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Can Development Impact Fees Reduce Urban Sprawl?

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Urban sprawl has long worried officials and citizens. Residents in sprawling cities – where roads, homes, and businesses are spread out around a bigger and bigger perimeter – often have to deal with higher pollution, longer commute times, and growing costs to build and maintain roads, utilities, and other kinds of basic infrastructure. So far, however, many of the policies local governments have adopted to try to deal with urban sprawl have ended up generating unintended and unwanted consequences. The key question is whether there are really effective and economically satisfactory ways to limit urban sprawl.

Our research looks closely at one policy approach – the imposition of "impact fees" on urban construction, including one variant that sets fees at different levels in various areas of the city in order to encourage more compact development. Impact fees have been used for several decades, and extensively applied in states such as Florida and California. "Development charges" is another name for this type of fee, which are collected only once on newly constructed buildings. Normally, the revenues collected are strictly controlled and can only be used for the construction of new infrastructure or expansion of existing facilities in the same location from which the fees were collected.

What is the rationale for using such impact or development fees instead of bonds or other forms of public revenue? When bond issues pass, they are almost always paid for through an increase in property or sales taxes that applies to most – or all – residents of the city. Everyone has to pay even if only some citizens need or benefit from the new expenditures. For example, expanding highways at the far edges of a city provides less benefit to people living toward the center, yet in traditional modes of public finance those center-dwellers will have to pay the same amount as residents at the edge to cover the tax increase to pay off bonds.

Over time, the logic of this process is clear. In cities where sprawling growth is possible, a sizable chunk of new infrastructure expenditures will be spent at the ever more far-flung urban fringe. This means, in essence, that residents of inner city areas are subsidizing the expansion of infrastructure in increasingly distant locations – and in the process, furthering urban sprawl with whatever problematic consequences it may bring for everyone. Obviously, when urban authorities use impact fees instead of taxes for bond issues, they redress somewhat this bias toward expansion subsidized by inner-urban residents.

Studying the Effects of Zone-Impact Fees in Albuquerque

Our research takes a close look at a specific kind of "zone-impact fee program" installed in Albuquerque, New Mexico in July of 2005. Most impact fees involve a set rate collected on new construction throughout the urban area, but Albuquerque's program sets different fee rates for various regions of the city. Inner and downtown areas of the city are charged lower impact fees because new infrastructure facilities and services

are expected to cost less on those areas; impact fees are set at higher rates at the urban fringe, because large expansions and construction of new infrastructure tends to be very expensive there. This variability in the rates charged for Albuquerque's impact fees provides us, as researchers, with a special opportunity to analyze how the introduction of the variable fees influenced rates of urban construction in different areas.

Our study asked what effect the variable Albuquerque fees had on issues of building permits for construction planned in various parts of the metropolitan area – and we especially probed to discover the impact on residential density. Did the fees encourage more building toward the center rather than at the edges? Our findings reveal that, in fact, the zone-based impact fee program in Albuquerque did have a significant effect on the location of new residential construction. For each single-dollar worth of average increase in impact fees, the effect on building permit rates was twice as large in the fringe areas of the city, where the fee rates were greater, than in the core areas of the city, where the fees were deliberately set at lower rates. Given the larger fee amounts levied at the urban fringe, the effect we found translated into a nearly ten to one impact on construction not actually carried through after permits were issued. For every permit lost in the core, ten were lost at the urban fringe.

However, not all the news from Albuquerque is good from the perspective of people who want to reduce urban sprawl. Our findings show that the zone-impact program may have redirected growth to even *more remote locations* beyond the formal boundary of the city of Albuquerque. During months when Albuquerque's outer-zone fees were higher, permits for new construction increased in neighboring Rio Rancho.

Are Impact Fees a Good Idea?

Should cities adopt zone-impact fees or other kinds of impact fees? Choices must be carefully made. Our research suggests that impact fees will, on average, reduce construction rates. In consequence, they may not make sense for locations struggling with unwanted low growth rates. For higher-growth areas, using impact fees instead of bonds may bring important benefits.

- Impact fees tend to be more equitable because they are borne by new construction and help to target the costs of new or expanded infrastructure onto residents most likely to use it.

- A properly constructed zone-based system of impact fees can limit urban sprawl. As our research shows, such a program may discourage construction at the urban fringe and encourage building in established neighborhoods or redevelopment of the city's interior.

- But regional planning is important. To avoid having unwanted sprawl simply skip over municipal boundaries, cities in a region can coordinate and integrate their use of impact fees, instead of proceeding in isolation from one another.

Overall, we hope our findings will encourage citizens and officials to think carefully about the costs of infrastructure to support construction in different areas of their communities. When used thoughtfully, impact fees may well constitute a useful tool for shaping urban growth in efficient and environmentally sustainable ways.

Read more in Trey L. Trosper, Gregory S. Burge, Arthur C. Nelson, James C. Nicholas, and Julian C. Juergensmeyer, "Can Development Impact Fees Help Mitigate Urban Sprawl?" *Journal of the American Planning Association* (2013).