Orcas, Waldron, Decatur, and Blakely islands, raising sheep, cattle, and poultry on small
37 subsistence farms.

38 Fishing and marine-based industries continued to be a major activity in the Islands. Early salmon salteries and later
39 canneries were established at Friday Harbor on San Juan, at Deer Harbor on Orcas, and at Richardson on Lopez.
40 The strategic location of the Islands relative to Canada also proved attractive to smugglers transporting illegal
41 laborers, drugs, wool, liquor, and other commodities.

42 Up to the 1940s, agriculture was a staple industry on the islands. Before the irrigation of eastern Washington, the
43 San Juans were the number one apple producing region in the state; plums, cherries, and peas were also major
44 crops. Many farms reverted to second growth forest after the Great Depression and the Second World War. Some

²⁷ U.S. Bureau of Economic Analysis, 2017 CAINC30 Economic Profile table for WA counties (apps.bea.gov; accessed Jan. 30), 2019. See also Figure 10.15.

1 of these farms still continue, mainly as pasture land which contributes to the overall ecosystem diversity and sense
2 of open space.

3 Extensive logging for the lime kilns (for burning the lime and for barrels) and salteries (for barrels) at the beginning
4 of the 20th century removed all old growth and valuable timber on most of the Islands. The lime company at Roche
5 Harbor continued to operate until 1956. Quarrying activities for sandstone were extensive on Waldron, Sucia, and
6 Stuart islands, and aggregate extraction continued on San Juan until 2001.

7 By the 1960's the San Juans had been discovered by visitors and the economy began to be driven by construction
8 of new residences, particularly summer homes, and commercial properties. Trade and services, especially for
9 seasonal visitors developed to the extent that the islands host the highest number of businesses per capita of any
10 county in the state.

11 Marine biology, resorts, and nature camps have historically contributed to the economy, attracting students,
12 vacationers, and campers from around the world. The University of Washington Friday Harbor Laboratories was
13 established in 1904 and seasonally hosts over 450 researchers and students.

14 San Juan County's economy has recovered from the Great Recession of 2007-09. Most sectors have recovered
15 well, with the aggregate of all industries gross business income increasing by 12 % between 2006 and 2017, after
16 adjusting for inflation²⁸. Construction and real estate experienced the largest drops and construction has not yet
17 fully recovered from Great Recession impacts. Educational services, while a small component of the county's
18 economy (Figure 10.7), experienced the largest gains during that same time period of 2006-2017, and
19 manufacturing, arts/entertainment/recreation, and wholesale trade also experienced substantial gains after
20 adjusting for inflation.

21 **10.4.D Data & Charts**

22 Data presented in this document is from state and federal agencies which classify industries by North American
23 Industry Classification System (NAICS²⁹). NAICS has limitations that should be recognized when interpreting these
24 data: frequently the categories are not intuitive. Notably, the tourism industry – which is critical to San Juan
25 County – contributes to several NAICS sectors, but many of these sectors cannot be assigned specifically to tourism
26 (e.g. retail and food services). For smaller sectors, restrictions on reporting can prevent splitting or aggregating to
27 answer questions about specific industries. In addition, businesses are categorized only by the activity that
28 generates most of its revenue, regardless of what other activities they do.

29 **Population**

30 As shown in the following chart ([Figure 10.5](#)), San Juan County saw a quintupling of its population in the years
31 after 1970, possibly due to efforts to market the islands as a retirement and second home destination. Currently,
32 population growth has leveled off and the Office of Financial Management of Washington State expects the
33 population to grow slowly over the next 10 years.

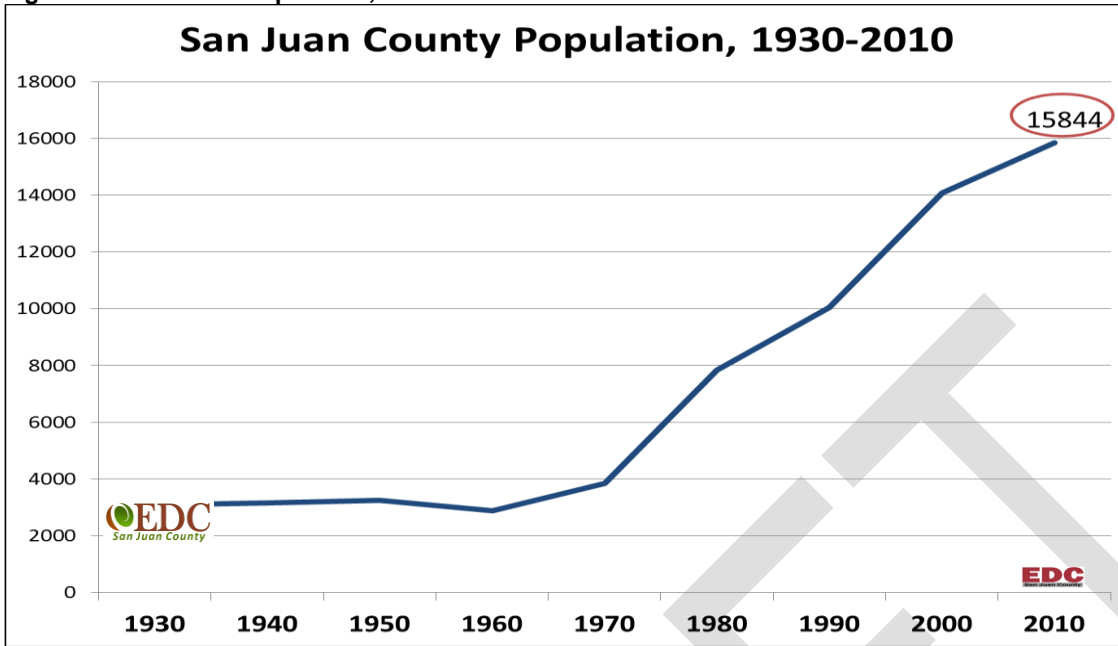
34 Since 1980, most of the growth in San Juan County has been in the population over the age of 55, and the “greying”
35 of San Juan County over the past 30 years has been remarkable, as noted in the second chart on the next page
36 ([Figure 10.6](#)). Median age is continuing to climb and projections from WA State Office of Financial management
37 suggest that in 2030, 34% of SJC population may be over 65.

38 Educational attainment of adults age 25 and over is higher for San Juan County than the rest of Washington State
39 and the US. Nearly 47% of county residents have a bachelor's degree or higher, compared to the state average of
40 34% (Figure 10.1). San Juan County is far less ethnically diverse than Washington State with smaller proportions
41 of all racial or ethnic minorities compared to the state. About 98 percent of its population was white in 2010.

²⁸ Data: WA Dept. of Revenue, courtesy of J. Hoke, June 28, 2018. Inflation adjustment based on U.S. Bureau of Labor Statistics inflation calculator (www.bls.gov/data/inflation_calculator.htm).

²⁹ See: <https://www.census.gov/eos/www/naics/faqs/faqs.html>

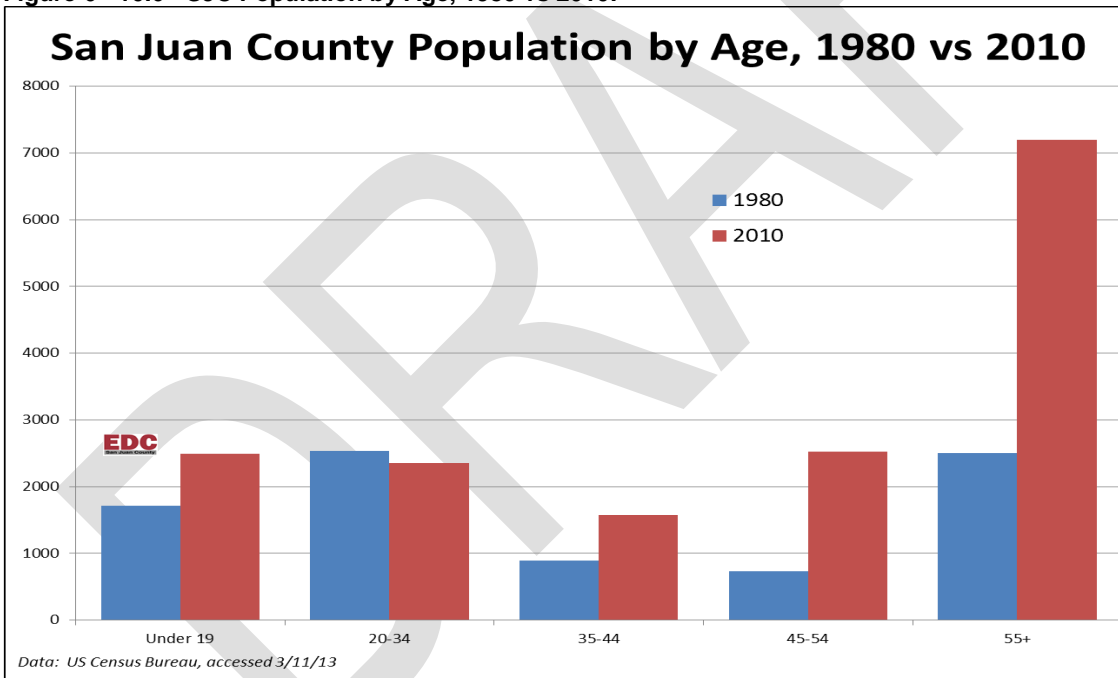
1 **Figure 5 – 10.5 - SJC Population, 1930-2010.**



2 *Data: US Census Bureau, 3/5/13.*



3 **Figure 6 - 10.6 - SJC Population by Age, 1980 vs 2010.**



4 *Data: US Census Bureau, accessed 3/11/13*

5 **Income**

6 The following table shows personal income by major source, and earnings by industries defined by two-digit North
 7 American Industry Classification System (NAICS) code. NAICS codes are the standard used by federal statistical
 8 agencies in classifying business establishments for the purpose of collecting, analyzing, and publishing statistical
 9 data related to the U.S. business economy. Except as noted, numbers are in thousands of dollars and are not
 10 adjusted for inflation. Negative numbers represent losses. (D) entries replace data for industries with few
 11 reporting businesses in order to preserve confidentiality.

1 **Table 2 - 10.2 - CA5N Personal Income NAICS: 2006-2016, SJC.**

CA5N Personal Income by Major Component and Earnings by NAICS Industry: 2006 – 2016, San Juan County

U.S. Bureau of Economic Analysis, "CA5N Personal Income by Major Component and Earnings by NAICS Industry" (accessed June 26, 2018).

Line Code	Description	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Income by place of residence											
10	Personal income (thousands of dollars)	\$889,509	\$948,292	\$783,306	\$792,347	\$842,984	\$959,155	\$955,433	\$1,093,407	\$1,103,587	\$1,129,920
20	Population (persons) 2.	15,400	15,590	15,714	15,770	15,822	15,810	15,875	16,021	16,234	16,339
30	Per capita personal income (dollars)	\$57,760	\$60,827	\$49,848	\$50,244	\$53,279	\$60,668	\$60,185	\$68,248	\$67,980	\$69,155
Derivation of personal income											
35	Earnings by place of work	\$314,414	\$329,699	\$309,074	\$318,808	\$316,517	\$347,397	\$347,603	\$352,871	\$360,825	\$380,152
36	Less: Contributions for gov't social insurance 3.	\$37,840	\$39,028	\$38,793	\$39,748	\$36,528	\$37,248	\$42,315	\$43,988	\$45,872	\$47,985
37	Employee & self-employed contributions for gov't social insurance	\$19,911	\$21,085	\$21,250	\$21,385	\$17,972	\$18,735	\$23,293	\$24,137	\$25,168	\$26,636
38	Employer contributions for gov't social insurance	\$17,929	\$17,943	\$17,543	\$18,363	\$18,556	\$18,513	\$19,022	\$19,851	\$20,704	\$21,349
42	Plus: Adjustment for residence 4.	\$13,517	\$8,953	\$9,334	\$9,982	\$11,034	\$12,088	\$12,671	\$13,534	\$13,985	\$14,537
45	Equals: Net earnings by place of residence	\$290,091	\$299,624	\$279,615	\$289,042	\$291,023	\$322,237	\$317,959	\$322,417	\$328,938	\$346,704
46	Plus: Dividends, interest, & rent 5.	\$505,128	\$542,108	\$386,262	\$373,992	\$419,561	\$499,234	\$495,338	\$615,595	\$612,484	\$612,940
47	Plus: Personal current transfer receipts	\$94,290	\$106,560	\$117,429	\$129,313	\$132,400	\$137,684	\$142,136	\$155,395	\$162,165	\$170,276
Earnings by place of work											
Components of earnings											
50	Wages & salaries	\$187,574	\$195,085	\$184,752	\$183,939	\$182,125	\$187,849	\$191,150	\$199,324	\$207,423	\$220,302
60	Supplements to wages & salaries	\$49,972	\$53,537	\$50,437	\$53,645	\$51,564	\$52,416	\$51,912	\$53,351	\$53,669	\$57,663
61	Employer contributions for employee pension & insurance funds 6.	\$32,043	\$35,594	\$32,894	\$35,282	\$33,008	\$33,903	\$32,890	\$33,500	\$32,965	\$36,314

62	Employer contributions for gov't social insurance	\$17,929	\$17,943	\$17,543	\$18,363	\$18,556	\$18,513	\$19,022	\$19,851	\$20,704	\$21,349
70	Proprietors' income 7.	\$76,868	\$81,077	\$73,885	\$81,224	\$82,828	\$107,132	\$104,541	\$100,196	\$99,733	\$102,187
71	Farm proprietors' income	-\$2,397	-\$3,237	-\$2,147	-\$1,392	-\$480	-\$695	-\$364	-\$572	\$413	-\$23
72	Nonfarm proprietors' income	\$79,265	\$84,314	\$76,032	\$82,616	\$83,308	\$107,827	\$104,905	\$100,768	\$99,320	\$102,210
Earnings by industry (thousands of dollars)											
81	Farm earnings	-\$1,140	-\$1,882	-\$699	-\$177	\$536	\$457	\$785	\$707	\$1,907	\$1,959
82	Nonfarm earnings	\$315,554	\$331,581	\$309,773	\$318,985	\$315,981	\$346,940	\$346,818	\$352,164	\$358,918	\$378,193
90	Private nonfarm earnings	\$261,273	\$272,911	\$251,278	\$257,489	\$257,101	\$287,649	\$294,851	\$299,191	\$305,586	\$322,024
100	Forestry, fishing, & related	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
200	Mining, quarrying, & oil/gas extraction	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
300	Utilities	\$6,782	\$7,245	\$6,951	\$7,702	\$8,306	\$7,704	\$8,149	\$8,526	\$8,977	\$9,310
400	Construction	\$65,473	\$68,951	\$64,560	\$68,225	\$61,551	\$59,484	\$60,390	\$59,630	\$60,517	\$66,824
500	Manufacturing	\$11,110	\$11,007	\$8,434	\$9,408	\$10,999	\$11,865	(D)	(D)	\$10,410	\$10,810
510	Durable goods manufacturing	\$9,158	\$8,852	\$6,065	\$7,222	\$8,726	\$9,574	\$10,149	\$8,387	\$7,859	\$8,180
530	Nondurable goods manufacturing	\$1,952	\$2,155	\$2,369	\$2,186	\$2,273	\$2,291	(D)	(D)	\$2,551	\$2,630
600	Wholesale trade	\$4,438	\$3,871	\$4,185	\$4,898	\$3,906	\$6,726	\$8,189	\$7,995	\$7,281	\$7,145
700	Retail trade	\$28,065	\$26,658	\$27,013	\$27,530	\$24,797	\$26,441	\$27,169	\$31,122	\$34,487	\$37,925
800	Transportation, warehousing	\$3,956	\$4,103	\$4,096	\$3,819	\$3,801	\$4,696	\$5,419	\$5,507	\$5,512	\$5,509
900	Information	\$4,421	\$3,772	\$3,858	\$3,747	\$3,154	\$2,924	\$4,136	\$4,736	\$6,833	\$6,521
1000	Finance & insurance	\$5,248	\$5,633	\$5,903	\$6,659	\$6,293	\$5,873	\$5,787	\$6,613	\$6,262	\$5,987
1100	Real estate, rental & leasing	\$5,967	\$14,408	\$9,301	\$7,343	\$4,928	\$10,563	\$13,373	\$14,767	\$17,888	\$17,527
1200	Professional, scientific, & technical services	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1300	Management of companies & enterprises	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)	(D)
1400	Administrative & waste management services	\$12,164	\$11,948	\$12,720	\$12,984	\$12,963	\$15,572	\$17,766	\$18,421	\$16,062	\$16,290
1500	Educational services	\$3,739	\$4,235	\$4,210	\$4,428	\$4,567	\$4,803	\$4,706	\$5,044	\$5,343	\$5,548
1600	Health care & social assistance	\$15,051	\$16,915	\$17,190	\$17,135	\$16,592	\$16,604	\$20,728	\$19,413	\$20,176	\$20,961

1700	Arts, entertainment, & recreation	\$5,994	\$6,705	\$6,416	\$4,461	\$7,370	\$7,300	\$9,291	\$11,466	\$7,945	\$7,814
1800	Accommodation & food services	\$34,373	\$31,908	\$26,292	\$26,904	\$31,573	\$46,935	\$40,783	\$37,537	\$41,112	\$43,933
1900	Other services (except gov't & gov't enterprises)	\$21,923	\$21,409	\$20,854	\$20,486	\$21,160	\$22,082	\$21,953	\$23,007	\$23,190	\$23,236
2000	Government & government enterprises	\$54,281	\$58,670	\$58,495	\$61,496	\$58,880	\$59,291	\$51,967	\$52,973	\$53,332	\$56,169
2001	Federal civilian	\$4,440	\$4,593	\$4,565	\$5,079	\$4,719	\$4,790	\$4,579	\$4,723	\$4,723	\$4,815
2002	Military	\$1,487	\$1,681	\$1,908	\$1,863	\$1,648	\$1,477	\$1,385	\$1,309	\$1,264	\$1,317
2010	State & local	\$48,354	\$52,396	\$52,022	\$54,554	\$52,513	\$53,024	\$46,003	\$46,941	\$47,345	\$50,037
2011	State government	\$6,312	\$6,374	\$5,650	\$5,925	\$5,712	\$5,568	\$5,100	\$5,047	\$4,874	\$4,865
2012	Local government	\$42,042	\$46,022	\$46,372	\$48,629	\$46,801	\$47,456	\$40,903	\$41,894	\$42,471	\$45,172

Legend / Footnotes:

1. The estimates of earnings for 2001-2006 are based on the 2002 North American Industry Classification System (NAICS). The estimates for 2007-2010 are based on the 2007 NAICS. The estimates for 2011 forward are based on the 2012 NAICS.

2. Census Bureau midyear population estimates. Estimates for 2010-2016 reflect county population estimates available as of March 2017.

3. Employer contributions for government social insurance are included in earnings by industry and earnings by place of work, but they are excluded from net earnings by place of residence and personal income. Employee and self-employed contributions are subtractions in the calculation of net earnings by place of residence and all of the income measures.

4. The adjustment for residence is the net inflow of the earnings of interarea commuters. For the United States, it consists of adjustments for border workers and US residents employed by international organizations and foreign embassies.

5. Rental income of persons includes the capital consumption adjustment.

6. Includes actual employer contributions and actuarially imputed employer contributions to reflect benefits accrued by defined benefit pension plan participants through service to employers in the current period.

7. Proprietors' income includes the inventory valuation adjustment and capital consumption adjustment.

8. Under the 2007 NAICS, internet publishing and broadcasting was reclassified to other information services.

Note-- All dollar estimates are in current dollars (not adjusted for inflation).

(D) Not shown to avoid disclosure of confidential information, but the estimates for this item are included in the totals.

(L) Less than \$50,000, but the estimates for this item are included in the totals.

(NA) Data not available for this year.

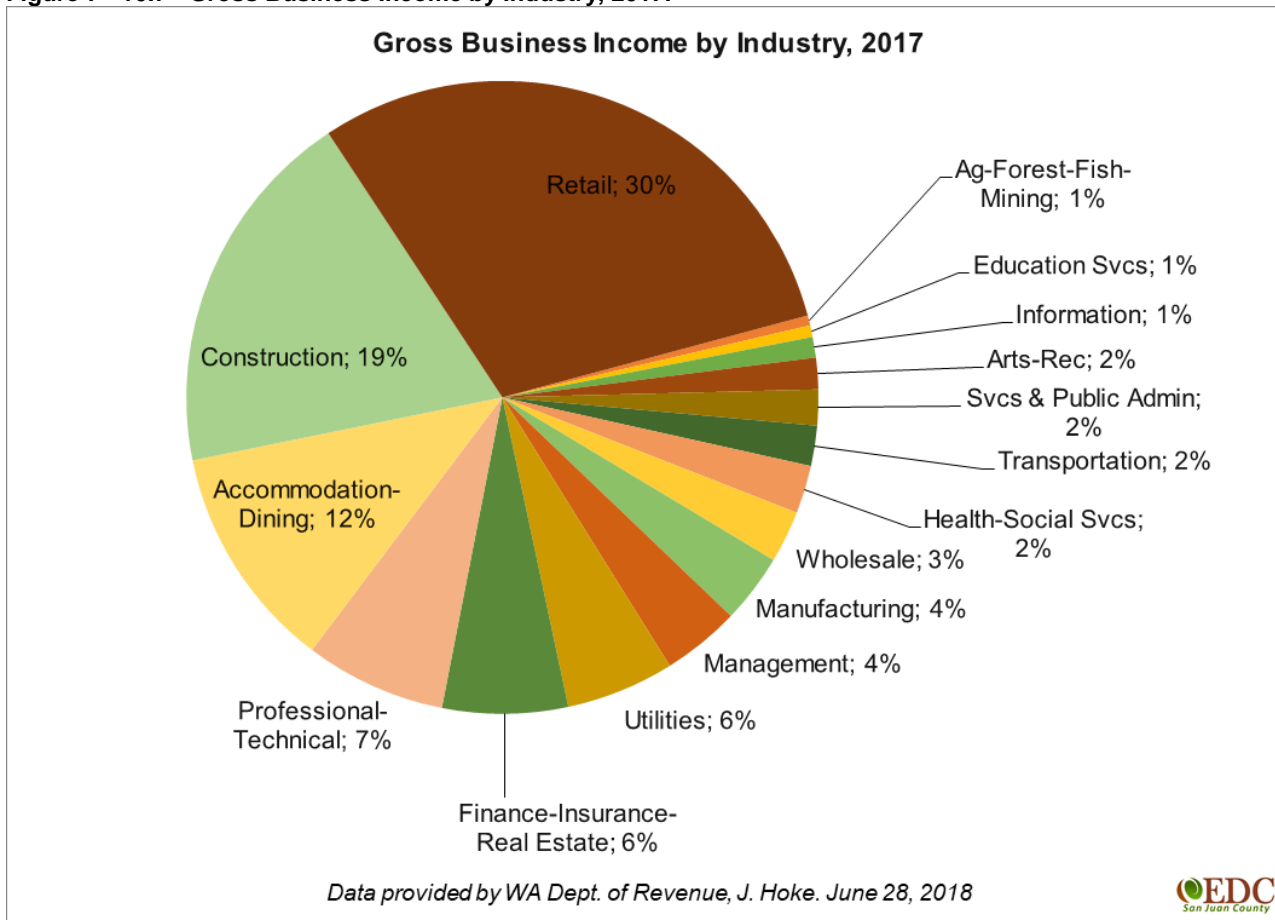
Last updated: November 16, 2017 -- new estimates for 2016; revised estimates for 2010-2015.

1 **Current Industries**

2 *Gross Business Income*

3 The four largest industry sectors in San Juan County represent 68% of total business income in the county, as
4 measured by Department of Revenue reporting (Figure 10.7). Retail represents 30% of the total economy;
5 construction, 19%; accommodations/dining, 12%; professional, scientific, and technical services, 7%. Aggregate
6 gross business income for all reporting businesses in San Juan County was \$744,812,830 in the year 2017.

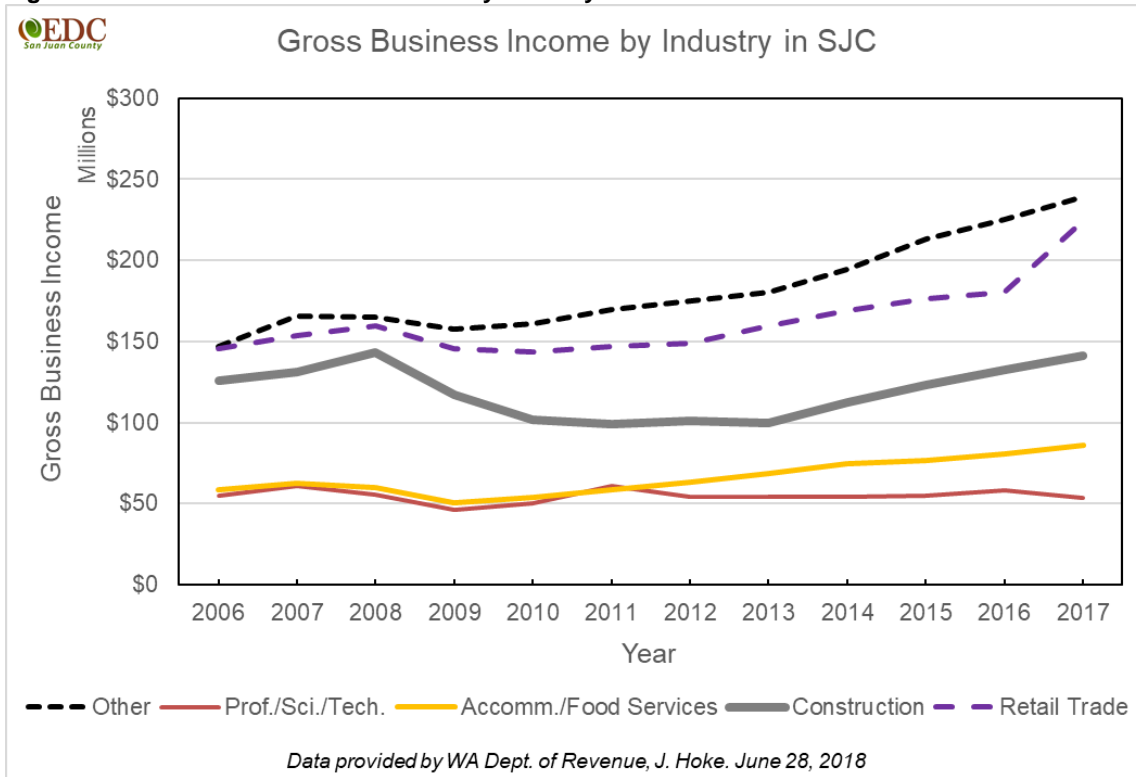
7 **Figure 7 - 10.7 - Gross Business Income by Industry, 2017.**



8

9 Over the past 10 years, industries have changed somewhat but the four mainstays (retail, construction,
10 accommodations/dining, and professional-scientific-technical services) have remained dominant in terms of gross
11 business income (Figure 10.8). Construction fell more sharply than other major industries during the 2008
12 recession, and lagged other industries in recovery, only catching up to pre-2008 levels in 2017. The professional,
13 scientific, and technical services sector has been stagnant since 2006, although it did not decline as sharply as
14 construction did after 2008.

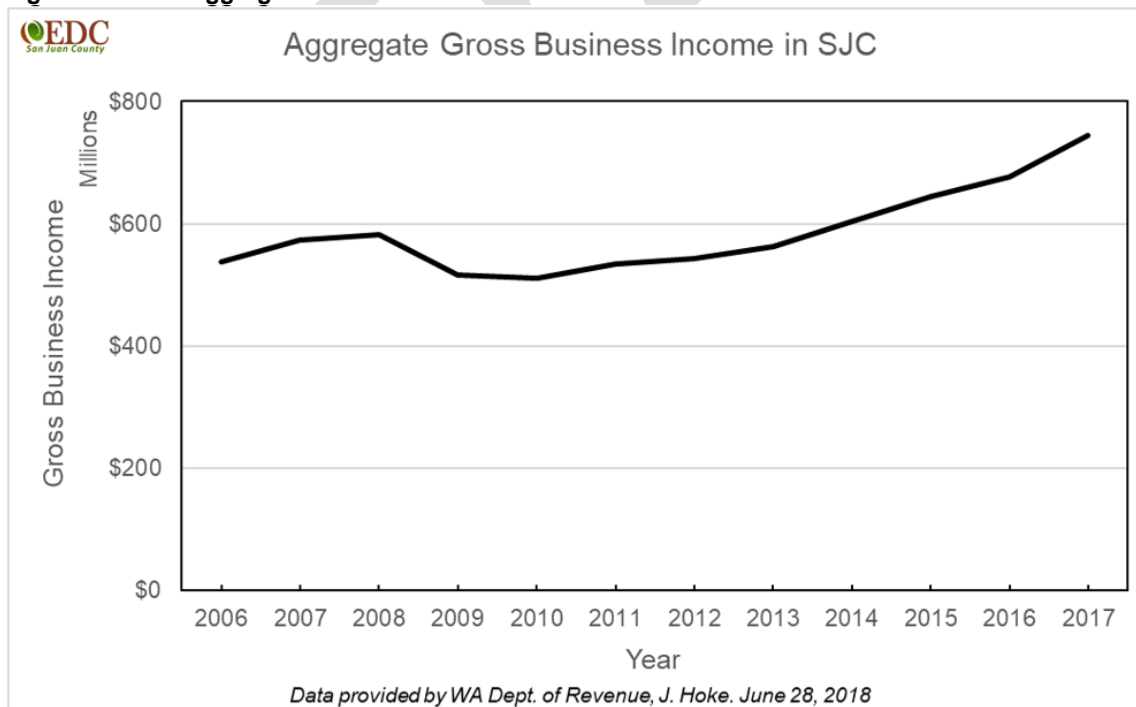
1 **Figure 8 - 10.8 - Gross Business Income by Industry in SJC.**



2

3 The following chart (Figure 10.9) shows the aggregate gross business income reported to the Washington State
 4 Department of Revenue by businesses in the county, for the years between and including 2006 and 2017.

5 **Figure 9 - 10.9 - Aggregate Gross Business Income in SJC.**



6

7 Increasing economic diversity requires strengthening smaller sectors. The following shows how some of these
 8 sectors have changed over the last decade in San Juan County (Figure 10.10) and Washington State (Figure 10.11)
 9 in terms of gross business income. Sectors were picked that a) have relatively high wages (see below, Figure

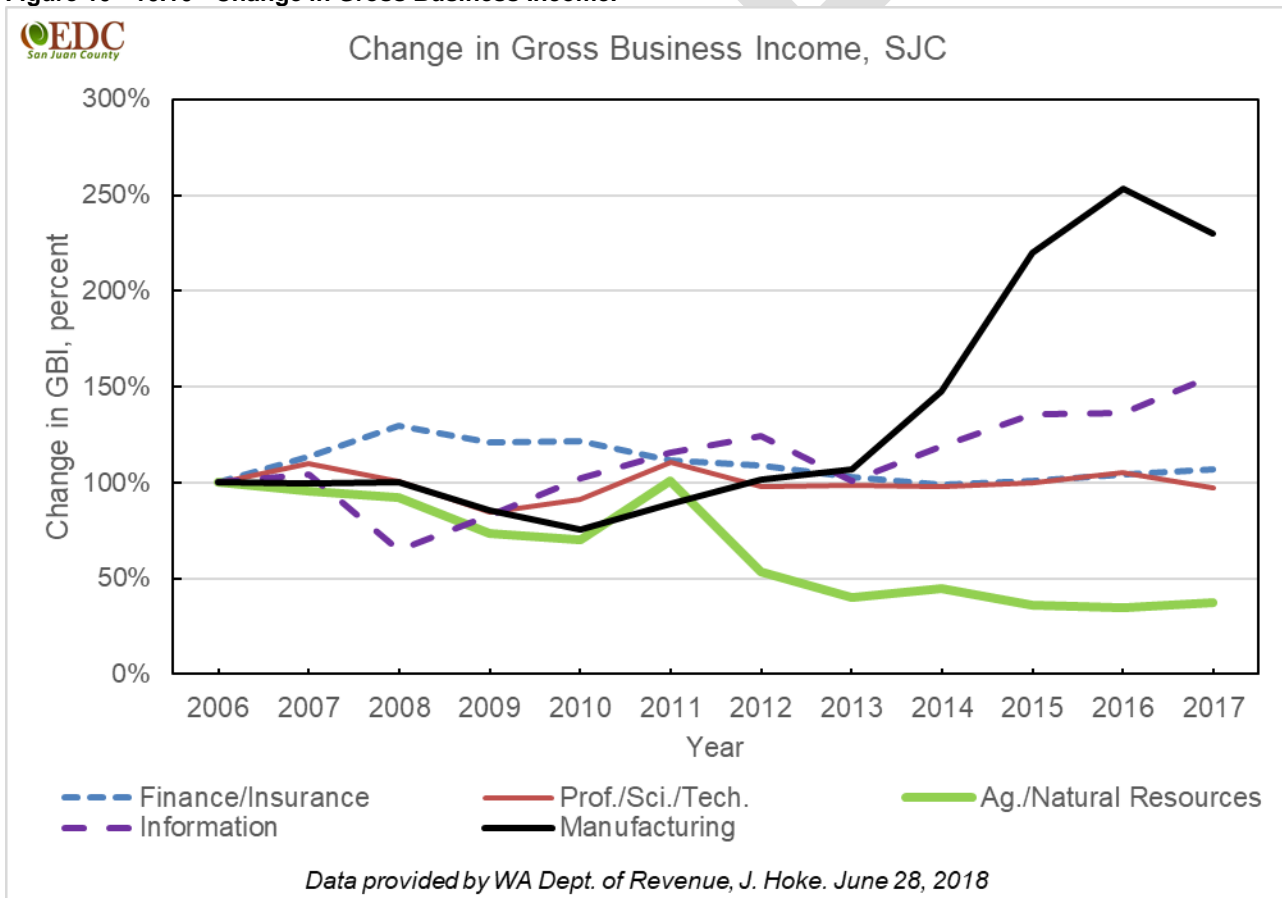
1 10.14), provide exportable products or services, and are not currently dominant (except for professional, scientific,
2 and technical services). Encouraging these sectors would provide both high paying jobs and bring income into the
3 county.

4 San Juan County's agriculture and natural resources sector and professional, scientific, and technical sectors have
5 not kept pace with the corresponding sectors in Washington State. The GBI for the agriculture and natural
6 resources sector has declined dramatically in San Juan County, especially since 2011. The professional, scientific,
7 and technical sector on San Juan County has not enjoyed the boom it experienced in Washington state. It is not
8 clear what local factors have limited these sectors in this county; however, identifying and ameliorating those
9 factors could diversify the economy and bring high-wage jobs and revenue to the county.

10 Although the direct monetary value of the agriculture/natural resources sector is small, it may have much larger
11 indirect effects on the economy by maintaining the character that other industries (tourism, retail, construction)
12 depend upon. It also enhances the larger food services sector by providing local food options and benefits
13 prepared food or craft sellers at farmers markets. This does not include benefits to residents' nutrition (including
14 proprietors' and workers'). Therefore, supporting agriculture and identifying and ameliorating the causes of its
15 steep decline, could both diversify local industry and support other major industries.

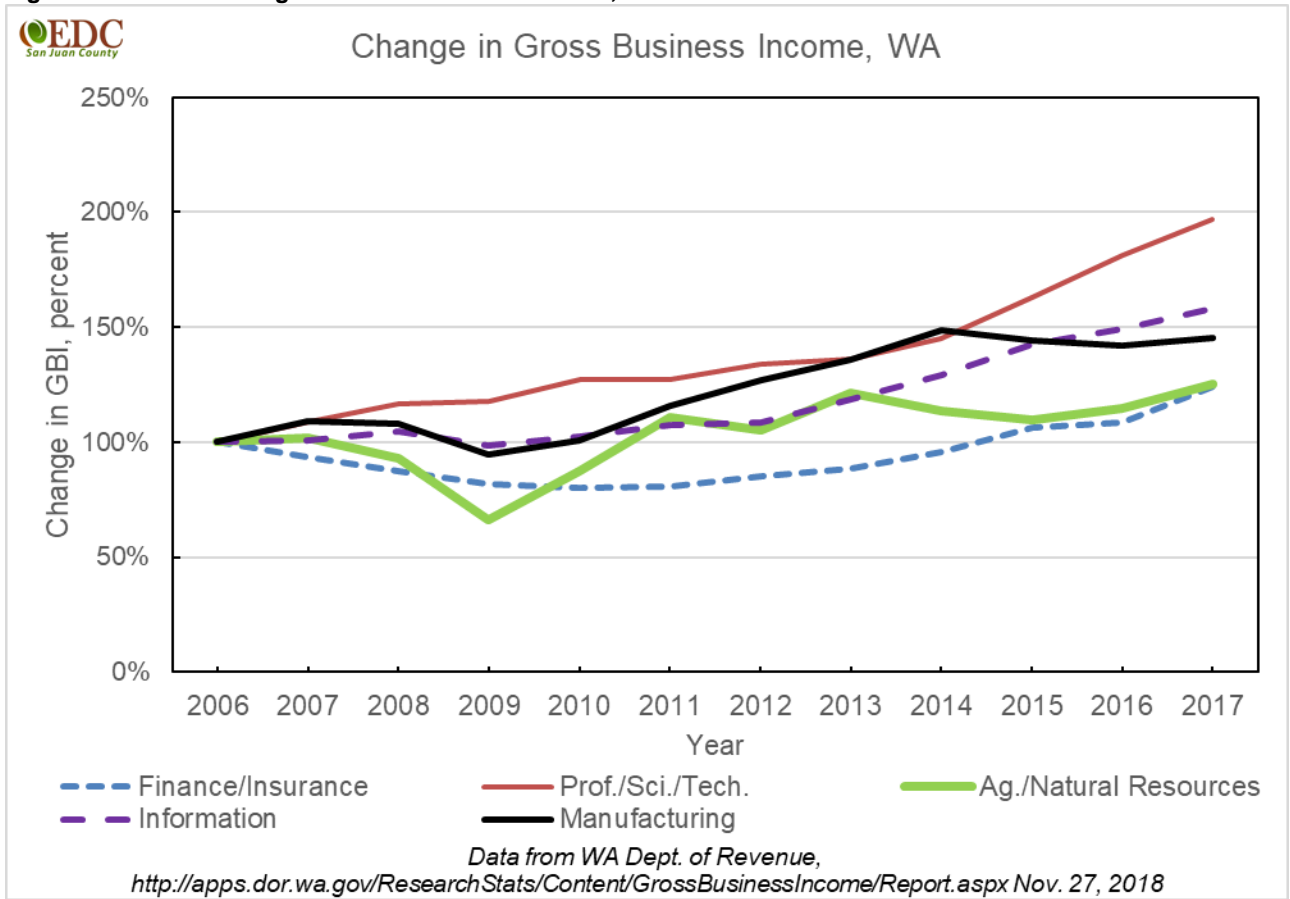
16 In contrast, manufacturing has done surprisingly well on the islands in comparison to the rest of the state.
17 However, the variation over time is large, so this may be a transient fluctuation.

18 **Figure 10 - 10.10 - Change in Gross Business Income.**



19

1 **Figure 11 - 10.11 - Change in Gross Business Income, WA.**



2

3

4 **Earnings**

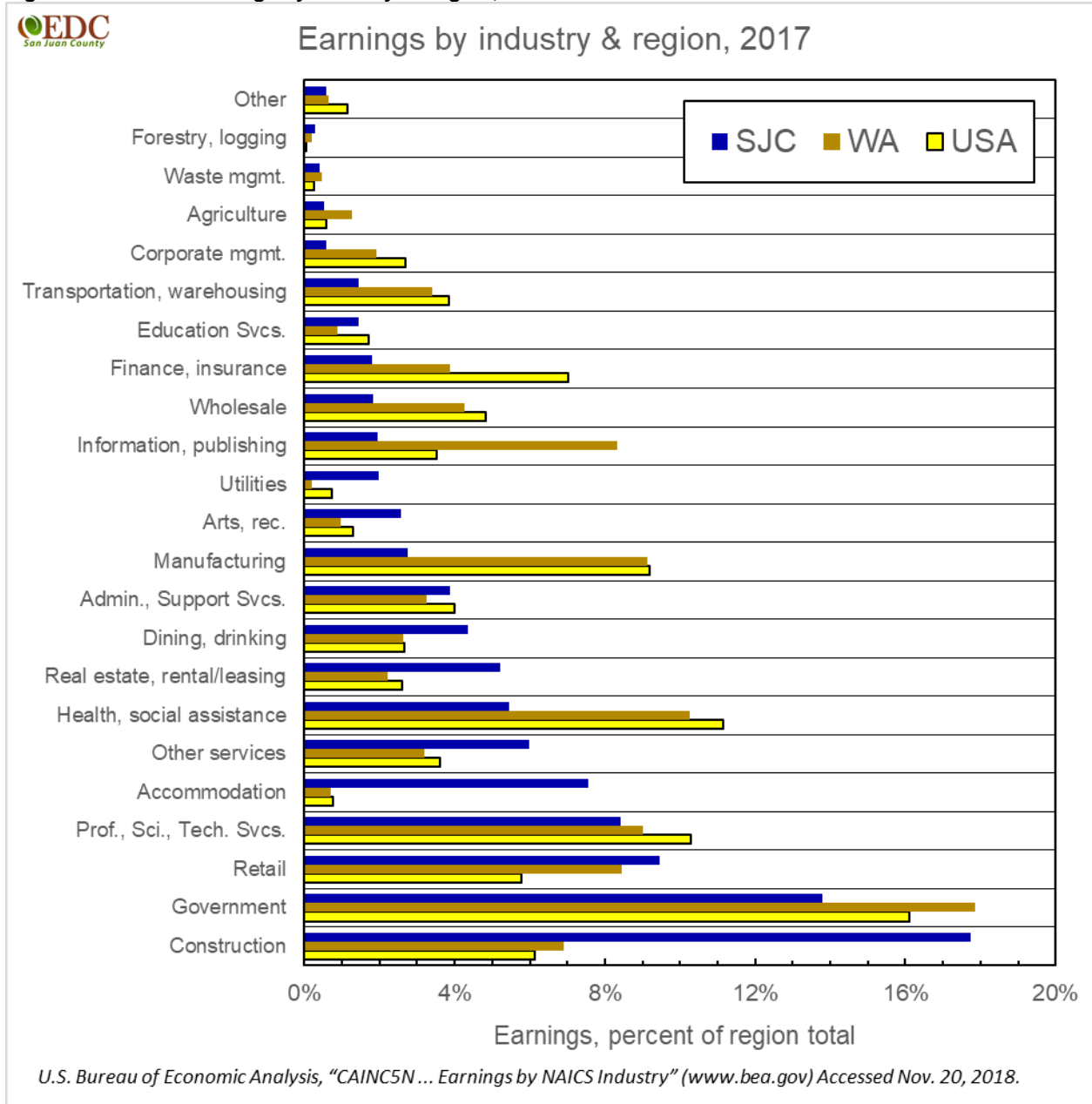
5 The aggregate of workers’ and proprietors’ earnings for all sectors provides a measure of how much each industry
 6 contributes to community vitality because it includes both private and public sector jobs and because it excludes
 7 shares of corporate income that do not go directly to people. Bureau of Economic Analysis (BEA) provides earnings
 8 data by industry, based on what is reported by businesses to agencies like the IRS. The BEA defines earnings as
 9 “the sum of three components of personal income--wages and salaries, supplements to wages and salaries, and
 10 proprietors' income.”

11 Earnings split by industry and region is shown in Figure 10.12. Construction is the largest industry in San Juan
 12 County, comprising a much larger share (18 %) of the economy than in Washington State or the United States as
 13 a whole (6 – 7 %). Combined with the real estate and rental sector (5 %), about 23 % of the economy is directly or
 14 indirectly tied to buying, selling, or developing land. The second largest share in terms of aggregate individuals’
 15 earnings is government at 14%, comparable with the rest of the state and country. The tourism industry is
 16 comprised of the bulk of the accommodation sector, and large portions of dining/drinking, retail, and arts and
 17 recreation sectors, as well as some of the transportation sectors (note that accommodation and food services –
 18 dining and drinking establishments – can be distinguished in this data source). Although the contribution of
 19 tourism to these sectors cannot be separated individually, we can estimate that between 8 and 25% of total
 20 earnings depend directly on tourism. Tourism-dependent sectors and land sales/development-dependent sectors
 21 are notably larger in San Juan County than in the rest of Washington and the USA.

22 It is notable that the county’s manufacturing, information/publishing, wholesale, and finance sectors, are much
 23 smaller in San Juan County than in Washington State or the USA as a whole. These are all high-wage sectors and
 24 could be encouraged in San Juan County. Also notable is the comparative size of accommodations and dining
 25 sectors. Data for the US closely parallels that for Washington state, with the exception of the information category,

1 which is likely higher in Washington because of large software publishers like Microsoft and other publishing and
 2 data processing/hosting businesses.

3 **Figure 12 - 10.12 - Earnings by Industry & Region, 2017.**



4
 5
 6 **Workforce**

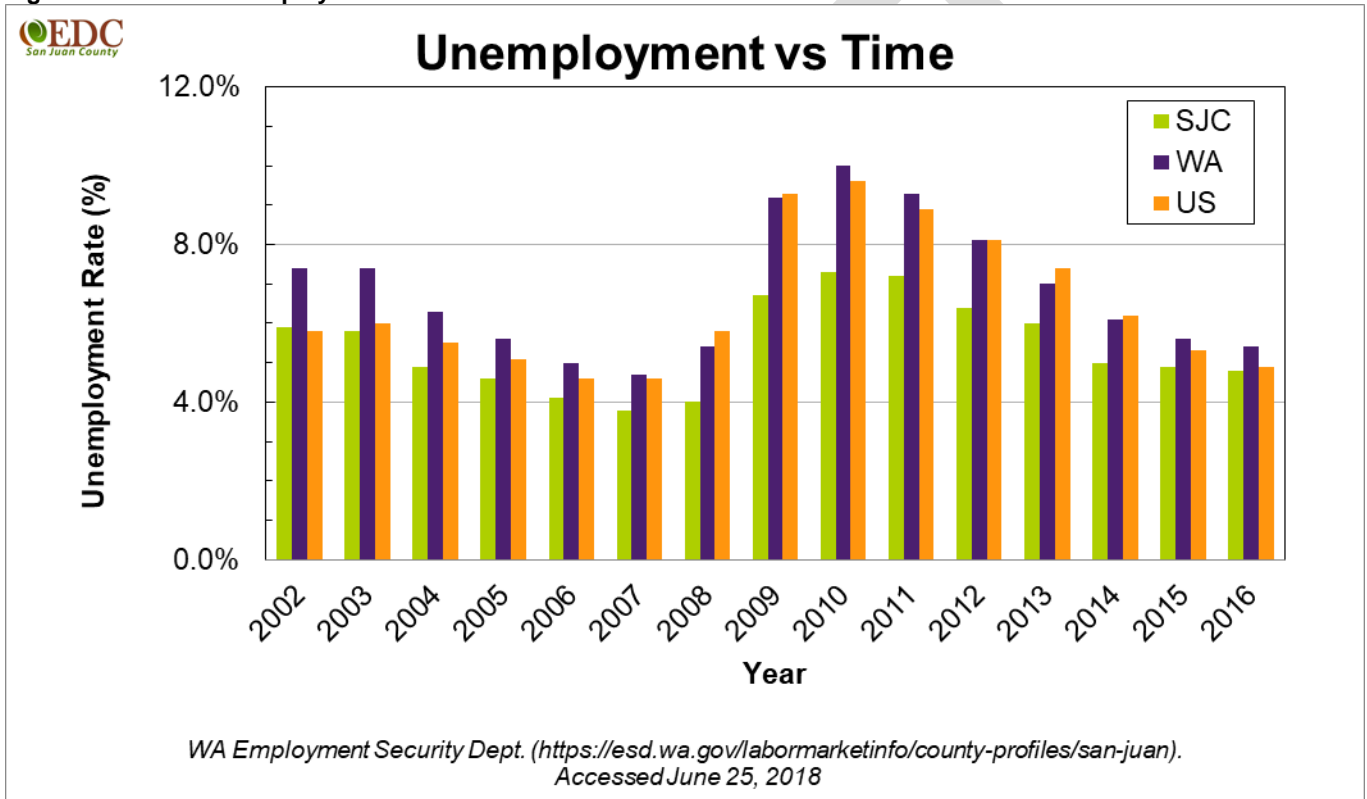
7 San Juan County's unemployment rate tends to be annually lower than the national average, but has a regular
 8 seasonal fluctuation resulting primarily from the seasonal workforce needs of the tourism and construction
 9 industry segments. San Juan County has some "commuter" element to its workforce, primarily provided by
 10 selective employers who fly/ferry workers into the county for specific project related work, and residents who
 11 telecommute for mainland companies. It is estimated that about 6 percent of 2016 earnings by residents of comes
 12 from out of the county³⁰.

³⁰ WA Employment Security Department, San Juan County Data tables accessed November 2018
 N:\LAND USE\LONG RANGE PROJECTS\PCOMPL-17-0001 Comp_Plan\Public Record\Eco Dev\Current Draft\2019-09-04_Eco_Dev_Element_PC_Changes_VC_MVD.docx
 Economic Development Element

1 Unemployment (Figure 10.13): The following chart (Figure 10.13) shows a comparison between San Juan County
 2 unemployment rates and the rest of the US. San Juan County tends to have slightly lower unemployment than the
 3 rest of the US as an annual average. Unemployment in San Juan County falls substantially in the summer but
 4 increases in the winter³¹.

5 The majority of the County’s top sectors are seasonal industries: construction, tourism, and related support
 6 industries. Along with seasonal employment come challenges like an increased need for social services for
 7 unemployed, lower-wage employees during the off-season months, shortened ferry services, and the closure of
 8 retail establishments and other services like bus and transportation services. Finally, some companies (e.g., the
 9 major resorts) import seasonal workers from international sources, such as South America, the Philippines, and
 10 Eastern Europe. Another source of seasonal workers are retired seniors and high school students and returning
 11 college students working during their summer breaks.

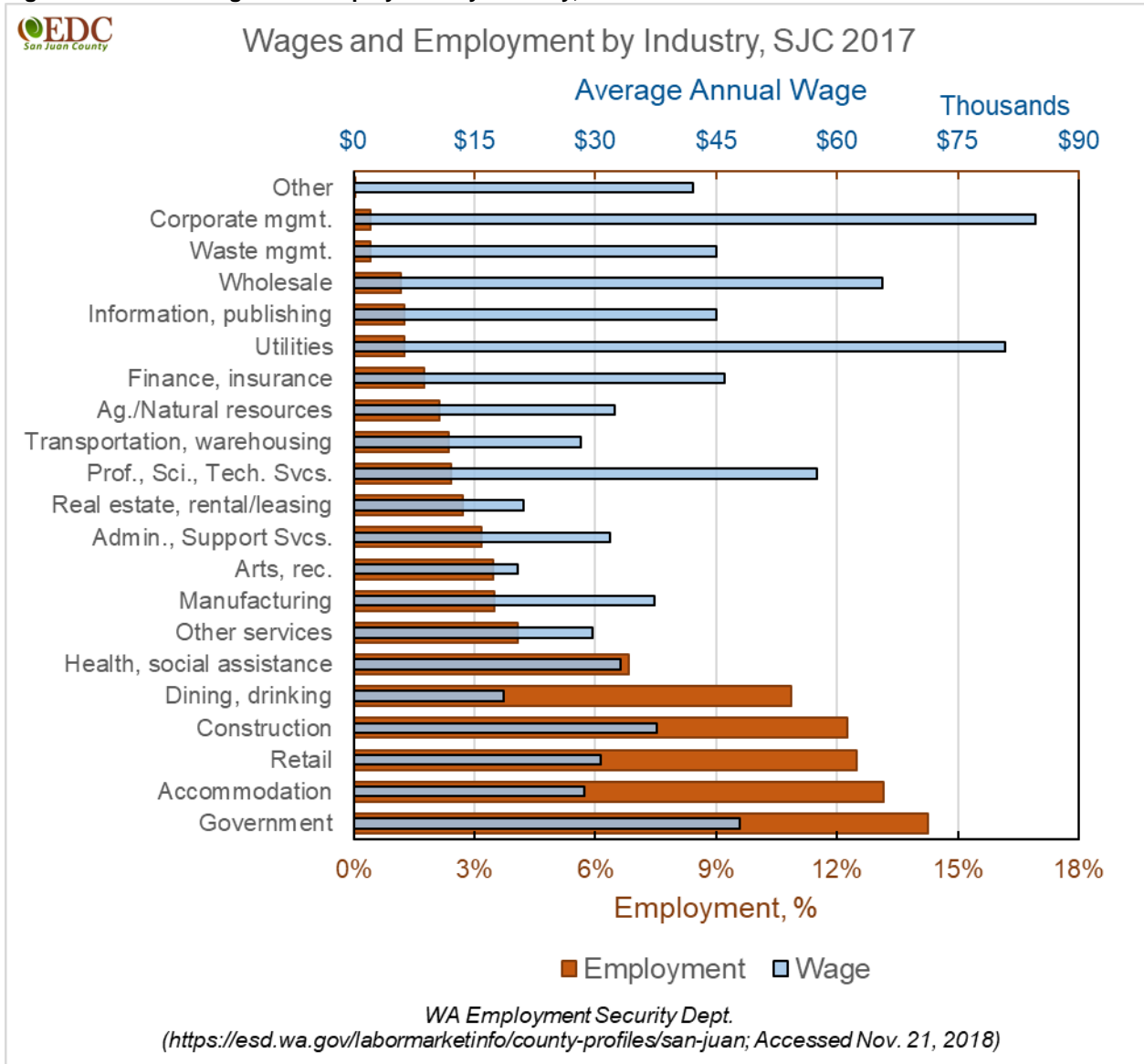
12 **Figure 13 - 10.13 - Unemployment vs Time.**



13
 14 The chart on the next page (Figure 10.14) shows the percentage of workers employed in various industry sectors
 15 in San Juan County, and average annual wages by industry. Data comes from 2017 employer tax reports from the
 16 Washington Employment Security Department. Note that these data are for jobs covered by Washington State
 17 Unemployment Insurance; exemptions include self-employed, contractors, real estate agents, etc.

³¹ Ibid.

1 **Figure 14 - 10.14 - Wages and Employment by Industry, SJC 2017.**



2
 3 As mentioned before, annual wage income is distinctly lower in San Juan County than other counties (Figure
 4 10.154), particularly urban counties, partly because the region’s major industries tend to provide low-wage jobs
 5 (Figure 10.14).

6 Based on Bureau of Economic Analysis data (Table 10-2, CAEMP25N; <https://apps.bea.gov> accessed Nov. 2018), 8
 7 % of San Juan County jobs come from the public service sector – county, town and federal government, port,
 8 fire/sheriff department, and school employees. The total number of jobs in San Juan County in 2017 was 11,464,
 9 with wage/salary jobs at 6,414 and proprietors at 5,050. These data include both full and part time jobs, as well
 10 as jobs not covered by unemployment insurance (and therefore not counted in the Employment Security Dept.
 11 data of Figure 10.13).

12 With nearly 5,000 business licenses – approximately 2300 of them actively reporting some income annually³² –
 13 San Juan County has a high rate of entrepreneurship relative to other counties in Washington State. Most
 14 employees in San Juan County are employees of private businesses (48.7 ± 1.8 %), compared to non-profits (8.9 ±

³² Number of business licenses from WA Secretary of State business license search (ccfs.sos.wa.gov; accessed Dec. 12, 2018; number reporting income from WA Dept. of Revenue Gross Business Income data, courtesy of J. Hoke, June. 2018.

1 1.1 %) or government (14.0 %), but almost a third (28 ± 1.7 %) are self-employed³³. The proportion of self-
2 employed for San Juan County is almost 3 times greater than for the Washington State as a whole (Figure 10.16⁵).

3 **Figure 15 - 10.15 - Self-Employment by Region**



4
5
6

Resource Lands

7 The Economic Analysis of Resource Lands³⁴ examined land use and designation for agriculture, forestry, and
8 mining. This analysis identified 15,700 acres of agricultural land, 18,900 acres of forest resource land, and 215
9 acres of mining land. Farm income is often a supplement to other income: the majority of farms showed cash sales
10 of less than \$5,000 in 2012, and 20% had less than \$1,000 (see Economic Analysis of Resource Lands, Exhibit 8).
11 Logging in San Juan County is frequently for salvage operations (e.g. after storms) and mining operations are small
12 and primarily provide sand and gravel for within-county use.

13 Although the study found that agriculture and forestry represented only a small fraction of employment (<3 % for
14 agriculture), they support other economic activities, such as tourism. The vast majority of survey respondents
15 (81% of 189) prioritized preserving agricultural lands highly, while few respondents rated increasing land
16 availability for business (10%) and housing (16%) as high priorities.

17 Forest lands in particular provide valuable ecosystem services, and are valued by residents for contributing to the
18 islands character and beauty. The report points out that “retailers, tour operators, lodging and hospitality

³³ These data are from the Census Bureau’s 2012 – 2016 American Community Survey tables C2407 & C24070 (accessed Dec. 03, 2018, factfinder.census.gov). Note that they pool self-employed workers who are not in an incorporated business with unpaid family workers (total 17.9 ± 1.4 %); however, the geographic pattern for people who are self-employed in their own incorporated business (10.5 ± 1.1 % in SJC) is almost identical.

³⁴ Community Attributes Inc. 2017. *Economic Analysis of Resource Lands*:
https://www.sanjuanco.com/DocumentCenter/View/14432/2018-1-2_Natural_Resource_Lands_Analysis-?bidId=

1 establishments are all dependent on the preservation of forest lands for their businesses to thrive,” but that these
 2 non-extractive economic benefits have not been quantified.

3 **10.4.E Community Survey**

4 The Department of Community Development conducted a series of community workshops and an online survey
 5 in the fall of 2018 to obtain feedback on the update to the Comprehensive Plan³⁵. To provide an estimate of the
 6 uncertainty of the results³⁶, the tables below³⁷ present 90% confidence intervals for the responses, in addition to
 7 percentages of responses.

8 *Survey Results:*

9 Several questions related to the role of tourism issues in San Juan County; responses suggest concern regarding
 10 increases in visitation and lodging.

11 Respondents for both the workshops and the online survey overwhelmingly favored reducing or eliminating
 12 funding for advertising and marketing from lodging tax funds and preferred to use some or all of the lodging tax
 13 funds to support improvements in tourism infrastructure (Table 10.3). Note that for each of the tables in this
 14 section, results are presented as “observed percentage (lower confidence bound – upper confidence bound)”. The
 15 numbers in parentheses next to “workshop” or “online” show the number of statistical individuals (the number
 16 of islands for the workshops or the number of respondents for the online survey; for the question in Table 10.3
 17 there was only one response recorded at the Waldron workshop – insufficient to calculate a meaningful
 18 percentage – so that workshop was not included for this question). Results of pooling response options are shown
 19 on the right-hand sides of the tables.

20 **Table 3 - 10.3 - How should lodging tax funds be used?**

How should the county use lodging tax funds?				
	Individual Response Options		Pooled Options	
	Workshops (4)	Online (170)	Workshops (4)	Online (170)
Continue to fund tourism advertising and marketing with lodging tax funds.	4% (0% - 12%)	9% (6% - 13%)	4% (0% - 12%)	9% (6% - 13%)
Reduce lodging tax funding for tourism advertising and use some of the funding to improve tourism related infrastructure.	22% (17% - 29%)	43% (37% - 49%)	83% (67% - 94%)	85% (81% - 90%)
Stop advertising the islands and use all funding for tourist related infrastructure improvements.	61% (51% - 69%)	42% (36% - 49%)		
None of the above.	14% (7% - 24%)	5% (2% - 8%)	14% (7% - 24%)	5% (2% - 8%)

21
 22 A majority of respondents in both the workshops and online survey support finding more ways to accommodate
 23 some combination of hotels, resorts, and/or campgrounds (Table 10.4). However, a large majority in the
 24 workshops either responded that no new accommodations were needed or that only additional campgrounds
 25 were needed. Results from the online survey were less clear in this regard.

³⁵ A. Zack (2019). 2018 Community Workshops Report. San Juan County Department of Community Development. (https://www.sanjuanco.com/DocumentCenter/View/18020/2019-01-31_DCD_Zack_Wksp_Rep_PC_02-15-2019?bidId=)

³⁶ See subsection on “Statistical Considerations” below.

³⁷ Data for Tables 10.3-10.8 come from the 2018 Community Workshop Report.

1 **Table 4 – 10.4 - Should the County find more ways to accommodate hotels, resorts, and/or campgrounds?**

Should the county find more ways to accommodate hotels, resorts, and/or campgrounds?				
	Individual Response Options		Pooled Options	
	Workshops (5)	Online (168)	Workshops (5)	Online (168)
Additional hotels/resorts and campgrounds are not needed.	34% (20% - 49%)	32% (26% - 38%)	74% (64% - 83%) 26% (17% - 36%)	54% (48% - 60%) 46% (40% - 52%)
Only hotels/resorts.	4% (2% - 10%)	7% (3% - 10%)		
Only campgrounds.	40% (25% - 56%)	22% (17% - 27%)		
Hotels/resorts and campgrounds.	22% (14% - 33%)	39% (33% - 45%)		

2

3 For both the workshops and the online survey, a large majority preferred some form of additional regulation for
4 vacation rentals, although respondents were split on what form such regulations should take (Table 10.5).

5 **Table 5 - 10.5 - Vacation Rental Regulation Poll**

Given that vacation rentals provide both positive and negative outcomes, is additional regulation needed?				
	Individual Response Options		Pooled Options	
	Workshops (5)	Online (167)	Workshops (5)	Online (167)
Maintain existing regulations for vacation rentals.	21% (8% - 37%)	28% (22% - 34%)	21% (8% - 37%)	28% (22% - 34%)
Require the approval of a homeowners association if responsible for shared road or water system.	10% (4% - 19%)	19% (14% - 24%)	79% (63% - 92%)	72% (66% - 78%)
Limit the number of vacation rentals by lottery.	45% (32% - 59%)	35% (29% - 41%)		
Limit the number of permits allowed per owner.	24% (16% - 35%)	17% (13% - 22%)		

6

7 In both the workshops and online surveys, over two thirds of respondents preferred maintaining airport runways
8 at their current size despite the increase in the number of flights for this option (Table 10.6). Note that no
9 responses were recorded from the workshop on Shaw.

10 **Table 6 - 10.6 - Individual Response Options – Airport Runway Infrastructure.**

Given two options facing the county, which of the following do you prefer?		
	Individual Response Options	
	Workshops (4)	Online (166)
Growth of airport runways to allow for larger planes, resulting in fewer trips per day made by larger planes.	12% (3% - 31%)	30% (24% - 36%)
Maintain airport runways to limit the size of planes, resulting in an increase of the number of trips.	88% (69% - 97%)	70% (64% - 76%)

11

1 In both the workshops and online surveys, a clear majority of respondents supported San Juan County’s
 2 participation – either as a lead or in a supporting role – in training entrepreneurs and workers rather than focusing
 3 on industries the county already has (Table 10.7).

4 **Table 7 - 10.7 - County Role in Industry Development.**

What role should the county take in developing other industries besides tourism?				
	Individual Response Options		Pooled Options	
	Workshops (5)	Online (161)	Workshops (5)	Online (161)
The county should continue to focus on the industries it already has - primarily tourism.	14% (8% - 24%)	16% (11% - 20%)	14% (8% - 24%)	16% (11% - 20%)
The county should have a supporting role for existing agencies and non-profits by creating new programs to train entrepreneurs and workers.	59% (47% - 70%)	42% (36% - 49%)	} 86% (76% - 92%)	84% (80% - 89%)
The county should take the lead on growing more varied industries here, by creating new programs to train entrepreneurs and workers.	27% (18% - 38%)	42% (36% - 49%)		

5
 6 Both visitors and new residents put a strain on water resources. A majority of participants expressed willingness
 7 to participate in a voluntary well monitoring program, although the support for this is not as clear for the online
 8 survey (Table 10.8).

9 **Table 8 - 10.8 - Voluntary Private Well Monitoring.**

Would you participate in a voluntary private well monitoring program?		
	Individual Response Options	
	Workshops (5)	Online (162)
Yes	74% (69% - 76%)	57% (51% - 64%)
No	26% (24% - 31%)	43% (36% - 49%)

10
 11 **Statistical considerations:**

12 Confidence intervals provide information about uncertainty due to sample size limitations; however, they do not
 13 account for biases. We must expect biases in participation based on which segments of the population read the
 14 media outlets where the workshops and surveys were announced, variation among segments in motivation to
 15 participate, and – most importantly – which segments have time and ability to participate in events such as
 16 workshops or long surveys. Although all of these factors would affect both the workshops and the online surveys,
 17 we can reasonably expect that the participant pools would have differed between the two formats. Therefore,
 18 similarities in the results of the two formats give us confidence that they represent that fraction of the population
 19 motivated to express their opinions (this does not account for all biases, however).

20 A major complication is that the workshops were designed to “accommodate discussion of the question topics”
 21 and “engage participants in conversation”³⁸, therefore participants within an individual workshop were not
 22 statistically independent. However, the workshops were held on 5 islands (Lopez, Orcas, San Juan, Shaw, and
 23 Waldron); therefore, the pools of participants for each workshop would have been approximately independent of
 24 each other (except for shared presenters).

³⁸ A. Zack (2019). 2018 Community Workshops Report. San Juan County Department of Community Development.
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1 Hence, we can calculate confidence intervals for the percentage of responses by treating each workshop as a
2 single statistical individual. The proportion choosing each response option within each workshop was taken as the
3 data for calculations. Therefore, proportions shown in the tables below are means of the proportions calculated
4 separately for the 5 workshops. These means differ slightly from the proportions one would calculate by blindly
5 pooling all survey responses. Confidence intervals were calculated from the set of proportions calculated
6 separately for the individual workshops³⁹.

7 In contrast, the respondents to the online survey (171 responses) can be treated as statistically independent
8 individuals. Therefore, the proportion choosing each response and the confidence intervals⁴⁰ were calculated from
9 raw counts of individual responses.

10 The participants in the online survey and workshops were asked 16 multiple choice questions, responses to 6 of
11 which are summarized here; the rest of the results are available in the original report. Confidence intervals were
12 calculated independently for each response option and each question: no effort was made to adjust the
13 confidence intervals based on the number of questions or the number or response options. For cases where
14 responses to different options were pooled, different results might have been obtained if the question were asked
15 with the options combined rather than separate

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³⁹ The arcsine transformation was used when combining proportions from the workshops to calculate standard errors and confidence bounds, as described in J.H. Zar (1999) *Biostatistical Analysis*. Prentice-Hall, Inc.

⁴⁰ Calculated as described in W.J. Conover (1999) *Practical Non-parametric Statistics*. John Wiley & Sons

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