

**GEOG 4220/5220**

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**Applied Retail Geography:  
Motivation and Fundamentals**



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**Welcome to this Class**

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**No matter why you are here,  
what your major is, or anything else  
about who you are, welcome.**

**I am glad you are here.**



2

**Motivation for Being Here...**

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**Why should you take this course\*?**  
(\*Aside from the fact that you might have to)

Because a **knowledge of geography** and its **connection to business** opens up a wide range of career opportunities!

- Even businesses most people know, like Wal-Mart or Amazon, depend on experts who understand **the meaning of geography for business success**.
- We'll explore ideas that will give you a sound foundation for understanding the changing geography of both **store and non-store retail activity**.
- The semester will also expose you to **fieldwork and GIS technology** that form a key part of the toolkit that geographers use everyday in their work for retailers and consulting firms that themselves work for retailers.
- By the end of the semester, you will have an understanding of the fundamentals that **geographers need to have a great career** in the retail market & site analytics field

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**Motivation for Being Here...**

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**Why should you take this course\*?**  
(\*Aside from the fact that you might have to)

Even if you don't intend to pursue a retail geography career, this course will give you valuable perspective on how our world works:

**Helpful information for life as a knowledgeable citizen**

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**Motivation for Being Here...**

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This course explores some of the **practical insights** that geography contributes to business and community leaders who want to make **informed decisions**



*A 10-minute drive time zone around a potential business site*

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**Motivation for Being Here...**

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This course explores some of the **practical insights** that geography contributes to business and community leaders who want to make **informed decisions**



We'll spend the semester unpacking what "practical insights" means...

*A 10-minute drive time zone around a potential business site*

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**UNT**

## Four Ground Rules

- 1. Do your work **Come Prepared**
- 2. Come to learn **Right Attitude**
- 3. Participate **Be Engaged**
- 4. Consider others **The "Golden Rule"**

**My goal here is to serve your needs well.**  
*"I did not come to be served, but to serve"*

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**UNT**

## Words to the Wise

- **Do everything you can to keep up**
  - It will be easy to fall behind
- **If you are having trouble keeping up, please come talk with me**
  - I am here to help, and I want to help you succeed

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**UNT**

## Who I am

- **Instructor:** Dr. Murray Rice
  - Professor of Location Intelligence here at UNT Geography & the Environment
  - Founder of the consulting firm **Altavision Geographics**, a business that uses geography to help businesses better market themselves

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**UNT**

## Who I am

- **Instructor:** Dr. Murray Rice
  - Bachelor's degree in Engineering Physics
  - Master's and PhD degrees in Economic Geography
  - A decade of consulting experience in market analysis, site selection
  - Following my decade of consulting, I am now in my 15<sup>th</sup> year of teaching at UNT

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**UNT**

## Who I am

- **Instructor:** Dr. Murray Rice
  - I was born and spent most of my early years in Ottawa, the capital of Canada



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**UNT**

## Who I am

- **Instructor:** Dr. Murray Rice
  - Because I grew up in Canada, I was of course an extreme risk-taker



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**Who I am**

- **Instructor:** Dr. Murray Rice
  - I also spent part of my growing-up years in the beautiful city of Boston



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**Who I am**

- **Instructor:** Dr. Murray Rice
  - Today, my wife and I have two sons who love to build things and travel



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**Who I am**

- **Instructor:** Dr. Murray Rice
  - We also have two active dogs, Max and Maggie



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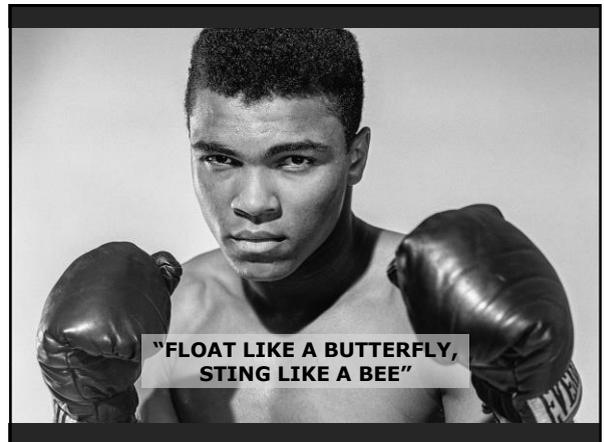
**Who I am**

- Other miscellaneous facts...
  - I am a **Christian**, and enjoy a good conversation about all matters related to faith and belief
  - I have traveled to **three continents** so far (North America, Europe, and Asia)
  - I am a fan of the **Ottawa Senators** (NHL), **Saskatchewan Roughriders** (CFL), **Boston Red Sox** (MLB), and **Seattle Seahawks** (NFL)

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**Retail & Business Geography**

- **Retail geography solves practical problems for retail businesses**
  - Application of geographic insights in a retail setting
  - Let's jump right into one of the feature elements of this course that does this directly

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**Some Course Details**

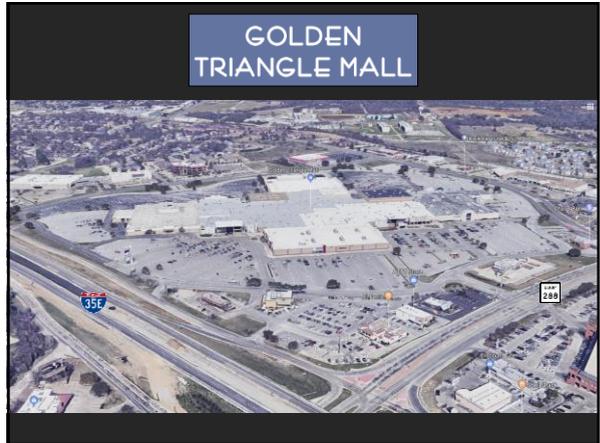
- **Term Project – An Applied Study**
  - Your semester project work in this class will address an important, real-world problem
  - Two key elements to your project work
    - 1. *Assessment, discussion, and use of your **conceptual knowledge from class** that apply to the case study situation*
    - 2. *Geographic analysis of the situation using the **skills and tools** you will be introduced to in this course*

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**Some Course Details**

- **Term Project – An Applied Study**
  - Please pick up a copy of the basic project document before you leave class today (and please read it thoroughly before Wednesday)
  - **This year's project:**
    - Focus on analysis of the future possibilities for a prominent, local retail property...

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### GOLDEN TRIANGLE MALL

What are some issues related to "shopping mall viability" today?

**One word: competition.**

E-Commerce

amazon

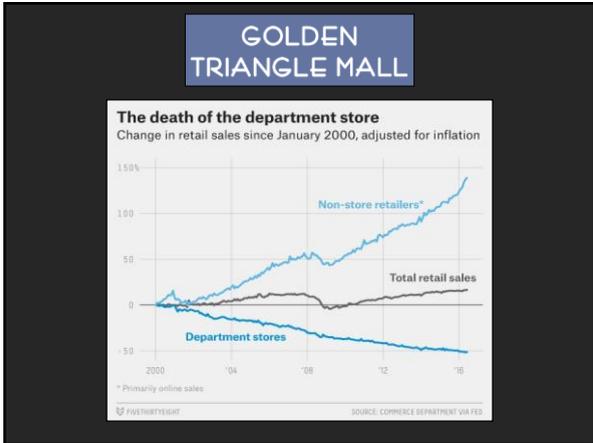
amazon Prime

wayfair

Walmart

Target

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**Macy's Store Closures in 2017**

High levels of competition have led to thousands of store closures

Q: Why is the closure of a store like Macy's of particular importance to a shopping mall?

Figure A.10: Macy's Closures

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### GOLDEN TRIANGLE MALL

**Many malls are losing key retailers. The future is uncertain for many malls and mall-based retailers in America.**

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WFAA 9 89° Dallas, TX

**WEATHER ALERT**  
13 Minutes Ahead

**July 31, 2019**

**Locals remember Collin Creek Mall in Plano before closure**

**Collin Creek Mall in Plano holds final event — a farewell party**

Collin Creek Mall in Plano will hold its last event Friday and it's a farewell celebration.

PLANO, Texas — Collin Creek Mall in Plano will hold its last event on Friday. A farewell celebration is scheduled from 6 p.m. to 9 p.m. before demolition crews start their work on the \$1-billion, mixed-use development.

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**GOLDEN TRIANGLE MALL**

**This leads to the local question: what happens if major retailers close and leave Golden Triangle Mall?**

**Q: What do you think happens to the mall property if the mall itself closes?**

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**GOLDEN TRIANGLE MALL**

**Q: Do you think the real estate (property) associated with the mall has value? How? Why?**

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**GOLDEN TRIANGLE MALL**

**Your job is to identify the possibilities for a mall property redevelopment**

**A Few Key Questions to Answer**

*If the mall were to complete a partial or total redevelopment:*

- What are the best retail business shopping complex ideas that mall management should consider?
- What property, market, and other factors need to be considered when determining a best use for this (or any) commercial property? What can you say about these factors in Denton?
- Of all potential retail and service business tenant candidates in the United States, which would be the best ones for a redeveloped Golden Triangle Mall?

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**GOLDEN TRIANGLE MALL**

**The mall owners and investors need to be smart about maximizing the value of any redevelopment; there are no do-overs for them.**

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**Some Course Details**

- **We have a great corporate sponsor for this project this year**
  - **Intalytics** of Ann Arbor MI and Irving TX

**Michigan**

5 Research Drive  
Suite A  
Ann Arbor, MI 48103

**Texas**

7301 N. State Highway 161  
Suite 315  
Irving, TX 75039

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**Some Course Details**

- **We have a great corporate sponsor for this project this year**
  - **Intalytics** of Ann Arbor MI and Irving TX

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Intalytics serves a wide range of great clients

- They're big
- They're good
- It will be great to work and learn with them



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**Dave Huntoon**

- **Dave Huntoon**, Principal in the Intalytics Ann Arbor (Michigan) Office
- **Justin Tischler**, Senior Director of Modeling (and UNT Graduate) in the Intalytics Irving (Texas) office
- One or both will be here later in the semester to provide overall project insights and do a Q&A
- Mr. Huntoon and Mr. Tischler will also work with me to evaluate your project results



**Justin Tischler**

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**Dave Huntoon**

- **Dave Huntoon**, Principal in the Intalytics Ann Arbor (Michigan) Office
- **Justin Tischler**, Senior Director of Modeling (and UNT Graduate) in the Intalytics Irving (Texas) office



**Justin Tischler**

- Work hard and take full advantage of this time
- **"Opportunities like this do not grow on trees"**

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## Some Course Details

- **Term Project – An Applied Study**
  - The best work in the class wins the annual **Intalytics Awards in Business Geography**
    - **\$1000 cash prize:** best final project report and presentation
    - **\$500 cash prize:** best initial "environmental scan" report

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## Some Course Details

- **Term Project – An Applied Study**
  - *Last project thought:* you can do the project as an individual or in cooperation with one other student
    - **I leave the choice up to you:** there are advantages both ways
      - Pairing up can be a good thing if you can find a partner you can trust
      - Please indicate on the class sign-up sheet in the next week or two if you find a partner you want to work with

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## Retail & Business Geography

- Retail geography is part of the more general field of **business geography**
  - Business geography "integrates geographic analysis, reasoning, and technology in support of improved business decisions" (Thrall, 2002)

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**Retail & Business Geography**

- Business geography is an interesting field with great career prospects



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**Retail & Business Geography**

- Business geography is an interesting field with great career prospects



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**Retail & Business Geography**

- Business geography is an interesting field with great career prospects



**Joshua Bova** Associate Manager – Market Planning at KFC (Louisville, KY), and UNT Geography Graduate (2018)

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**Every Map Tells a Story**  
Through geographic information systems, UNT alumni use spatial context to solve real-world problems.

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**Retail & Business Geography**

- Business geography is an interesting field with great career prospects



**Amie Sumpter** Manager – Market Strategy for Advance Auto Parts (Roanoke, VA), and UNT Geography Graduate (2007)

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Advance Auto actually hired a second UNT Geography graduate not too long ago...

**Amie:** took this class in 2006  
**Timothy:** took this class in 2016



Amie Sumpter  
Timothy Klein

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**Retail & Business Geography**

- **So we are working on a powerful skill set here:** the ability to use geographic knowledge and skills to help retail businesses make great decisions
- In this course, we are focusing on applications related to retail and services more broadly
  - But this perspective can help any kind of business, as well as non-profits and all levels of government ("location intelligence")

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**Geography and Hurricane Harvey**

**Q:** How can this "geography and decision-support" perspective be helpful in situations like this?

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**Retail & Business Geography**

- Retail geographers contribute to decision-making in a variety of complex environments

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**One kind of "retail environment"...**

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**Denver's Park Meadows Mall**

**...another kind of shopping venue...**

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**Southlake's Town Square**

**...yet another kind of retail complex...**

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## Some Course Details

- Meeting M, W through the fall semester
  - Office hours:** W, 9 to 10:45 am, ENV 310G
  - Also:** you are welcome to simply stop in (if my door is open I will gladly give you time)
  - See the **class web page** for a variety of course resources, including the syllabus, readings, and retail GIS labs

<http://www.murrayrice.com/geog-4220.html>

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## Some Course Details

- Required, Free Textbook:**
  - Rice and Hernandez (2017) *Location Intelligence Research and Applications*
    - Free download:** see link on [course website](#)
  - We're using this book because this is the **most comprehensive** reading resource available for business geography (and it also defines another related term: "location intelligence")
  - Includes case studies by some of the most prominent business geographers today

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**Some Course Details**

- Also, aside from the course website note that you can also find more resources on our course network directory, accessible on the computers in our CSAM lab room

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**To Access Resources in CSAM 2 (ENV 340):  
See the desktop on any CSAM Computer**

Go to this location (the "class" drive)

**UNT**  
UNIVERSITY OF NORTH TEXAS  
Discover the power of ideas

**Fall 2019 Key Code to Enter ENV 336 (CSAM): 1217#**

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**To Access Resources in CSAM 2 (ENV 340):  
See the desktop on any CSAM Computer**

When you open the "class" drive, you will find our course resource directory

The 4220 directory has folders for assignments and readings

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**To Access Resources in CSAM 2 (ENV 340):  
See the desktop on any CSAM Computer**

Name	Date modified	Type	Size
Applied GIS Lab	2/16/2018 12:49 PM	File folder	
Readings	8/30/2017 10:33 AM	File folder	
Semester Project	8/22/2018 10:38 AM	File folder	

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**Some Course Details**

- Class time will usually be lectures with me, with a few exceptions**
  - In one upcoming segment of the course we will complete fieldwork/GIS labs: (weeks of Sept 9 and 23)
  - GIS lab learning opportunity: applied retail GIS labs using a widely-used GIS technology, Esri's **Business Analyst Web App** cloud-based software (more on this in a few minutes)

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**Some Course Details**

- Class time will usually be lectures with me, with a few exceptions**
  - On a few other occasions we will have guest talks with business people we can learn from

**First guest speaker:** Carl Whitaker

- UNT GEOG graduate (MS, 2015)
- Manager of Market Analytics
- RealPage, Inc. of Dallas
- Wednesday, September 18<sup>th</sup>

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**Some Course Details**

- **Required Software Registration**
  - I will email a weblink and instructions to your UNT email address so you can set up an Esri account for this semester
  - ***When you receive this email, please complete the account registration right away (don't wait)***

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When you have activated your account registration, you can then go to the Esri login screen (<https://bao.arcgis.com/esriBAO/login/>) and use your Username and Password to access the Esri BA Web App

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**Some Course Details**

- **Readings**
  - See the course syllabus and website for a list of weekly readings
  - I assume you will have completed these readings before class on Monday each week

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**Week 1: Introduction**

**Geography and Decision-Making**

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**Information and Decisions**

- **Q:** how well do you know D-FW? What would you draw if you had to draw a "generic map" of D-FW?
- **Key "mental map" points:**
  - **Everyone** has a **different view** of the city (we all drew different features)
  - Some have **more information** than others, but everyone's perception of the city is **incomplete**

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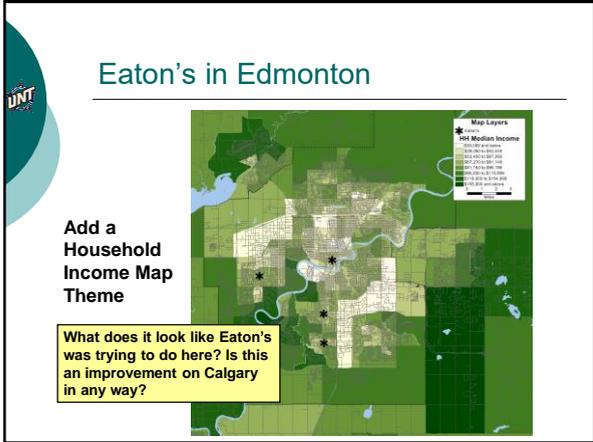
**Information and Decisions**

- Often, how organizations **use the information available to them** determines **how successful** they are

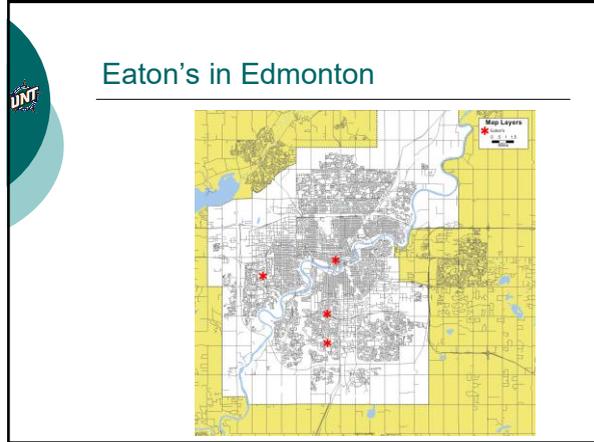
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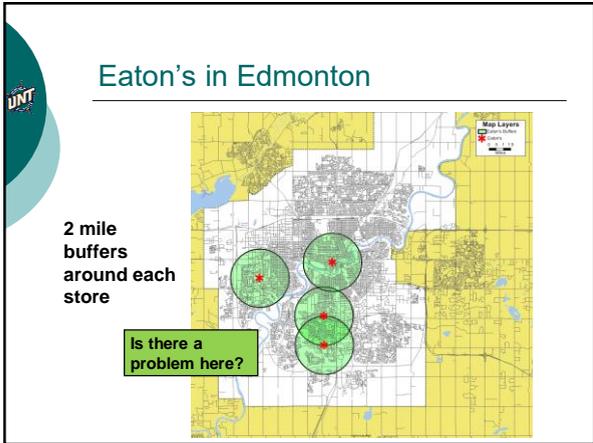




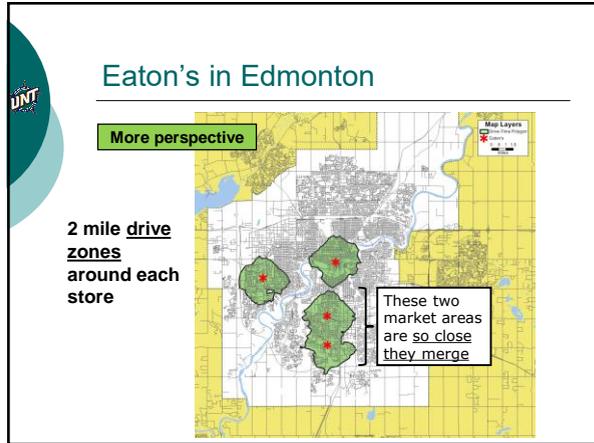
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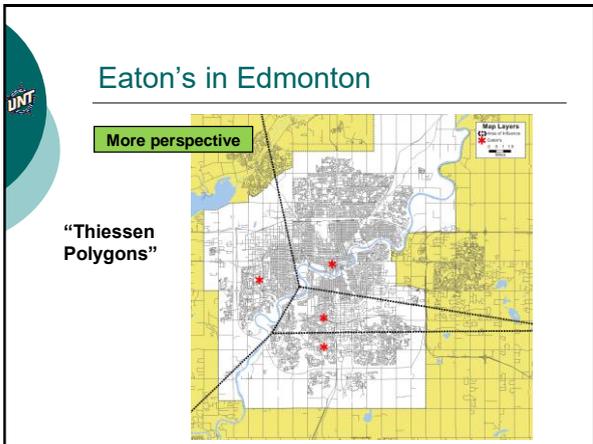
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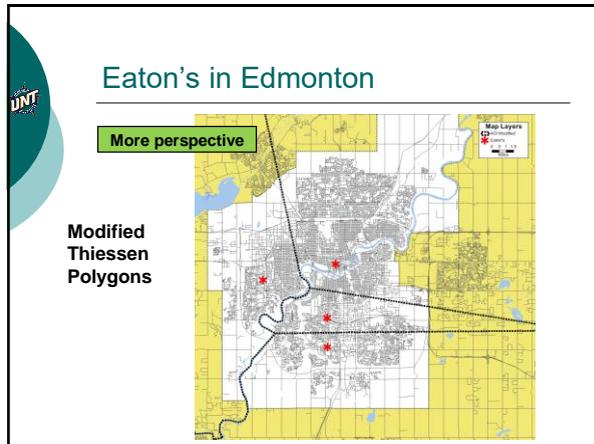
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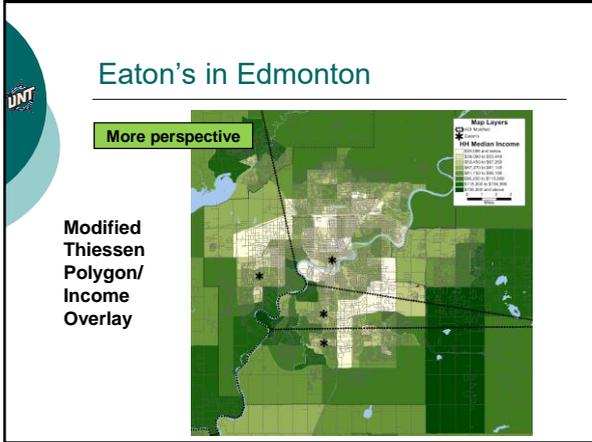
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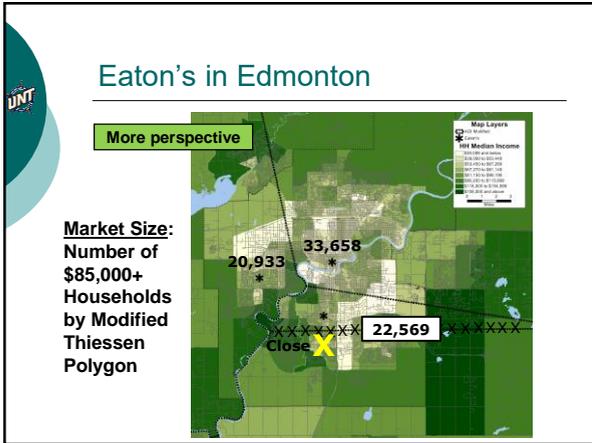
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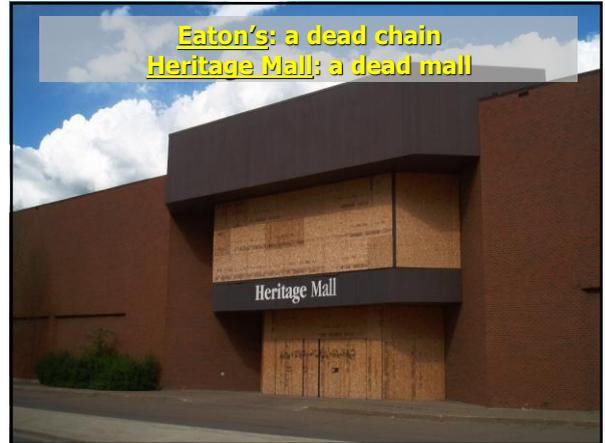
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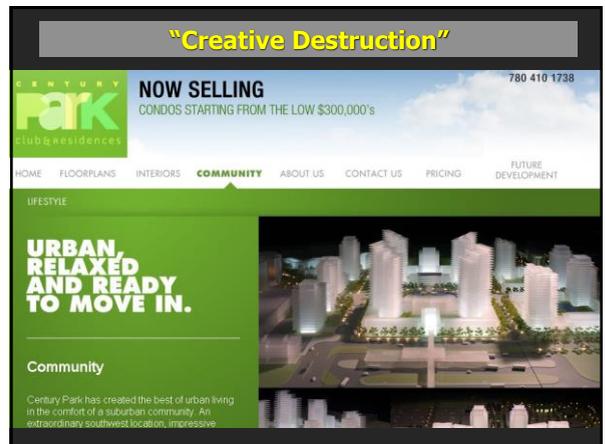
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## Information and Decisions

- **Good Information Processing: Wal-Mart**
  - **Eaton's, Sears, the Bay:** all larger Canadian operations than Wal-Mart had in its first year in Canada (1994)
  - **Today:** Eaton's and Sears are completely gone in Canada, the Bay is also in trouble, and Wal-Mart is Canada's second-largest retailer (and single largest store chain)
  - **How did Wal-Mart do it?**

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## Information and Decisions

- **Some partial answers:**
  - Wal-Mart measures everything they can
  - They analyze
  - They act on what they find
- Each store is linked by satellite to Wal-Mart's world headquarters
  - Comprehensive, instantaneous results measurement: Wal-Mart HQ knows how many Oreos the Hickory Creek Supercenter sells minute-by-minute throughout the day

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Wal-Mart's network operations center, located inside its global e-commerce headquarters in San Bruno, Calif., tracks order volume, site traffic, and social media activity in real time around the world.

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## Information and Decisions

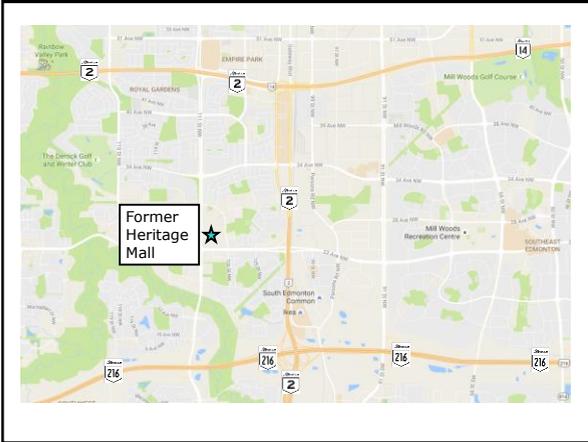
- Wal-Mart's information management extends to analyzing **every store location and market** they are in
- Close stores in underperforming locations, open new stores (often bigger ones) in better places

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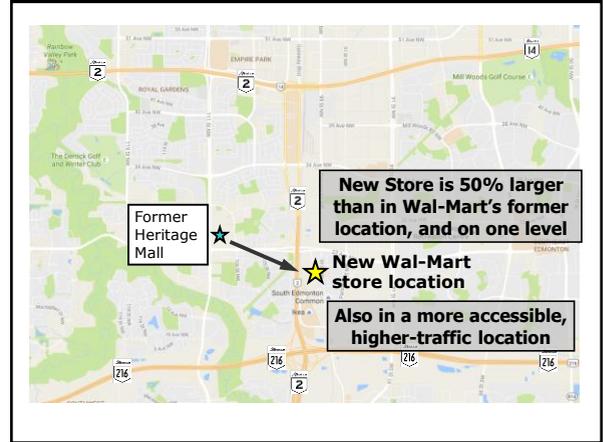
**Wal-Mart in South Edmonton: a successful location, but not successful enough**

**Wal-Mart's past, two-level store location at the former Heritage Mall site**

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### Pred's Behavioral Matrix

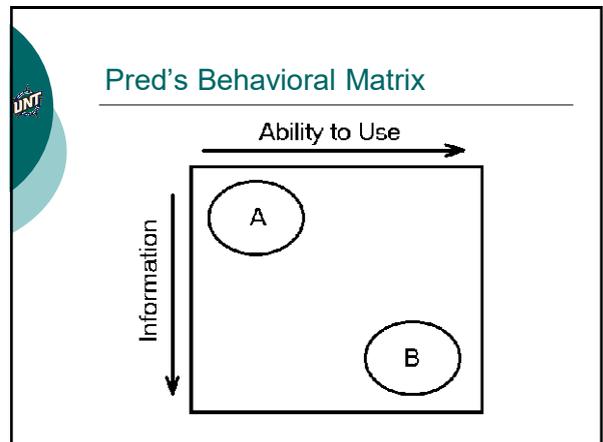
- There is a connection between information and geography
- Geographer Allan Pred found that **two key factors** determine the success of many businesses
  - Amount of information
  - Ability to use information

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### Pred's Behavioral Matrix

- Based on these two factors, we can classify businesses and the quality of decisions they will **likely** make
  - **Example:** store or factory location decisions

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### Pred's Behavioral Matrix

- Businesses **low on both factors** (Part A) make "random" decisions; likely to miss profitable locations and die quickly
  - **Note:** they can make good decisions (by chance)
- Businesses **high on both factors** (Part B) are most likely to choose profitable locations

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### Pred's Behavioral Matrix

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### Pred's Behavioral Matrix

- **Related concept:** spatial margins to profitability
  - **SMP:** the **edge** or **boundary** of the area where a given kind of business can make a profit
  - **SMPs are different** for each kind of business

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### Pred's Behavioral Matrix

**Edge of "Profitable Zone" is the SMP**

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### From a Geographic Perspective...

Profitable zones and SMPs for grocery stores in Spokane, WA (approximation)

Profitable Zone

SMP (the edge or boundary of the profitable zone)

Could think of profitable zones and SMPs on a map (islands and edges)

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### Pred's Behavioral Matrix

- Connection to behavioral matrix:
  - Companies from **Part B** of the matrix (**high on information and ability to use**) will usually locate within SMP boundaries
  - Companies from **Part A** of the matrix (**low on information and ability**) locate more randomly, and will often find themselves outside SMP boundaries

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## Pred's Behavioral Matrix

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- **To sum up:** Information, ability to use information, and geography are all factors in business success

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## Homework

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- Do the **reading** for next week
- In general, have a look at the **discussion questions** provided in your syllabus for each week
  - See the last few pages of your syllabus for those questions

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