

PUKAR BHANDARI

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🎓 Education

University of Utah

May 2023

Master of City and Metropolitan Planning

Salt Lake City, UT

- Specialization in land use, transportation, and smart growth with interest in GIS and geospatial data analytics
- **Projects:** Salt Lake City Parking Study; Traffic Impact Study at 2100S/2100E; Built Environment Determinants of Walking and Biking Safety; Accessibility Analysis of Transit Equity; 15-Minute Salt Lake City: Proximity Analysis; Bicycle Sharing Station Suitability Analysis; see website for full portfolio

Tribhuvan University, Institute of Engineering

August 2018

Bachelor's Degree in Architecture

Kathmandu, Nepal

- **Projects:** Earthquake Memorial at Barpak (Thesis), Conservation Masterplan for Historic Nuwakor Palace, Resettlement Plan for Barpak; Cafeteria at IOE, Pulchowk Campus

👛 Experience

Metro Analytics

Jun 2023 – Present

Transportation Planner/Analyst - Full Time

Atlanta, GA

- Conducted research and analysis on transportation decision-making, evaluating economic, social, safety, and equity impacts, and developing innovative planning strategies using performance metrics, safety data, and GIS for high-quality reports and presentations.
- Collaborated with stakeholders, mentored junior staff, and contributed to business development efforts to address complex policy and safety issues, delivering innovative solutions and expanding the firm's consulting portfolio.
- **Projects:**
 - **Benefit-Cost Analysis:** Ohio DOT Cleveland CCG3A Intersection, Missouri DOT STIP 2024-2027 & STIP 2025-2028
 - **Economic Impact Analysis:** Utah's Unified Plan 2023-2050, Utah Transit Authority 2023-2050
 - **Metropolitan Transportation Plans (MTP):** Valdosta-Lowndes MPO 2050 MTP, DARTS 2050 MTP, Bowling Green – Warren County 2050 MTP, Greater Dalton 2050 MTP
 - **Freight Plans:** Stonecrest Freight Cluster Plan, ARTS Regional Freight Plan, TMACOG Freight Profile
 - **Resiliency Plans:** Albany-DARTS Resiliency Plan
 - NCHRP 08-146: Integrating Resiliency into Transportation System Operations

University of Utah, College of Architecture + Planning

Aug 2021 – May 2023

Graduate Teaching Assistant - Part Time

Salt Lake City, UT

- Assisted in teaching undergraduate and graduate courses over five terms, managing assignments, providing personalized guidance, and leading workshops for 48 graduate students on community and regional analysis using advanced Excel for data analysis and visualization.

University of Utah, Energy & Geoscience Institute

Jun 2022 – Aug 2022

GIS Analyst Intern - Internship

Salt Lake City, UT

- Collaborated with geoscience researchers to provide geospatial analysis and visualizations for mining operations, developing and integrating comprehensive datasets and georeferenced maps to support resource exploration in Utah and Wyoming.

🛠️ Technical Skills

- **Software:** ArcGIS/QGIS, Bentley Cube, TransCAD, Synchro/SimTraffic, AutoCAD, SketchUp, Microsoft Office Suite (Word, Powerpoint, Excel), Adobe Creative Cloud Suite (Photoshop, Illustrator, InDesign), National Bridge Investment Analysis System (NBIAS)
- **Programming:** R (*dplyr, sf, ggplot2, shiny, quarto*), Python (*numpy, pandas/geopandas, matplotlib, seaborn, scikit-learn*), Database (MS Access, SQLite, PostgreSQL, DuckDB), LaTeX, WordPress
- **Data Analysis:** Travel Demand Models, Benefit-Cost Analysis of Highway and Bridge Projects, Economic Impact Analysis, Safety Analysis, Accessibility & Equity Analysis, Mobility Data Analytics (Replica), US Census/CTPP/IPUMS Data Analysis, Machine Learning Algorithms (*Naive Bayes, K-Means Clustering, Decision Trees, Random Forest*)