VALUES, ETHICS, AND SUSTAINABILITY

David Thompson: May 14–18, 2012

Faculty of Extension: EL 21

University of Alberta

April 30 – May 18, 2012

10:25 am – 11:35 am Monday-Friday

Location: Education South, Room 165

May 17: Sprawl Solutions

- Last class: to change behaviour, need to change prices.
- How much would prices need to change?
- Pricing instruments
  - Property tax changes
  - Development cost charge changes
  - User fee changes
- Regional dimension
- Reversing the harm – Retrofitting Suburbia
- Conclusions

How much would prices need to change?

- Answer: it depends on your goal…
- Potential goals:
  1. Balance the municipal books (eliminate subsidy)
  2. Address externalities
  3. Shift decisions on location of development

Goal 1. Balance the municipal books

- Goal is to eliminate subsidy. How much?
- Sprawl and infill development both require municipal infrastructure and services
- This costs money
  - Some of these costs are covered by developers, and passed on to buyers
  - Some are covered by the city, and passed on to taxpayers
  - What are the costs?

Costs covered by developers and buyers

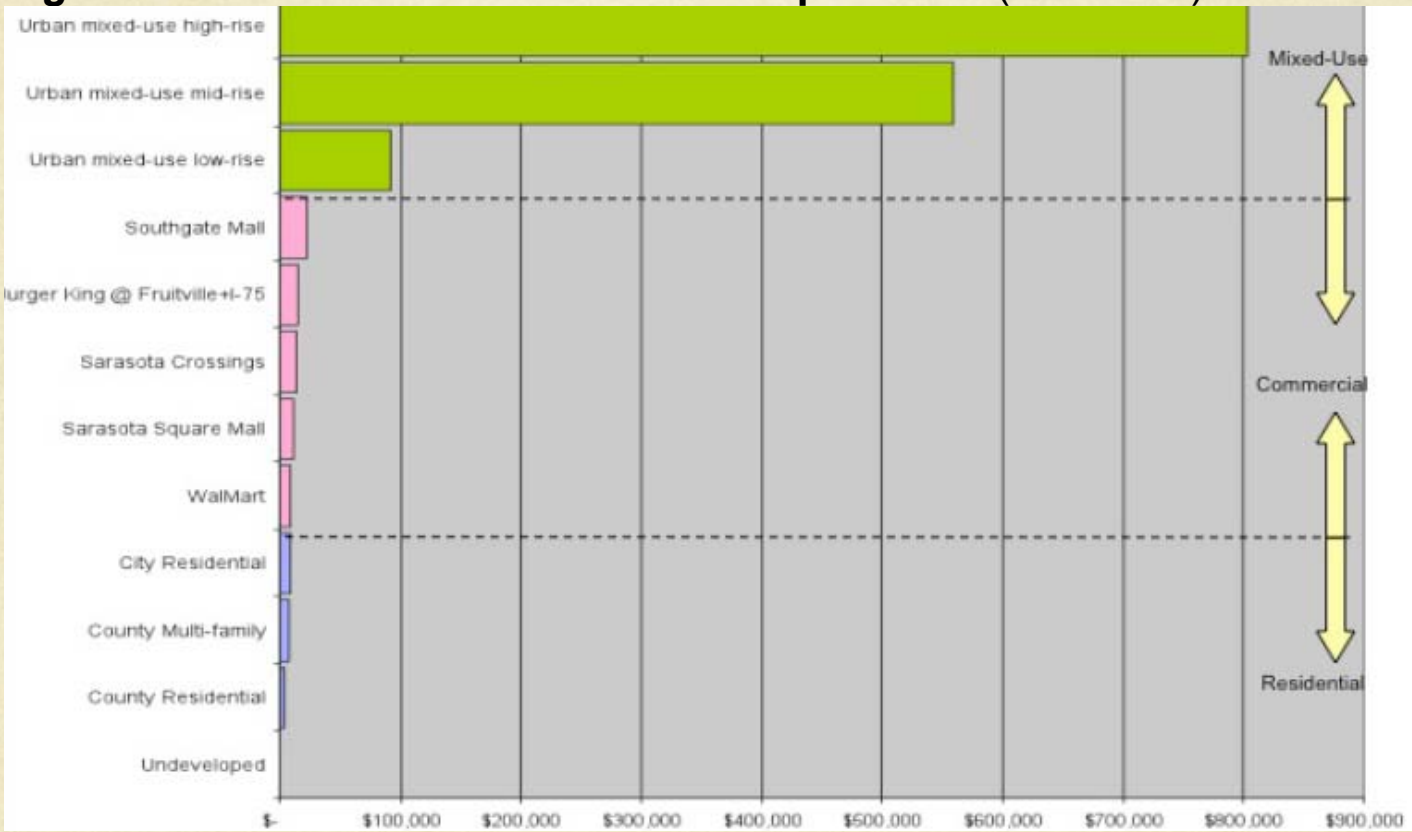
- Varies from city to city, province to province.
- Sewers, stormwater facilities, underground wiring, roads, walkways, streetlights, levelling and seeding of Municipal Reserve lands, watermains.
- Construction only (possibly plus 2 years)
  - not long-term maintenance, repair, refurbishment, replacement/renewal.

Costs covered by city and taxpayers

- Varies from city to city, province to province.
- Maintenance, repairs, renewal etc. of everything paid for by developers (forever)
- Also construction of major roads, major trunk sewers, fire stations, police stations, recreation and community centres, bus transit centres, parks, libraries
- Also “all operating and renewal costs for new neighbourhoods including transit, refuse collection, snow clearing, street cleaning, drainage, fire and police protection, libraries, and parks and recreation facilities.”
- Schools and education (through school board, provincial taxes)

The revenue side

Figure 3 **Tax Revenue Per Developed Acre** (PIP 2009)



- Source: VTPI

Development costs and revenues

- "The discussion around development in new areas has long included the question, 'do new neighbourhoods pay for themselves?' The answer is, 'only partially.'"

  - *Costs and Revenues for New Areas* (City of Edmonton, 2011)

- More succinctly, the answer is 'no.'

  - Dave

Net costs timeline

- Over the next 30 years, just 17 of more than 40 developing and future neighbourhoods will cost the city more than $500 million more than they provide in taxes, user fees and other revenues.
- After the first 30 years, the annual net cost goes up as aging infrastructure needs to be replaced. The following 30 years will cost us over $3 billion.

Expenses over 30 year period based on $1 revenue received

NHBD	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q
EXP/REV	1.28	0.33	1.39	1.38	1.43	1.54	1.25	1.26	2.12	1.22	1.26	1.31	1.20	1.81	1.33	1.53	1.55

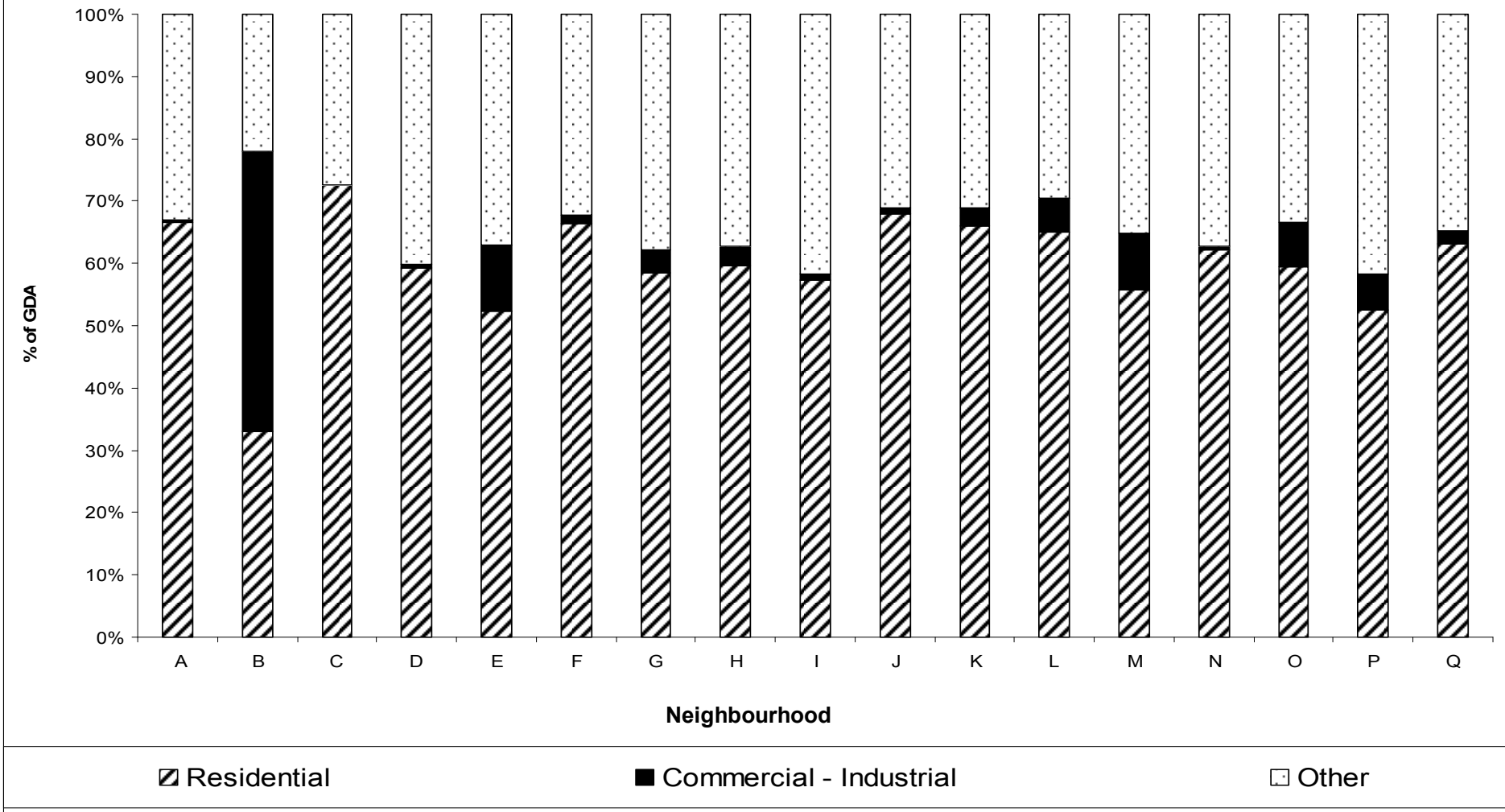
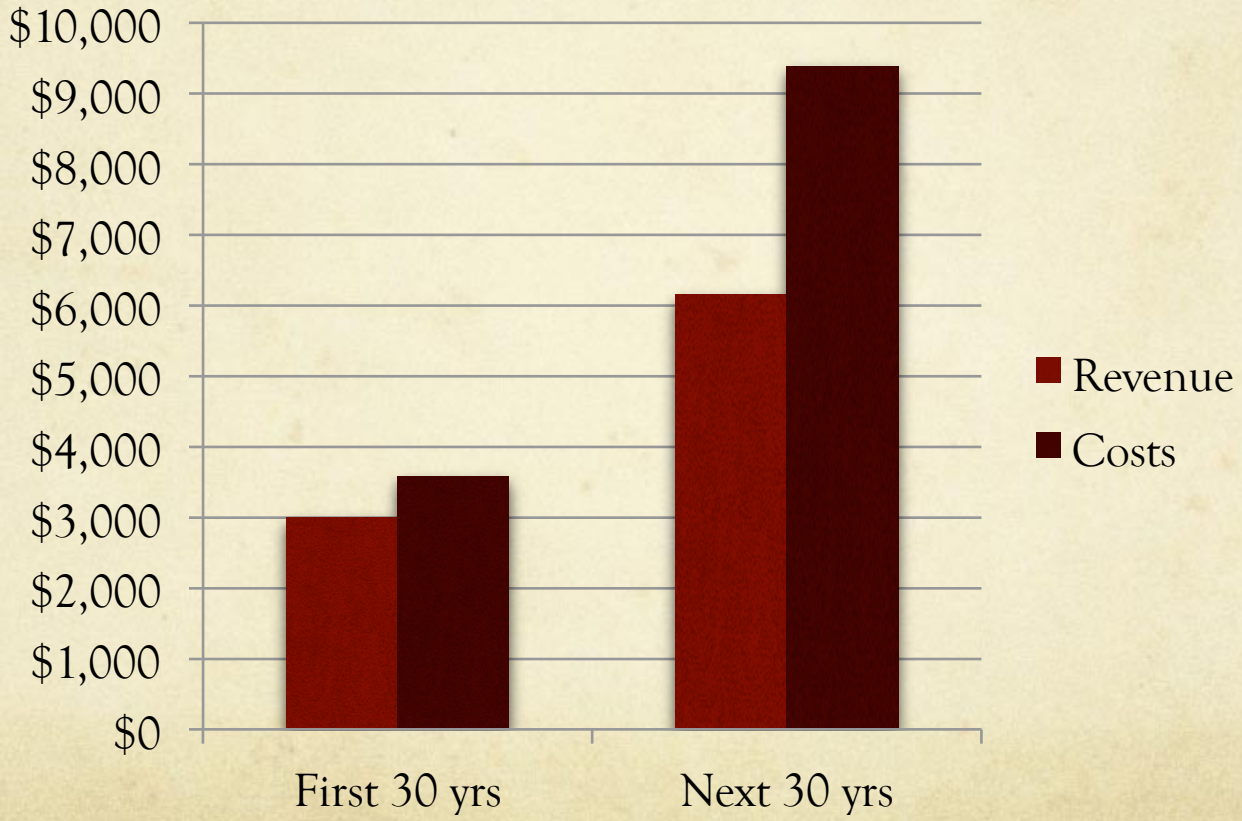


Table 1 **LAND USE BASED ON PERCENTAGE OF GROSS DEVELOPABLE AREA**

17 of over 40 new areas revenue and costs ($millions)



Subsidy per dwelling (rough)

- Assumptions:
  - roughly 146,000 new dwellings by 2040.
  - roughly 75% in new areas = 109,500.
- Subsidy roughly (order-of-magnitude)
  - $300/dwelling/year for first 30 years
  - $900/dwelling/year for next 30 years
  - So call it $600/year (order-of-magnitude)

Goal 2. Address Externalities

- Environmental costs of sprawl
  - Who pays?
- Health costs of sprawl
  - Who pays?
- Other costs of sprawl?
- Add externality to the financial subsidy

Goal 3. Change decisions

- How much would dwelling costs need to rise in sprawl areas / fall in established areas in order to change:
  - developer location decisions?
  - buyer location decisions?
- Answer: depends on city's price differential
  - Likely higher than (subsidy plus externality)
  - On the order of $X00,000

For now, take just the modest goal: eliminate subsidy

- $600/year (order-of-magnitude)
  - $300/dwelling/year for first 30 years
  - $900/dwelling/year for next 30 years

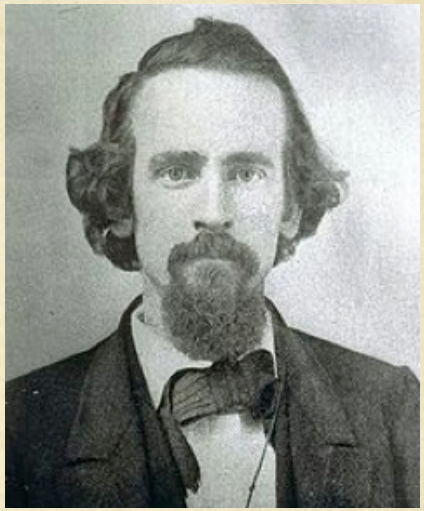
Pricing Instrument #1
Property taxes

- Property tax = assessed value x mill rate
- Edmonton's mill rate for multi-family dwellings is 15% higher than the rate for single- family dwellings
  - Encourages low density, incentive for sprawl
- Other portion is assessed value
  - Lower land values on fringes of city means lower taxes, i.e. incentive for sprawl

Property tax reform – mill rate

- Change the mill rate ratio:
  - Make it same for single family as multi-family?
  - Make it 15% higher for single family?
  - Grade the mill rate based on distance from city centre – to reflect costs?

Property tax reform – assessed value



- Change assessment
  - Base on linear frontage (proxy service cost)
    - Incentive for smaller lots, more density
- Land Value Taxation
  - Henry George 1839 – 1897
  - No tax on buildings
    - Convert parking lots to housing and workplaces – Pittsburg
    - Edmonton?
  - Risk – drive development toward fringes, where land is cheap?
    - Solution: lower taxes to maintain farms?

Property taxes

- Use mill rate or assessment adjustments or both
- Could increase property tax on sprawl-house by $600/year.
  - Will buyers fully incorporate that cost into decision to buy?
  - Will buyers downplay or ignore future costs, and just focus on sticker price?
- Not fully effective on purchase decision

Pricing Instrument #2 Development Cost Charges

- If want to collect equivalent of $600/year over 60 years, total is $36,000
  - Non-discounted (as per City figures – gives order of magnitude estimate)
  - Current DCCs are on the order of $25,000 (CMHC).
- Raise cost of sprawl-house by $36,000
  - (compared to $X00,000 to change decisions)
  - Some passed on to buyer, some absorbed by developer
- Is it enough to affect decisions?
  - Developer decision
  - Buyer decision

Pricing Instrument #3
User fees

- Waste disposal, water, sewage, electricity, etc.
- Often a flat rate – disregards consumption level or cost of consumption
  - Vary them depending on infrastructure, delivery and servicing costs?
  - Include environmental costs?
- Order of magnitude: a few hundred dollars a year
  - Enough to change decisions?

Regional dimension

- Policy competition
  - Race to the bottom
  - But… competing for *this* kind of growth = competing for debt.
- Solutions:
  - Regional coordination (voluntary arrangements) based on awareness of debt
  - Provincial legislation
  - Governance models

Reversing the harm

- It's not enough to stop the harm
  - Decades of further, locked-in damage if leave sprawl.
- Developing a vision of positive change to sprawl
  - Retrofitting Suburbia
  - Seeing suburbs as "first-generation construction"
  - http://www.ted.com/talks/ellen_dunham_jones_retrofitting_suburbia.html
  - 19 minutes (if tight on time, skip to 4:20, or 6:38)

Conclusions

- To change behaviour, need to change prices. How much?
- Depends on goal:
  - Eliminate subsidy / balance books?
    - $36,000
  - Address externalities (environment, health…)
    - $36,000 + X
  - Change decisions
    - $X00,000

Conclusions

- Pricing instruments
  - Property tax changes
  - Development cost charges
  - User fees
- Would they affect developer or buyer location decisions?
- Change trends, change built sprawl
- Tomorrow: engaging with the City

Tomorrow

- Special guest from GEA
- Less on economics (yay!)
- More on how citizens and organizations can engage to make change in the City
  - Focus on agriculture and food security (well received on Monday)