

#### Education

B.S. Economics, University of Oregon

B.S. Applied Mathematics, University of Oregon

Years at ECONorthwest: 7

Years in Industry: 7

Areas of Expertise

Data Analysis

Litigation Support

# Ryan Knapp, Technical Manager

Ryan works extensively with applied statistics and uses this in the scope of litigation support, education/social policy, market analyses, and planning and development. He is developing his professional report writing skills to effectively communicate economic data to decision makers.

#### REPRESENTATIVE PROJECTS

Ryan has served as Technical Manager on the following projects, unless otherwise noted:

- New Mexico Oil & Gas—Permian Basin, NM (2019—Ongoing) Senior Research Analyst. Researching and analyzing revenue disparities earned from royalty rates on BLM oil and gas leases versus New Mexico oil and gas leases.
- Report on Post-Recession Rebuilding—Portland, OR (2021). ECONorthwest provided Prosper Portland with an economic analysis and report on recession recovery, "Rebuilding Portland: The Role for Economic Development." The report explores the economic effects of the pandemic, with a focus on business and labor perspective, strategy for traded sector, and comparisons to other cities/regions. ECONorthwest presented to the Economic Recovery Task Force, including the Mayor and the Portland City Council.
- Portland Business Analysis Annual Value of Jobs Update—
   Portland, OR (2019) Senior Research Analyst. Updated annual
   Portland economic conditions analysis.

### **Urban Planning and Redevelopment**

- McMinnville Economic Opportunities Analysis—McMinnville, OR (2019–Ongoing) Senior Research Analyst. Developing a housing needs analysis, a buildable lands inventory, a housing strategy, and updated Comprehensive Plan Housing Element.
- Hood River Industrial Demand Assessment—Hood River, OR
   (2019–Ongoing) Senior Research Analyst. Assisting the Port of
   Hood River with understanding the level of demand for industrial
   development within their region.

- Maupin Housing Needs Analysis—Maupin,OR (2021) Senior Research Analyst. The City of Maupin has not evaluated its housing needs in more than three decades. While residential development in Maupin has been relatively slow over time, several recent developments are increasing growth pressure in the city. Maupin was recently serviced with high speed internet, which made it easier to attract people who want to live in rural Central Oregon but work from elsewhere. The city started to see some growth from people relocating and working from Maupin and the COVID-19 pandemic sped up that process. ECONorthwest worked with Maupin to complete a housing needs analysis and developed policies to address Maupin's growing housing needs, especially identifying options for extending infrastructure to unserved residential land to support future development.
- Summer Town Center Development Feasibility—Summer, WA (2019) Senior Research Analyst. Supported the rewrite of Town Center development code with market and financial feasibility analysis.
- Lake County Fairgrounds Assessment Lake County, OR (2019) Senior Research Analyst.
   Assisted Lake County Fairgrounds staff with a market assessment of their fairground facilities and their regional competitiveness.
- Klamath County Fairgrounds Assessment—Klamath County, OR (2019) Senior Research Analyst. Assisted Klamath County Fairgrounds staff with a market assessment of their fairground facilities and their regional competitiveness.
- Troutdale Housing Needs Analysis Troutdale, OR (2019) Senior Research Analyst. Worked with Roseburg to develop a housing needs analysis.
- Roseburg Housing Needs Analysis Roseburg, OR (2019) Senior Research Analyst.
   Worked with Roseburg to develop a housing needs analysis.
- Lakeview Housing Needs Analysis Lakeview, OR (2019) Senior Research Analyst.
   Worked with Lakeview to develop a housing needs analysis.
- Hillside Master Plan for Housing Opportunities—Oregon City, OR (2019) Senior Research Analyst. Provided analytic support (market analysis; regional input-output modeling) for the Hillside Master Plan.
- Grants Pass Area Wide Brownfields Plan—Grants Pass, OR (2018–Ongoing) Senior Research Analyst. Providing market analysis and redevelopment strategies for an employment subarea of the City of Grants Pass.
- Clackamas County Housing Needs Analysis—Clackamas County, OR (2018–Ongoing)
   Senior Research Analyst. Developing housing needs analysis for 11 jurisdictions in Clackamas County, plus the unincorporated areas of the county.
- Harney County Economic Opportunities Analysis—Harney County, OR (2019) Senior Research Analyst. Worked with the cities and county to develop a regional economic opportunities analysis for Harney County.
- Lake County Economic Opportunities Analysis—Lake County, OR (2019) Senior Research Analyst. Worked with the cities and county to develop a regional economic opportunities analysis for Lake County.

- Wheeler County Economic Opportunities Analysis—Wheeler County, OR (2019) Senior Research Analyst. Worked with the cities and county to develop a regional economic opportunities analysis for Harney County.
- City of Maupin Economic Opportunities Analysis—Maupin, OR (2019) Senior Research
   Analyst. Worked with the city to develop a regional economic opportunities analysis for the
   City of Maupin.
- Oregon Early Childhood Investments—Oregon (2018–Ongoing) Senior Research Analyst. Characterizing participation in public programs for children aged 0-5 and estimating the cost of possible program expansions for the Children's Institute and Oregon Community Foundation.
- Creswell Land Needs Analysis—Creswell, OR (2018–Ongoing) Senior Research Analyst. Working on the Economic Opportunities Analysis portion to help produce Creswell's Land Needs Analysis. Involves data analysis, chart generation, and technical writing of demographics trends.
- Oregon State Housing Plan Statewide, OR (2018–Ongoing) Senior Research Analyst. Working with the Oregon Housing and Community Services Department to develop a State Housing Plan that would guide policies and implementation of affordable housing programs. Majority of work involves PUMS data analysis, chart generation, and some technical writing of the results.
- Clackamas County Fairground Master Plan—Clackamas County, OR (2018) Senior Research Analyst. Assisted with the update of Clackamas County Fairground's Master Plan, which included demographic data analysis, research of local fairgrounds, and tourism trends.
- Lincoln County Commons Master Plan—Lincoln County, OR (2018) Senior Research
   Analyst. Helped develop a master plan for the Lincoln County Commons. Conducted
   demographic analysis and researched other nearby fairgrounds.
- Sherwood Economic Opportunities Analysis—Sherwood, OR (2018) Senior Research
  Analyst. Assisted the City of Sherwood to develop an economic opportunities analysis,
  which included demographic analysis, tourism trend analysis, and technical writing.
- Cottage Grove Housing Needs Analysis Cottage Grove, OR (2017–2018) Senior Research
   Analyst. Assisted with the report write-up for housing needs analysis for Cottage Grove
   and conducting data analysis and chart generation.
- Skokomish Indian Tribe Housing Strategy—Skokomish, WA (2017) Senior Research Analyst. Analyzed a survey of housing demand and housing conditions for Skokomish Indian Tribal members living on the reservation. Helped develop a housing strategy to address tribal housing needs.
- Tillamook Fairgrounds Strategic Plan—Tillamook, OR (2017) Senior Research Analyst. Helped develop a market and feasibility assessment to assist the Tillamook Fair Board in understanding the options for renovation and replacement of existing buildings and facilities based on potential future uses at the Fairgrounds.

- Industrial Area Framework Plan—Milwaukie, OR (2017) Senior Research Analyst. Worked on the development feasibility phase of the North Milwaukie Industrial Area (NMIA) framework plan. The results of the analysis grounded the framework plan to promote new development, as well as the associated funding strategy that will be used to support existing area businesses.
- Maryland Parkway Brownfield Assessment—Stantec and Clark Counties (2017) Senior Research Analyst. Worked with Stantec and Clark County on developing a methodology for selecting and prioritizing sites for brownfield assessments, using EPA funds.
- Albany Schools Feasibility Study—Albany, OR (2016) Senior Research Analyst. Performed a market feasibility study for construction of a new gymnasium or auditorium in Albany. Researched Oregon and Washington schools with school population demographics comparable to Albany schools.
- Columbia County Housing Affordability—Columbia County, OR (2016) Senior Research Analyst. Analyzed housing characteristics in Columbia County and cities within the County using Census data and Redfin. Contributed charts and commentary to the final memorandum.
- North Milwaukie Market Study—Milwaukie, OR (2016) Senior Research Analyst. Completed census block group data analysis for an industrial opportunity site in Milwaukie. Conducted demographic and housing market analysis.
- Private Developer Market Study—Various Counties, WA (2016) Senior Research Analyst. Analyzed U.S. Census Bureau data to create demographic profiles for northern Oregon and Southern Washington counties and cities. Used Redfin and other housing databases to create home price estimates for living communities comparable to our client's housing development.
- Skagit County Housing Inventory—Skagit County, WA (2016) Senior Research Analyst. Used Redfin to determine median single-family home values in Skagit County. Calculated household income needed to afford two-bedroom households in Skagit County and cities within the County.
- Talent Economic Opportunities Analysis Talent, OR (2016) Senior Research Analyst. Analyzed Census data for the City of Talent and comparable geographies in Oregon. Wrote sections of the final report and contributed charts and data.
- Jacksonville Housing Needs Analysis and Economic Opportunities Analysis Jacksonville, OR (2016) Senior Research Analyst. Collected Census data for the City of Jacksonville, Jackson County, and comparable geographies in Oregon. Created charts, analyzed data, and wrote paragraphs for final report.

### **Market Analysis**

■ Treasure Valley Reload Facility Market Analysis — Portland, OR (2019) Senior Research Analyst. Conducted a market analysis of a proposed reload facility in the Treasure Valley of Eastern Oregon (Nyssa).

- Market Analysis of Mid-Willamette Valley—Portland and Malheur County, OR (2019)
   Senior Research Analyst. Conducted a market analysis of a proposed intermodal facility in the Mid-Willamette Valley.
- Gunnison Rising Market Analysis—Gunnison, CO (2018) Senior Research Analyst. Conducted market analysis of a proposed master planned community to be located in Gunnison, Colorado. Gathered and analyzed demographic and market rent data; wrote results in a technical report.
- Vancouver The Heights Subarea Plan Vancouver, WA (2018–Ongoing) Senior Research Analyst. Assisting the City of Vancouver with The Heights Subarea plan. Working on the market analysis portion with data analysis and technical writing to provide input for redevelopment planning.
- College Place Market Analysis College Place, WA (2018) Senior Research Analyst.
   Supported a market analysis for CERB grant. Collected and analyzed demographic data via chart generation; wrote findings in a technical report.
- Port Townsend Gateway Subarea Plan—Port Townsend, WA (2018) Senior Research Analyst. Helped create an updated subarea plan for the Gateway study area, including updated development standards. Wrote results in technical memo; supported with data analysis and chart generation.
- St. Helens Predevelopment Services On-Call—St. Helens, OR (2018) Senior Research Analyst. Provided ongoing services to Tokola Properties and the St. Helens Urban Renewal Agency to support redevelopment on the waterfront. Wrote results for an apartment market analysis.
- Terteling Ranch Market Analysis Boise, ID (2018) Senior Research Analyst. Produced a market analysis that characterizes unit mix, absorption, and pricing for development of a 1,500-acre property for a private property owner in Boise.
- Oregon Recovery High School Feasibility Study—Portland, OR (2018) Senior Research Analyst. Developed a feasibility/market analysis for Oregon Recovery High School Initiative, a non-profit that plans to run a charter high school for students affected by substance use disorders.
- COAR Quarterly Real Estate Analysis Various Cities, OR (2017–Ongoing) Senior Research Analyst. Producing quarterly real estate market trend report for Deschutes, Jefferson, and Crook counties and submarkets for Central Oregon Association of Realtors (COAR).
- Eugene Airport Master Plan Eugene, OR (2017) Senior Research Analyst. Contributed to a market analysis for the Eugene Airport Master Plan update, which focused on identifying private industrial business development opportunities to locate at the Airport. Also interviewed economic development stakeholders and businesses in the Eugene-Springfield area of the type that might consider locating at the Airport to identify opportunities and barriers to industrial development at the Airport.

Sundoon Market Study—Klickitat County, WA (2016) Senior Research Analyst. Conducted a market analysis regarding the demand for housing in a proposed development in Dallesport. Wrote findings in a technical report and provided support with demographic data analysis and chart generation.

# Forecasting and Modeling

- Portland Parks Revenue Model—Portland, OR (2016) Senior Research Analyst. Generated a revenue model for Portland Parks. Compiled pro formas and financial data for golf courses, karting tracks, and sports complexes comparable to existing Portland Park facilities.
- Annual TriMet Revenue Forecast—Portland, OR (2014–Ongoing) Senior Research
   Analyst. Collect and update economic data for ECONorthwest's forecast model of TriMet's
   revenue. Write up results and employ quarterly updates to compare forecasted values to
   actuals.
- Toll Optimization Model (TOM) Output File Testing—Various (2014) Senior Research Analyst. Gathered and cleaned data to test various output files generated by ECONorthwest's Toll Optimization Model.

## **Impact Analyses**

- Chetco Fire Impact Analysis Coos Bay, OR (2019) Senior Research Analyst. Assessed the
  economic impact of the Chetco Fire on regional communities via effects on timber, fisheries,
  tourism, and relocation decisions. Also, investigated funding and recovery strategies.
- BLM Burning Man Environmental Impact Study Analysis—Black Rock Desert, NV (2018)
   Senior Research Analyst. Evaluated the socioeconomic impacts of Nevada's Bureau of Land Management's (BLM) proposal to issue a revised Special Recreation Permit for the Burning Man event.
- Economic Impact of Comcast NBCUniversal—Statewide, OR (2017) Senior Research Analyst. Gross economic contributions analysis of Comcast NBC/Universal across Oregon.
- UFA—NMTC Economic Impacts—Portland, OR (2017) Senior Research Analyst. Helped
  United Fund Advisors calculate the direct and secondary jobs for a batch of New Market
  Tax Credit applications across the U.S.
- Hermiston School District Economic Contributions 2017—Eastern OR (2017) Senior Research Analyst. Updated an analysis performed in 2014 on the economic impacts of events held at Hermiston School District.
- TriMet Orange Line Impacts Portland, OR (2016) Senior Research Analyst. Conducted a variety of analyses for TriMet's fiscal impacts to the Portland area using IMPLAN.
- Hood to Coast—Portland, OR (2016) Senior Research Analyst. Evaluated Hood to Coast's
  economic impact to Multnomah County and the state of Oregon. Used data from client plus
  research and analyses conducted for other relays across the nation.
- Oregon Department of Corrections—Salem, OR (2016) Senior Research Analyst. Cleaned and analyzed vendor payment data for IMPLAN analysis.

### **Transportation**

- Peninsula Regional Transportation Planning Organization Economic Analysis Seattle, WA (2019) Senior Research Analyst. Provided socioeconomic and input-output analysis for expansion of a trail system in the WA Peninsula Regional Transportation Plan.
- JTC Transit Funding Study—Olympia, WA (2018–Ongoing) Senior Research Analyst.

  Cataloguing transit vehicle fleets and facilities including park-and-rides, maintenance facilities and transit centers and assessing replacement and expansion needs. Also analyzing and providing recommendations for potential revenue sources to address future capital needs.
- Idaho Statewide Public Transportation Plan—Statewide, ID (2017) Senior Research Analyst. Conducted a financial analysis based on the existing and future transit systems and needs to identify capital and operating funding needs.
- Intermodal Transit Facility Portland, OR (2016) Senior Research Analyst. Researched benefits of intermodal rail transportation to the economy and environment. Wrote memorandum that detailed findings.

### Litigation

- Wrongful Death Case—Portland, OR (2018) Senior Research Analyst. Conducted research and provided analysis for defendant for a work-related death.
- Medical Malpractice Case—Portland, OR (2018) Senior Research Analyst. Provided economic analysis for the defendant in a case of alleged medical malpractice.
- Lease Dispute—Portland, OR (2017) Senior Research Analyst. Conducted analysis in a dispute involving a commercial property lease.
- Discrimination Case—Portland, OR (2017) Senior Research Analyst. Conducted economic analysis of future streams of income with and without alleged employment discrimination for worker at trial.
- Organic Compost Case—Various Counties, WA (2016) Senior Research Analyst. Internal audit of final draft report. Reviewed language, arguments, citations, and final numbers in our analysis.
- Yakima Fair Housing—Yakima, WA (2016) Senior Research Analyst. Analyzed homeless service population data in the city of Yakima relative to Yakima's larger population.
- Personal Injury Claim—OR (2016) Senior Research Analyst. Conducted a future wage loss
  analysis. Created multiple scenarios to evaluate lost earnings due to a car crash and
  analyzed post-injury occupations that could bring income to household.
- Personal Injury Claim—Hillsboro, OR (2016) Senior Research Analyst. Conducted lost wage analysis for an accident related to the trucking industry.
- Beach Remediation Case—Gulf of Mexico (2016) Senior Research Analyst. Researched beach remediation projects in the Gulf of Mexico area. Used those project cost estimates to approximate the damage to beach habitat from negligent beach restoration after the Deepwater Horizon oil spill.

Mobile Home Park Case—MI (2015) Senior Research Analyst. Contributed to the analysis
and reporting of a multi-variate regression model detailing loss in profits for a mobile home
park.

#### **Natural Resources**

- Economic Benefits of Reopening Willamette Falls Locks—Clackamas County, OR (2018) Senior Research Analyst. Helped prepare an economic analysis of the benefits of reopening the Willamette Falls Locks. The study compared different operating scenarios against the U.S. Army Corps of Engineers' alternative to permanently decommission the Locks and quantified the benefits associated with commercial and recreational activity, economic development, and historic presentation and cultural value.
- Pew—BLM Quiet Recreation Spending Analysis—Western U.S. (2017) Senior Research Analyst. Calculated quiet recreation spending and economic impacts associated with nonmotorized recreation on BLM lands across the Western United States.
- Seattle Waterfront Green Infrastructure—Seattle, WA (2017) Senior Research Analyst. Identified and quantified the benefits of green stormwater infrastructure and park space as part of the plan for the Central Waterfront with the Alaska Way Viaduct removal.
- Economic Effects of Water Service Disruptions—Portland, OR (2017) Senior Research Analyst. Analyzed how citywide boil water notices affect the Portland Metro economy. Also looked at how rapidly businesses are able to respond to these notices.
- Yakima River Basin Yakima, OR (2016) Senior Research Analyst. Researched recreation and dollars generated for the Yakima River Basin as a result of Yakima's Integrated Water Plan. Also analyzed agricultural exports for the Yakima River Basin.
- Federal Oil/Gas Leasing and Well Reclamation—Western U.S. (2016) Senior Research Analyst. Analyzed historical well permitting and leasing data, compared trends between federal and non-federal lands, and researched liability of orphaned oil and gas wells on BLM lands. Wrote sections of final report.
- San Diego TMDL Bacteria—San Diego, CA (2016) Senior Research Analyst. Collected historical ocean water bacteria level data, beach attendance data, and weather pattern data. Used these to inform client about how wet weather events increase bacteria levels along the San Diego coast.
- Boat Repair Industry—Astoria, OR (2016) Senior Research Analyst. Performed market research for businesses that repair fishing vessels. Analyzed catch share program regulations and recent trends of the fishing industry, as well as competitors in the market and what services they offer. Wrote memorandum of research findings.

# Education, Health, and Social Policy

- Homelessness in Portland—Portland, OR (2018–Ongoing) Senior Research Analyst. Providing a report on homelessness in Portland, comparing Portland to the national context, providing a description of the determinants of homelessness, and discussing policy solutions.
- J.A. & Kathryn Albertson Foundation Idaho At-Risk Report—Boise, ID (2018) Senior Research Analyst. Drafted a report on the state of education in Idaho that will serve as a call to action for Idaho's leaders for the J.A. and Kathryn Albertson Family Foundation.
- Oregon Talent Assessment Statewide, OR (2018) Senior Research Analyst. Produced the Oregon Talent Assessment for 2018-2020 for the Workforce and Talent Development Board. Identified in-demand jobs and skills to focus and prioritize public and private investment in workforce and talent development in Oregon.
- Economic Mobility in Washington County Washington County, OR (2018) Senior Research Analyst. Provided socioeconomic and demographic analyses to support a larger report on Washington County's future. Analyses were organized around recent, seminal research by Dr. Raj Chetty and colleagues that showed that 1980s-era conditions in Washington County had large, positive effects on the earnings of children who grew up there.
- Evaluation of Combined Participation in the Nurse Family Partnership program and the Parent-Child Home Program—Central NJ (2017) Senior Research Analyst. Evaluated the educational attainment impacts of two early-childhood interventions: Nurse Family Partnership and the Parent-Child Home Program.
- Black Student Achievement Research—Statewide, OR (2017) Senior Research Analyst. Analyzed data about African American student achievement/opportunity gaps in Oregon's K-12 system.
- Lumina Postsecondary Attainment Model—Nationwide (2016) Senior Research Analyst. Developed a quantitative scenario model that estimates post-secondary completion outcomes through 2025 to support the Lumina Foundation's strategic planning process.
- "I Have A Dream" Foundation—Portland, OR (2016) Senior Research Analyst. Analyzed survey results. Created summary tables and cross-tabulations to reveal trends in responses.
- Welcoming America—Boise, ID (2016) Senior Research Analyst. Procured data for output measures to compare the City of Boise's performance relative to other cities with comparable demographics. Outcome measures fell into three categories: economic, social, and civic.
- AVID Program Evaluation—Portland, OR (2016) Senior Research Analyst. Analyzed
  preliminary performance data of schools participating in the Advancement Via Individual
  Determination (AVID) College Readiness program. Authored multiple sections of the final
  report.
- Idaho PTECH Network—Statewide, ID (2016) Senior Research Analyst. Conducted a literature review of how postsecondary completion impacts lifetime earnings. Designed a dashboard to show impacts to Idaho PTECH Network students and the larger Idaho economy.

- Health Facility Market Analysis—CA (2016) Senior Research Analyst. Conducted a market analysis for a healthcare facility's relocation in California. Used healthcare administrative data published by California and Census data to evaluate the local supply of healthcare facilities in the area.
- Stand for Children—Statewide, OR (2016) Senior Research Analyst. Completed a rigorous literature review for program effectiveness on Oregon students. Researched career and technical education, dropout prevention, and dual enrollment programs. For each program, analyzed their impacts on graduation rates, postsecondary remedial education costs, postsecondary attainment, and changes to students' income/earnings. Summarized findings in a slide deck.
- New Hampshire Healthcare Transformation—Statewide, NH (2015) Senior Research Analyst. Compiled approximately forty healthcare metrics and created a scorecard to compare New Hampshire's healthcare performance relative to the United States.
- Gates Postsecondary Model and Research—Nationwide (2014–2016) Senior Research Analyst. Literature reviews for evidence linking education interventions to postsecondary success. Helped develop new state-specific postsecondary success scenario model, which projects educational attainment into the near future.
- Disability Benefits Calculator—Various (2014) Senior Research Analyst. Programmed tools for disability benefit calculators to facilitate data analysis and communication with clients.
- Development and Maintenance of Helper Sites—Various (2014) Senior Research Analyst.
   Developed and tested various new health programs modeled for various states on the
   Disability Benefits 101 calculator website.