Econ 330: Urban Economics

Lecture 1

John Morehouse

`Jan. 4th, 2021`

Day One: Welcome!

Introduction

Me

Name: John Morehouse , **Office**: Zoom, **Office Hours**: M 15:00-16:00, F 9-10a , **Email**: jmorehou@uoregon.edu

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- A student that has passed EC201 and has at-least some recollection of what you have learned

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Schedule

Today

1) **Syllabus**

2) **Intro to Urban Economics**

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Upcoming

- EC201 Review Quiz on Canvas
- Letter of Intro on Canvas
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- 25%: Midterm Exam (1x): 125 points
- 20%: HW (4x, 6% each): 25 points each
- 15%: Book Report (1x): 75 points
- 4%: Review Quiz (1x): 20 points
- 1%: Letter of Intro (1x): 5 points

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> Your grade will be determined relative to your peers, so during the course, I will not be able to tell you what your exact letter grade is at any point in time, because it depends on everyone's overall scores of the class.

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† Don't be afraid to ask if you are unsure

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- **Start them early**, as they will cover *a lot* of material

Late Policy

From the syllabus:

> You are allowed one late problem set in this class (note: this does **not** include the book-report). The late problem set **must** be cleared with me prior to the due date and must be turned in at the **before of the next class period.** Make-up exams will not be given for any reason. In the case of a missed midterm due to unanticipated emergency situations, the student will be allowed to put the weight of the missed midterm on the final, provided notification is received as soon as possible and there is verification of the emergency. **DO NOT** take this class if you already know you cannot make one of the scheduled exams. The midterm will occur during week 6 and will cover all material prior to the midterm. The final will be cumulative.

Lectures

I will post slides and recordings of slides **after** the lectures. The lectures and recordings will be posted to canvas.

- **You are not allowed to record the lectures**
- I believe it is important (for most students) to physically write down definitions, math, and concepts. I **strongly** suggest that you take notes.

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Details

- We will review on Wednesday what I want you to know. Review will be similar to quiz
- Quiz will open Wednesday after class

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If you want to start studying early....

1) Be able to **solve** for **equilibrium** price and quantity in a model of linear supply and demand

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3) Know the definition of **elasticity** and how to interpret it

Review on Wednesday, I promise. Also: the the quiz will be extremely similar to our review.

This Course

This class has two fairly distinct halves:

1. **Philosophy** & **Tools**
    - Why do cities exist? Why do they grow? Why do they decline?
    - Fundamental tools of labor & urban econ (it's all supply and demand)

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Checklist

1) **Syllabus**: ✅

2) **Intro to Urban Economics**

- **What is urban economics?**
- **What is a city?**
- **What is a model and why are they useful?**

Intro to Urban Economics

What is it?

A mashup between **geography** and **economics**.

Economics: Study of how people and firms allocate scarce resources.

- Main framework: utility & profit maximization

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We will also examine the efficacy of various **place - based policies**

- Minimum Wage
- Rent Control
- Land Use Restrictions

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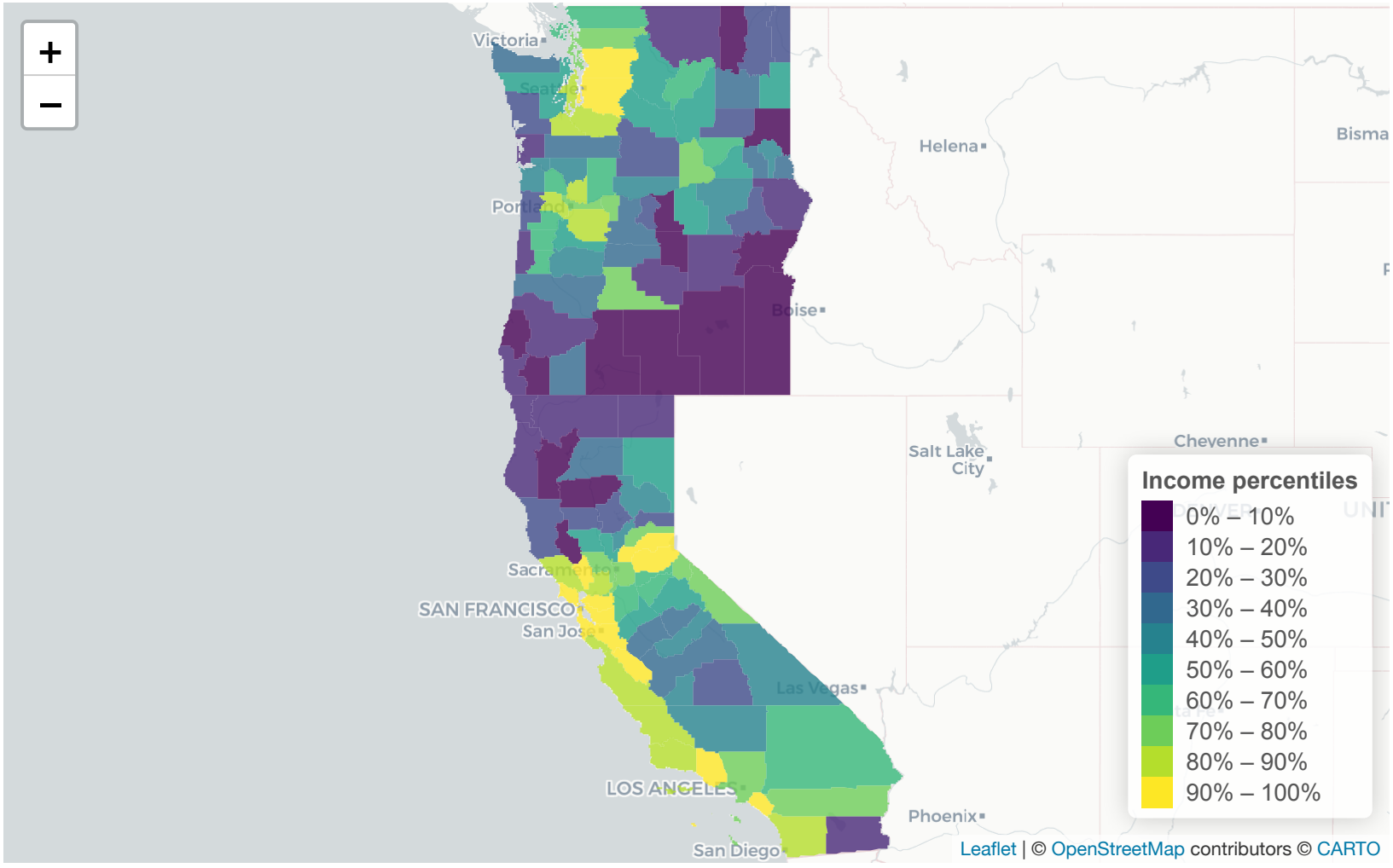
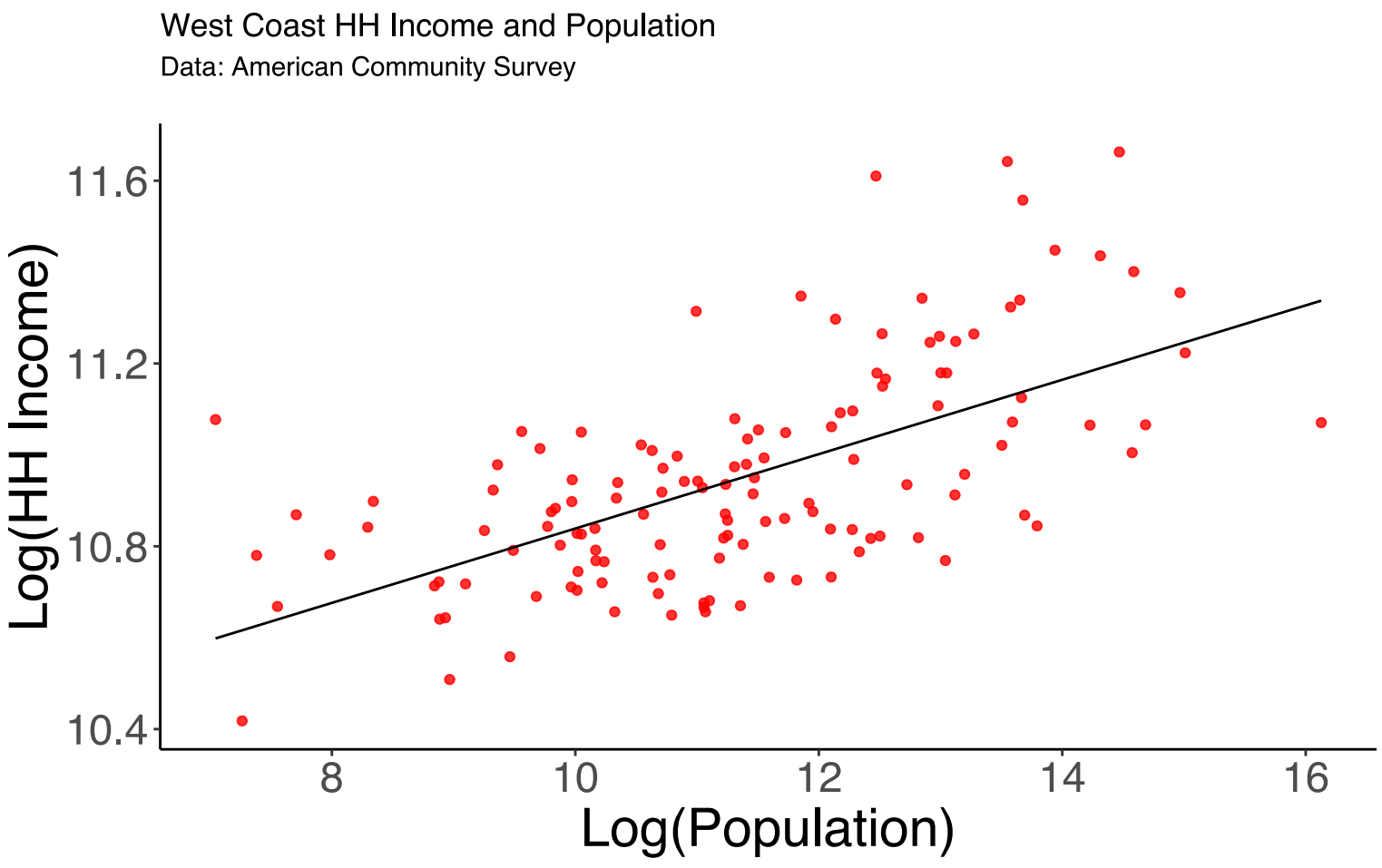
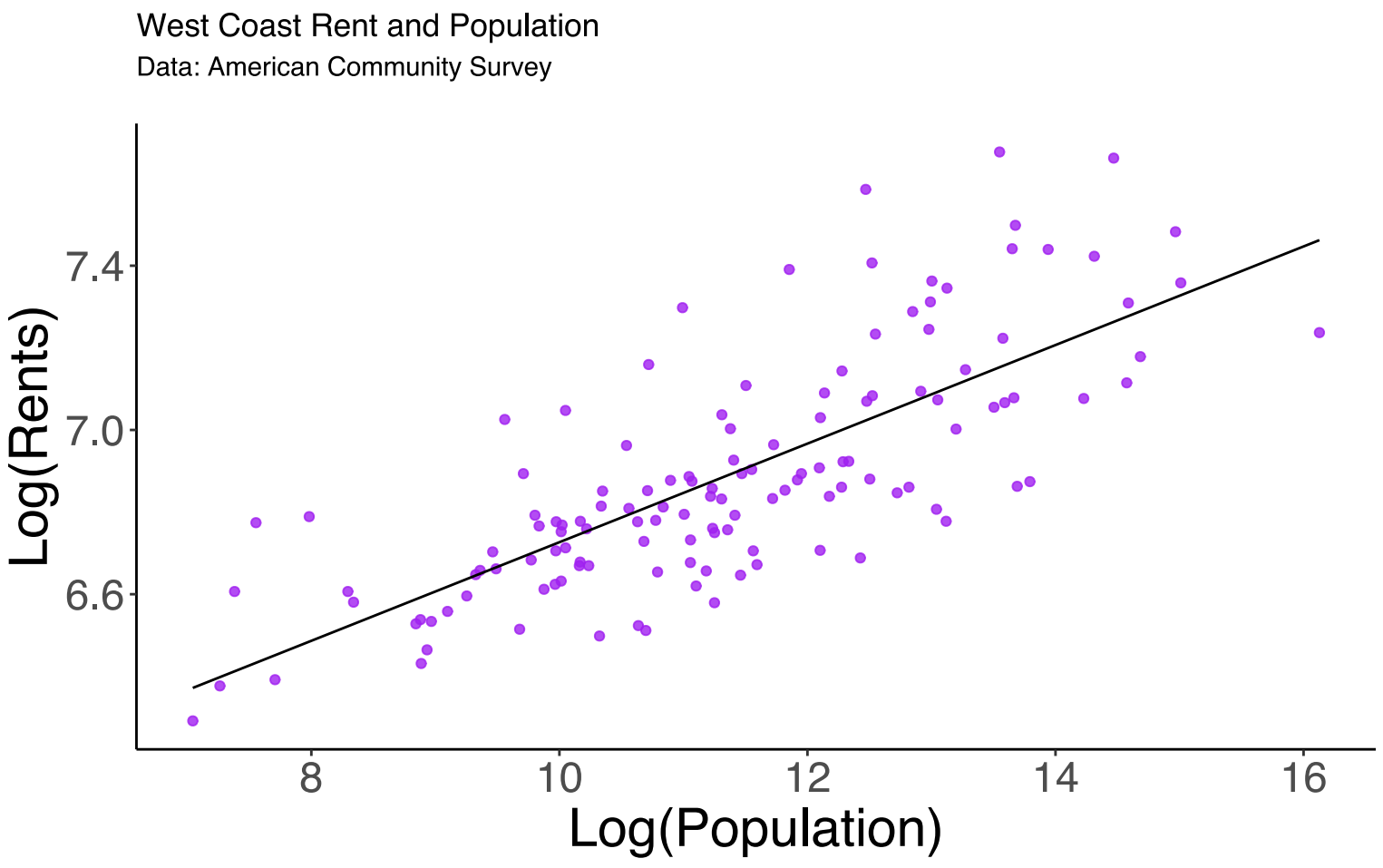
Wage Dispersion



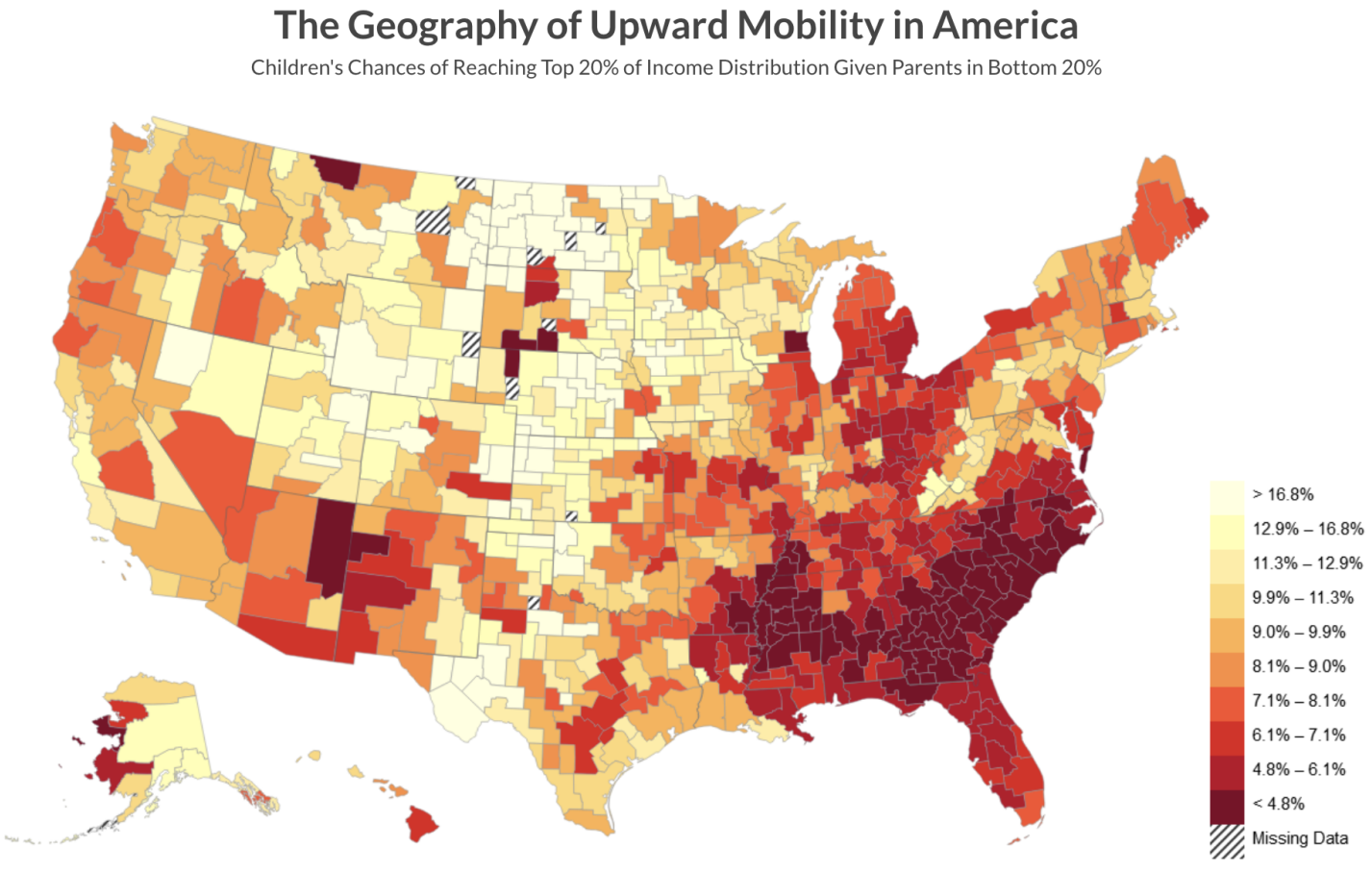
Income & Population



Rent and Population



Economic Oppurtunity



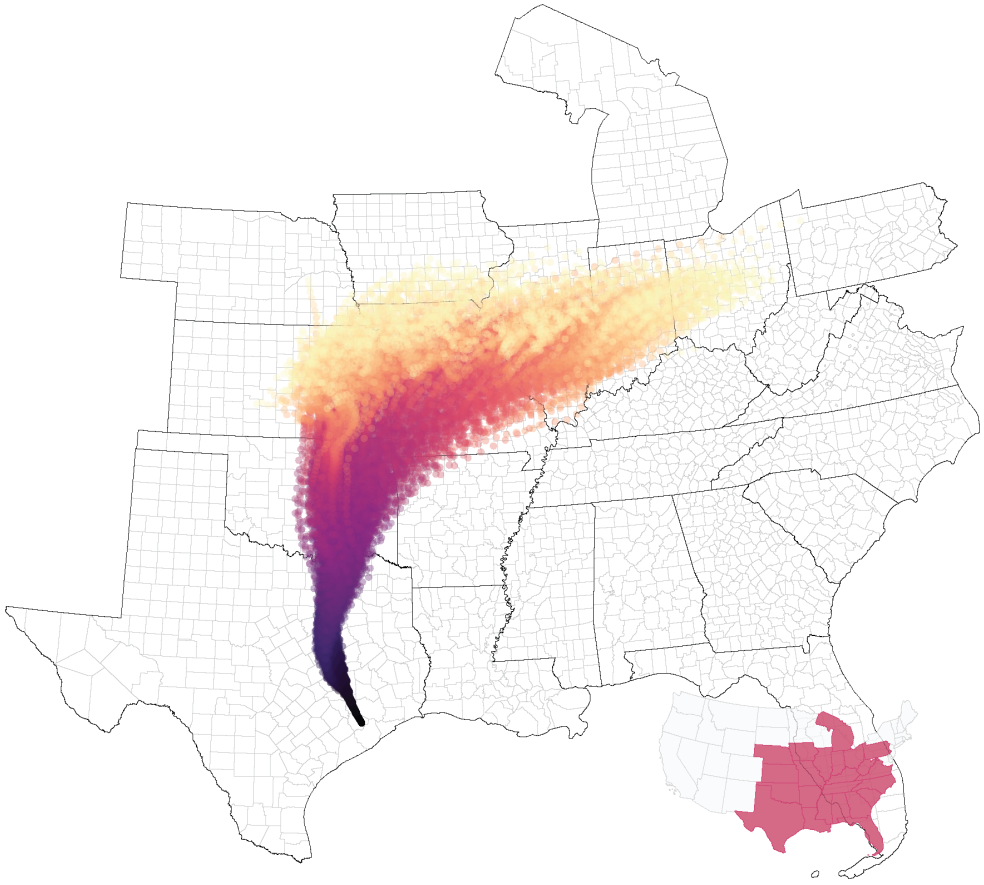
Source: The Equality of Oppurtunity Project

Carbon Emissions

CBSA	Rank	Emissions (1000 lbs)	Gas Emissions (1000 lbs)	Fuel Emissions (1000 lbs)	Electricity Use (MwH)	Electricity Conversion (1000 lbs/MwH)	Electricity Emissions (1000 lbs)
Lowest							
Honolulu, HI	1	9.65	0.30	0.07	6.10	1.52	9.29
Oxnard, CA	2	11.14	5.29	0.11	7.18	0.80	5.75
San Diego, CA	3	11.28	4.65	0.15	8.10	0.80	6.48
Los Angeles, CA	4	11.31	4.95	0.08	7.85	0.80	6.28
San Jose, CA	5	12.27	5.70	0.11	8.08	0.80	6.46
San Francisco, CA	6	12.50	5.94	0.13	8.04	0.80	6.43
Middle							
Austin, TX	33	20.96	3.87	0.13	16.71	1.01	16.96
Charlotte, NC-SC	34	21.05	4.91	0.24	15.36	1.04	15.90
Houston, TX	35	21.81	3.92	0.10	17.52	1.01	17.78
Virginia Beach, VA	36	21.98	4.51	0.43	16.46	1.04	17.04
Richmond, VA	37	22.08	4.39	0.69	16.41	1.04	16.99
Dallas, TX	38	22.33	3.89	0.13	18.04	1.01	18.31
Highest							
Tulsa, OK	65	27.61	7.54	0.16	15.67	1.27	19.92
Detroit, MI	66	27.99	14.97	0.28	11.53	1.11	12.75
Kansas City, MO-KS	67	28.90	8.77	0.18	15.69	1.27	19.95
Omaha, NE	68	29.96	13.02	0.26	13.66	1.22	16.68
Oklahoma City, OK	69	30.46	7.21	0.19	18.14	1.27	23.06
Memphis, TN-MS-AR	70	30.66	6.70	0.15	23.00	1.04	23.81

Source: Colas & Morehouse (2020)

Coal Based Particulate Emissions



The transport problem: Coal Plant 3470, simulated emissions path in January of 2005

Source: Morehouse & Rubin (2021) --- coming soon!

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- **MSA**: handy abbreviation for both **metropolitan** and **micropolitan** statistical area
- **Principal City**: the **largest municipality in an MSA**

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This model allows us to make predictions about prices and quantities (from the supply & demand side), *and* the **equilibrium** price and quantity

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    - Gives us the ability to **predict** the various aspects of the economy
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The ability of the model to **predict data** and **understand mechanisms** determines how useful it is

Models Part II

Did we make assumptions our supply/demand model? **Discuss**

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1. **Marginal values** are diminishing and **marginal costs** are increasing †
   - Generates downward demand and upward supply
2. Demand and Supply are **linear**
3. Demand and Supply are **deterministic**

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$$\begin{aligned} \text{Supply}: \quad & P(Q_s) = 10 + 5 * Q_s \\ \text{Demand}: \quad & P(Q_d) = 20 - 2 * Q_d \end{aligned}$$

1. **Marginal values** are diminishing and **marginal costs** are increasing †
    - Generates downward demand and upward supply
2. Demand and Supply are **linear**
3. Demand and Supply are **deterministic**

Are these reasonable? **Discuss**

†: Marginal = Change

Checklist

1. **Syllabus**: ✅
2. **Intro to Urban Economics**: ✅
    - **What is urban economics?**
    - **What is a city?**
    - **What is a model and why are they useful?**

Planning

Next Class:

- EC201 Review
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Thanks!

🔥 We survived our first day of class! 🔥

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