Impact Fees and Urban Sprawl

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A Brief Overview

- Attempts to curb Urban Sprawl:
  - Growth moratoria
  - Green-Belt programs
  - Permit caps
  - Equitability concerns

- Can Impact Fees be used in a similar nature?
  - Research Indicates; Yes!
Average Cost vs. Structured

- **Average Cost**
  - Single zone
  - Cost not associated with location
  - Incentives for urban sprawl generation

- **Structured**
  - Multiple zones
  - Each zone has a different fee rate
  - Costs appropriate for development location
Example

- Consider choice of location:
  - Saint John's County, FL
    - 1 zone
    - Single Fee: $9,686
  - Albuquerque, NM
    - 18 zones
    - Fee: From $1,370 to $6,912
    - Unique for size zone differentials

- Location, location, location
Why implement a structured fee program?

- Planned Growth Strategy:
  - “Encourage infill and redevelopment.”
- In place infrastructure development
  - Aim to use existing infrastructure
  - Rehabilitate and redevelop interior services
- Analysis for each type of fee per zone
  - Capital expenditures in each zone
Albuquerque's Program

- No prior impact fee program
- Implemented in July of 2005
  - Zone-based program
  - Phased in over three stages
    - 33% of final rates until 2006
    - 66% of final rates until 2007
    - 100% of final rates thereafter
  - Housing crisis response
    - 50% fee reduction as of October 2009
Zone-Based Program

- 4 Fee types:
  - Transportation
    - 8 zones ($0.00 - $2,918)
  - Recreation
    - 7 zones ($390 - $1,630)
  - Drainage
    - 5 zones ($0.00 - $2,810)
  - Public Safety
    - 2 zones ($207 - $276)
Impact Fee Structure

- Not strictly value-based
  - Drainage based on lot size
  - All other fees based on size grouping
    - 1,000-1,499 sqft.

- Three major aggregated zones
  - Based on growth patterns and city boundary
  - Differentiation between core and fringe locales
Impact Fee Structure

- **Core Zone:**
  - Zone 1 grouping
  - Maximum rate: $1,370

- **Inner (intermediate) Zone:**
  - Zone 2 grouping
  - Maximum rate: $5,537

- **Fringe Zone:**
  - Zone 3 grouping
  - Maximum Rate: $6,912
Share of Permits by Zone

Quarterly Permits by % of Total

- Fringe Zone Permits
- Interior Zone Permits
- Core Zone Permits

Year: 1990 to 2010
Albuquerque Data

- Interest Rates
- Population
- Unemployment
- Residential Construction PPI
- Building Permits
  - 21 years
    - 16 years prior to program, 5 years post program
    - Average of 538 permits per year
Analysis

- Use of FHFA housing price index
  - Albuquerque Metropolitan Area
  - Controlled for housing crisis effects
- 3 group panel data model
  - Analysis focused on concurrent determination
  - 3 Equation system
    - Used 3 month moving averages for most controls
    - Used growth rates for interest rates
Total Permits

Total Permits by Quarter
Results

- Reduction in permitting
  - Drop in permitting dependent upon zone
    - Larger effect in fringe zone
    - Smaller effect in core zone
    - Effects differ based on fee levels as well as zone characteristics

- Insignificant effect for Intermediate zone
  - Possible redirection of fringe to interior zones
  - Overall share of permits affected
Conclusion

- Impact fees reduce permitting on average
- Impact fees may produce asymmetric effects
- Use of structured system gives some control over infill redirection
- Emphasis on pre-existing service provision
- More equitable financing vs. Average Cost