

Individual Assignment 3: Value Per Acre Analysis and 3D Rendering

Rural Planning and Economic Development | PLAC 5500-001 / LPPP 5559-001 | Fall 2026

Assignment brief and working template

DUE: November 4, 2026, at the start of class

COURSE WEIGHT: 3%

Purpose

Use the provided parcel, zoning, tax-value, and 3D model resources to compare assessed property value per acre. Extrusion height encodes assessed value per acre. It does not represent building height, revenue, profit, or social value.

The class will provide

- In-class demonstration.
- Parcel, zoning, tax-value, and 3D model files.
- Field-mapping worksheet, example, work time, and rubric.

What to submit

- ☐ 3D rendering or clear captures showing the value-per-acre pattern and scale/legend.
- ☐ Accessible PDF or equivalent explanation with question, geography, comparison groups, interpretation, and limits.
- ☐ Analyzed data file when available.
- ☐ Method note with valuation year, value field, acreage field, joins, units, missing/invalid records, exclusions, and formula.
- ☐ Transparent treatment of public and tax-exempt parcels.
- ☐ Valid, invalid, excluded, and exempt record counts; outlier or comparison table; and one next evidence need.
- ☐ Connection to current zoning and subdivision conditions without assuming value alone justifies a regulatory change.

Recommended workflow

1. Define geography, year, parcel groups or districts, and planning question.
2. Inspect geometry, values, acreage, zoning/use, exempt flags, joins, and 3D assumptions.
3. Check invalid acreage, missing values, duplicate joins, multi-parcel properties, exemptions, and outliers.
4. Calculate assessed value divided by valid parcel acres while preserving original fields.
5. Render with transparent scaling and label height as a value symbol.
6. Compare like uses or districts before unlike land functions.
7. Explain what the pattern suggests, what it cannot establish, and the next evidence need.

Working pages

Question and comparison: What geography, valuation year, parcel groups, and planning question are being compared?

Data audit: Record fields, units, joins, valid/invalid/excluded/exempt counts, and public or tax-exempt treatment.

Calculation and 3D rule: Write the exact formula and explain the extrusion scale. State that height is a value symbol, not building height.

Pattern and outliers: What pattern is visible? Which outliers require inspection? Are the comparison groups genuinely comparable?

Planning interpretation: What does the result suggest? What can it not establish? What zoning, market, ownership, infrastructure, service, or fiscal evidence is needed next?

Submission self-check

- ☐ The formula is assessed value divided by valid parcel acres.
- ☐ Invalid or missing acreage is preserved and documented.
- ☐ Public and tax-exempt parcels are not silently removed.

- ☐ Extrusion height cannot be mistaken for building height.
- ☐ Comparisons are like-for-like or explain the limitation.
- ☐ The conclusion does not equate assessed value with revenue, profit, or social worth.

AI, collaboration, and individual responsibility

You may use the supplied data, model, and tools and discuss methods with classmates. Shared inputs and the same correct calculation are not duplicate completed assignments. Your observations, analytical decisions, interpretation, and presentation must be your own. Disclose material AI assistance, verify the work, and be ready to explain every method and choice. Do not place restricted client or personal data in public AI tools.

Honor pledge and authorship

Write and sign the exact pledge below for individual assignments and papers.

"I pledge that I have neither given nor received help on this examination (quiz, assignment, etc.)."

Student	
Signature	
Date	