Semester Project Reminder

Please remember that your Phase 1 Report (Analysis Plan) is due on Tuesday, March 5 (next week).

What is Due:
1. Paper copy of report: hand in to me at the beginning of class on March 5
2. Electronic version of report (Word format, please): email to me at murray.rice@unt.edu by 12:30 pm on March 5

Key Resources (all posted on your CSAM computer *4230* directory, “Semester Project” subdirectory):
1. Project description document
2. GEOG 4230 Referencing Guidelines (how to cite external sources)
3. Phase 1 Report Evaluation Form

Please pay special attention to the phase 1 report evaluation form (see the “assessment materials” link on the course website).

This document specifies exactly how your work will be assessed.

Reminder: The Breadth of Applications in this Course

- Remember the fundamental breadth of Location Intelligence as a discipline
- Application of geographic
  - Knowledge
  - Skills
  - Tools
- to assist in organizational decision-making (any organization)

The Real Estate Domain

WEEK 7: THE FUNDAMENTALS OF REAL ESTATE MARKET ANALYSIS

Even Business Geography (focus on profit-seeking firms) ought to have a very broad application
- Resource-based activities: mining, forestry, agriculture
- Industrial activities: fabrication, assembly, processing
- Service activities: retail, personal services, business services
- Administrative activities: headquarters

Geography & location matter to all of these

Reminder: The Breadth of Applications in this Course

- But over the last 4 decades, Business Geography has been most closely associated with services (and retail in particular)
- Q: Can you think of any reasons why it might make sense for retail & service activities to be so prominent an application venue for business geography?
Reminder: The Breadth of Applications in this Course

- Our real estate focus this week is a reminder of the many economic activities really do require specific kinds of locations.
- We will see more application areas for further economic sectors in the weeks ahead.

Real Estate Sample Scenario

- Before we go any further with defining real estate analysis, let's look at a sample situation where real estate decisions have a strong connection with business performance.

Let's take a look at a few dimensions of location performance from this situation...
Real Estate Sample Scenario

Q: what do you observe in this satellite image of site A? (taken before restaurant development of the site)

Real Estate Sample Scenario

Q: how about this street view image of site A? (taken before restaurant development of the site)

Real Estate Sample Scenario

Q: what do you observe in this satellite image of site B? (taken before restaurant development of the site)

Real Estate Sample Scenario

Q: how about this street view image of site B? (taken before restaurant development of the site)

Real Estate Sample Scenario

Map Locations A & B With an Income Layer
Q: What additional insight does this map provide? Are there any important questions still unanswered?

Real Estate Sample Scenario

Map Locations A & B With an Income Layer and Drive Time Zones
Q: What insight does this map provide? How important is this new information?
Real Estate Sample Scenario

- A successful provider of real estate analysis services must integrate
  - A variety of information types (resources)
  - Complete geographic analysis (technology)
  - Sound judgment (education/experience)

Why Real Estate Market Analysis?

BASIC REAL ESTATE QUESTIONS

Why Real Estate Market Analysis?

- Real estate decisions depend on good answers to basic questions
  - 1. Should I buy a given land parcel?
  - 2. Should I develop a given business on that parcel?
  - 3. Will the market support the land use I propose?
- Smart real estate developers and investors have answers to these questions before they commit to a project.

Why Real Estate Market Analysis?

- Some real estate questions are best dealt with by someone other than a real estate market analyst
  - "May I build a residential subdivision there?"
  - "Am I allowed to build an office building there?"
  - "Is appropriate zoning available for my project?"
- Such questions could be termed "permission" questions
  - Best answered by planners and attorneys (these questions are political in nature)

Why Real Estate Market Analysis?

- Real estate market analysts provide a specific kind of input to investors, buyers, sellers, and financiers
  - "Does investing in a given project make financial sense?"
  - There are no guarantees in business, but can we evaluate & assess the level of risk that a given project involves?
  - Risk in real estate is complex and multi-faceted, but it always involves a geographic dimension
- Instead of addressing political permission questions, real estate market analysis deals with business viability.

Why Real Estate Market Analysis?

- So what’s the role of the business geographer here?
  - Real estate decisions are necessarily site-specific
  - Therefore, real estate market analysis is also site-specific
  - Key input: what is the relevant market area for considering a given real estate asset?
  - Country, state, county, or even more specific? The business geographer provides this crucial advice
  - The analyst must identify the appropriate market scale for a project, and then deliver the correct information for that zone.
Why Real Estate Market Analysis?

Q: What happens if the real estate market analyst does their job poorly?

- Possibility #1: the client misses an opportunity (they do not make a profit they could have made) – this is bad
- Possibility #2: the client suffers a financial loss (they actually lose money) – this is even worse

It is thus important that the market analyst provides results that accurately represent the investment context for a given property.

What is Real Estate Market Analysis?

BASIC DIMENSIONS

What is Real Estate Market Analysis?

Real estate analysis is the product of a complex set of processes that document the factors that determine

1. The demand for a given parcel of real estate
2. The supply of competing real estate
3. The relevant geographic boundaries for the intended land use/business activity (residential, retail, industrial, etc.)

What is Real Estate Market Analysis?

1. The demand side

- Buyers and investors determine their need for a given real estate asset individually and collectively
  - “What kind of real estate is needed?”
  - “How much is needed?”
  - “Where is it needed?”

Q: Can you think of an example of demand for a given kind of real estate?

What is Real Estate Market Analysis?

2. The supply side

- Buyers and investors need a picture of the complete set of real estate alternatives to a given property
  - What competing alternatives (within a given real estate type) are already available?
  - What similar real estate is not currently available, but is “In the Pipeline” (currently being developed)
  - What real estate could be converted or retrofitted to meet a specific use type, and at what cost?
What is Real Estate Market Analysis?

1. The supply side
   - Comprehensive data on specific real estate options is absolutely essential to provide a credible supply side analysis.

What can you tell me about the appropriate scale of market analysis for this business?

What is Real Estate Market Analysis?

3. The location dimension
   - Key factor: real estate market analysis must be done at a geographic scale that matches the reach of the proposed development.

What can you tell me about the appropriate scale of market analysis for this business?
What is Real Estate Market Analysis?

- Market analysis decisions thus depend on:
  - The kind of business being analyzed: 7-Eleven (small trade area) versus IKEA (large trade area)
  - Another way to look at this trade area idea is to think in terms of primary and secondary markets.

Primary market: the geographic range over which the most important users of the real estate asset will be drawn.

Example: 80% of a restaurant’s patrons will typically come from within six miles of a restaurant.

Whether the development survives (or not) usually depends on this 80%; the “core market.”

Secondary market: the further zone from where the other, less important users of the real estate asset will be drawn.

In Our Example: the 20 percent of restaurant patrons who come from further than six miles to a restaurant.

This 20% could determine the difference between a good development and a great one.

Risk and Real Estate Decisions

- Real estate success depends on effective management of risk.
  - Risk management: understanding the characteristics of every variable that could impact the success of a given development.
  - There are no real estate guarantees, but solid risk management analysis helps to manage (minimize) the risk present.

Risk management and the “Big Five” components of real estate:
  - 1. Location
  - 2. Product
  - 3. Price
  - 4. Timing
  - 5. Contract Terms
Risk and Real Estate Decisions

- Risk management and the “Big Five” components of real estate
  - 1. Location
  - 2. Product
  - 3. Price
  - 4. Timing
  - 5. Contract Terms

In the following discussion, be thinking of related scenarios that could introduce an element of risk for each of these.

1. Location
- We simply recognize the obvious in stating that all real estate has a location.
- However, we can break our understanding of location down into two categories first recognized in 1890 by economist Alfred Marshall:
  - Site: the actual business location itself
  - Situation: the geographic context for a given site

Q: Tell me what you can observe about this business site.
Risk and Real Estate Decisions

- Note: to have a great business opportunity, we need both site and situation to be suitable for the business.
- Q: how might it be possible for a business to have a great site but a poor situation?
- Is it possible to have a poor site but a great situation?

- Effective management of real estate risk entails understanding the site and situation factors that can impact the success of a given development.
- What site characteristics are necessary for success?
- What situation characteristics are important?
- How does the concept of risk intersect with site and situation? Are site and situation changes possible that could negatively impact a real estate investment?
2. Product
   - You might think it could be challenging to define a real estate product separate from its location.
   - However, it is helpful to think of a real estate product in terms of its multiple characteristics that place it in competition with other real estate parcels.
   - In other words, what are the similarities and differences that could be used to compare one property with another?

Potential property comparison dimensions
   - Price/rental rate
   - Size of property
   - Vintage/age of property and structures
   - Construction quality of structures
   - Infrastructure: utilities & roads present/not present
   - Real estate product category

The ultimate goals of real estate product analysis
   - Categorize a given property
   - Compare it directly against potential alternative properties

How does risk enter into the situation here?

3. Price
   - An absolutely necessary component of real estate analysis.
   - If you pay too much for a property, the risk of project failure is multiplied: property cost reduces investment return.
   - The price paid must make sense in comparison with the intended land use and the returns anticipated from the project.

We need to recognize that price is a relative idea
   - A “high” price might be justified by above-average market potential compared to other, similar properties.
   - A “low” price might reflect deteriorating market conditions.
We need to recognize that price is a relative idea. Regardless of perception of high or low price, we need to recognize the concept of a “price point.” Above the price point, the proposed project is not competitive with other investment opportunities. Below the price point, the project may be feasible.

Need to recognize real estate investment analysis as being very broad. Includes such considerations as:
- Potential use of property
- Tax considerations
- Legal considerations
- Transaction costs
- Operating expenses

Considered now and as these project into the future.

4. Timing
Investment geographies and market conditions are constantly changing. We need to recognize:
- There are good times to enter a market with a given project
- There are wrong times to do the same thing

Just because something has worked in a given location in the past does not mean it will work in that location in the future.

Three considerations that can help us with timing:
1. Neighborhood life cycles: local in nature, mentioned in week 2 slides.
- People tend to age in place; a neighborhood full of young families now will, in 40 years, be home to mature families and seniors.
- Neighborhood life cycles are powerful and predictable.

2. Long-wave economic cycles: global in nature, also mentioned in week 2 slides.
- Kondratiev’s global business cycle idea focuses on global forces that impact cities and national economies.
- These cycles last decades.
Risk and Real Estate Decisions

- Three considerations that can help us with timing
  - 3. Industry cycles: driven by economic and technological change in a given industry
    - Great example: waves of retail development


Risk and Real Estate Decisions

- 5. Contract Terms
  - Worthwhile to mention that contract language can be a deal-breaker
  - Even if everything else lines up (location, product, price, timing), unfavorable contract terms can make an entire deal undoable

Examples of contract issues
- Necessity to offer free rent as an inducement to potential new office space tenants
- Perhaps needed in a highly-competitive leasing market
- This alters the revenue picture for a developer
- A “dark clause”: prohibiting a shopping mall owner from leasing space to a given category of tenant
- An issue when one business moves out and the former space needs to be leased again

Next: Real Estate GIS Exercises

- Our next two GIS exercises will focus on two distinctive areas of practice related to real estate
  - Real Estate: Site Selection
    - How can the location-allocation methods we have started to examine help a business make great real estate decisions for their retail operations?
  - Exercise #3: more experience with Maptitude’s facility location tools (week of March 5)

- Real Estate: Property Insurance
  - What risk is borne by insurance companies, in the face of natural hazards?
  - How can a geographic perspective help to understand and manage such a hazard-based risk?
Next: Real Estate GIS Exercises

Our next two GIS exercises will focus on two distinctive areas of practice related to real estate:

- Real Estate: Property Insurance
  - Exercise #4: Introduction to a cutting-edge analytical package called Alteryx (week of March 19)
  - Alteryx: transform and analyze your data
  - Please view an introduction to Alteryx here