Note: Try to develop a working knowledge of italicized terms highlighted in black.

1. O’Sullivan Chapter 4: Where Do Firms Locate? (pp. 80-91)

Transport costs becoming less important to firm location decisions
Transport technology improving
Production technology requiring fewer inputs
Result: Switch to a local-input-oriented location decision
Anywhere in U.S. or offshore

State and local taxes and location decisions
Taxes paid by business
Ceteris paribus, high tax city will grow at a slower rate
Intra-metropolitan elasticity: -1.0 to -3.0
Inter-metropolitan elasticity: -0.10 to -0.60

Government services desired by business
Ceteris paribus, high expenditure city will grow at a slower rate
Exception: spending on redistribution
Result: subsidy and incentive programs
Tax abatement, IDBs, loans, site development
Efficacy?
“Bidding for business” and firm shopping

Stadiums and jobs
$200 to $300 million for 300 direct and indirect jobs
Local entertainment displacement effect
Does this rule out subsidy?
Other benefits

Case studies
Semiconductor industry
r/d, wafer prod., component assembly
Japanese auto firms
Agglomeration
Carpet manufacturing
Localization economies
Saturn plant
Lowest cost per auto before subsidies
Bidding war

Wage/Unionization
Wage elasticity of business activity -1.0
Unions raise wages but may increase productivity (small – influence)

2. Wassmer Chapter 13: Ohio Looks Hard at What’s Lost Through Business Subsidies

Value of business subsidies in a year
Purpose? (Who Benefits)
Costs? (Who Pays For)
How to evaluate if the granting is appropriate?
Political and institutional difficulties in asking such questions
Supply and demand motivations for incentive market
Destructive competition
   Is there a need to stop?
   How?
Further background next week

3. O’Sullivan Chapter 5: Market Areas and Central Place Theory

Interactions of cities in a region, driven by business market areas
Firm’s market area
   Underprice its firms
   Consider CDs sold at music store
   Assumptions
   Region is 60 miles long, 20 miles wide
   People spread out equally over region
   Travel cost is $0.50 per round-trip mile
   Cd’s sold for $8
   Net price shown in Figure 5.1
   Monopolist provision
   Demand falls off as net-price rises
   Firm’s costs follow regular curves
   Figure 5.2: choose production to max. economic profit
   Market is really monopolistically competitive
   CD sales distinguished by location
   Firms enter as long as + economic profit to be made
   Space themselves away from other sellers
   Figure 5.5: One possible outcome
   Based on demand for product and specific costs

Algebra of market area determination
Assume
   \( d = \text{per-capita demand} \)
   \( e = \text{population density} \)
   \( q = \text{output of typical store} \)
   \( M = \text{market area of firm (square miles)} \)
Then: \( M = \left[ \frac{q}{(d \times e)} \right] \)
\( 5 = \left[ \frac{1,000}{(4 \times 5)} \right] \)
M shrinks if \( d \) or \( e \) rises

Effect of increase in production scale economies
   Decrease price willing to sell CD’s
   \( d \) rises (smaller market area)
   \( q \) rises also (larger market area)

Effect of decrease in travel costs
   Decrease net price of CDs
   \( d \) rises (smaller market area)
q rises also (larger market area)
Parcel post in 1913
Effect of income
Uncertain
High-income city has higher d, but lower e
If income elasticity for land smaller than income elasticity for CD's
High income city has smaller market area
Demise of small stores in U.S. (q rose)
New marketing replaced merchant as “huckster”
Market areas and d (per capita demand)
Pizza and Tibetan restaurants

Central Place Theory
Number and size of cities in a region
Assume
Region’s population is 80,000, uniform density
No shopping externalities
Ubiquitous inputs
Uniform demand for each product
Different per capita demands and scale economies
Scale economies large relative to per capita demand
Requires 80,000 population
Jewelry provided by one store
Scale economies medium relative to per capita demand
Requires 20,000 population
CDs provided by four stores
Scale economies small relative to per capita demand
Requires 5,000 population
Pizzas provided by 16 stores
Figure 5.6: Region will have 11 cities
Urban hierarchy
8 small, 2 medium, and 1 large
Where does each get its goods?
Relaxing assumptions
CD type stores provide imperfect substitute goods
Shopping externalities reduce number of small cities
CD and Pizza type stores provide complimentary goods
Compromise in regard to ideal central place location
Eliminate need for small cities
What about resource-oriented firm?
Could disrupt urban hierarchy
Optimal location small city created through market orientation

Urban Giants
Table 5.5: Share of national population
NY, NY and elsewhere
Large economies of scale in trade activities
Greater country’s reliance on import/export, bigger city (but)
Worker movement to primary (P) or stay in secondary (S) city
Good: high nominal wages (due to lower transport costs to domestic
customers) and lower net price of goods in P
Bad: higher commuting costs in P
International trade introduced
Both goods less in P
Lower transport costs to domestic customers diminish
So balance may be tipped to S
Countries with liberal trade policies have less P
Also, country run by dictator have greater P
Forcefully take resources from S

4. Discussion

O’Sullivan (question 10, p. 89)
Immature firms are highly dependent on the suppliers of intermediate inputs for which face-to-face contact is important (button makers, business services), so they cluster to exploit scale economies in the provision of these inputs. Mature firms exploit their own scale economies, and are oriented to sources of inexpensive labor and land.

O’Sullivan (question 17, p. 118)
Many state capitals are located close to large cities (Sacramento is near San Francisco; Salem is near Portland; Olympia is near Seattle), so their residents travel to the larger city to buy certain goods and services. If capitals were located on the basis of central place theory, they would be farther from larger cities, so their residents would purchase more goods locally.

5. Homework Due the Start of Meeting 4

1) Read all of the material under meeting 4 in the syllabus schedule; come prepared to discuss. (Note changes to syllabus for next week and for October 16 onward.)
2) One sentence, typed question regarding material that you read for next meeting but do not understand.
3) Typed and double-spaced answers to discussion questions listed on syllabus for next meeting. These should be no longer than 2 pages long.