

**The Economic Impact of Accelerating Permit Processes
on Local Development and Government Revenues**

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Delays in local permit processes have been costly and frustrating for architects, engineers, developers, general contractors, local governments, and building occupants for many years. Numerous budgetary and institutional constraints have limited the ability of government officials to adopt meaningful reforms. In the interest of addressing some of these concerns, the American Institute of Architects funded this ground-breaking report by PricewaterhouseCoopers LLP to study the relationship between permit processes, local economic activity, and government revenues. The study finds opportunities to increase local development activity and government revenues through the implementation of more efficient permit processes.

While any changes must be made at the local level, the potential benefit for the nation is substantial. The Bureau of Economic Analysis in the Department of Commerce reports that in 2004, new investment in privately-owned structures totaled \$960 billion, or 8 percent of GDP. Of this amount, \$295 billion was for nonresidential structures and \$665 billion was for residential structures. Total new investment in structures grew by 14 percent in 2004, with nonresidential investment growing by 7 percent and residential investment growing by 18 percent. Even modest efficiency gains affecting new investment in structures will contribute to economic growth.

This study examines the economic development and government revenue implications of an acceleration in permit processes. Because such opportunities will vary from locality to locality, local government officials, in cooperation with local business, are best positioned to determine the details of how such changes may be accomplished. We note that such changes have been successfully implemented in both large and small localities.

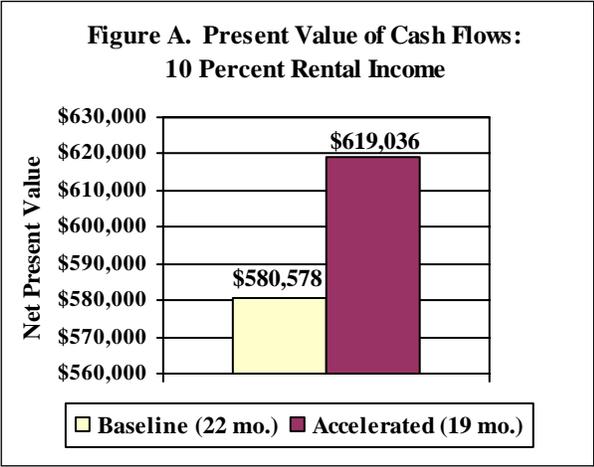
The findings are based on PricewaterhouseCoopers' Permit Acceleration Calculator. This calculator compares cash flows and rates of return under a "baseline" case that reflects the existing permitting system to an "accelerated" alternative case that assumes a 3-month reduction in total development time. This acceleration leads to improved rates of return for individual projects and increased local tax collections. Increased tax collections can provide a revenue source that can help finance the costs of the systems and procedural improvements needed to accelerate permit approval.

Consistent and efficient regulatory processes will encourage new development by reducing the direct costs associated with permit processes and the indirect costs associated with delays that affect all subsequent scheduling. Because these indirect costs are believed to be the largest, the study focuses on measuring their importance.

- 1. Reduced permitting times will encourage economic development.** Permitting delays increase costs and reduce returns on investment. When permitting delays are a routine and expected part of doing business within a community, some investors will look elsewhere to develop their projects. Conversely, if a

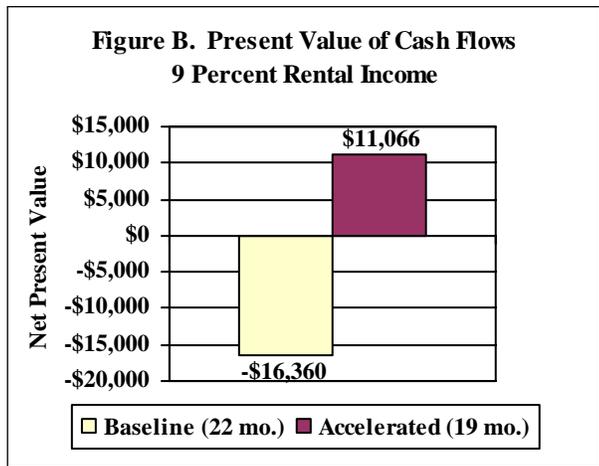
community is known to have efficient permitting systems, investors will be encouraged and more local economic development will follow.

We analyze the effect of these changes using a representative investment. Figure A illustrates how accelerating permit processes can affect the attractiveness of an investment. Under the baseline case, a \$7.5 million facility takes 22 months to complete, at which point the building would begin generating rental income (assumed to be 10 percent annually of the cost of the building). Over the assumed 15-year holding period of the investment and taking into account the time value of money, total revenues exceeds total outlays (i.e., the present value of cash flow is positive) by \$580,578.



Alternatively, if permit processes could be accelerated so that the building takes 19 rather than 22 months to complete, cash flow would increase to \$619,036. The investment becomes more attractive, and more likely to occur, under a more efficient permitting process.

Under the example presented in Figure A, an investor earns a positive return under either alternative. However, under certain assumptions, the efficiency of permitting processes will determine whether the investor makes or loses money on a project. If annual rents were 9 percent rather than 10 percent of the building value, the present value of cash flow will be a negative \$16,360 (see Figure B). On that basis, an investor should not finance the project because other



investments are more economically attractive. If permitting processes are accelerated and the total project time is reduced to 19 months, the project generates a positive cash flow of \$11,066.

Very simply, these examples assume that the investment starts generating cash flows three months earlier than otherwise. By providing a more rapid return on investment, the building

becomes a more attractive opportunity for the investor and should be built. As this example illustrates, accelerating permit processes increases the financial return on projects and encourages new investment.

Based on PricewaterhouseCoopers' calculations for this example, the internal rate of return would increase by around 0.6 percent as a result of a 3-month reduction in development time. If greater permitting efficiency similarly benefits other development, the increased return on investment should raise the overall level of development activity.

- 2. Permitting delays raise costs for all tenants.** When permitting delays are the norm in a community, the increased costs and delayed returns on investment will be built into rents paid by all tenants. That is, the demand for new space in the locality must be sufficiently high so that rents will be bid up to provide an adequate return to the investor. Without these higher expected rents, buildings will not be constructed. These higher rents will affect not only tenants of the new buildings, but also the rents paid on existing buildings.

Basic supply and demand principles are at work. If permitting delays discourage investment, there will be fewer buildings than otherwise and a tighter real estate market. As a result, rents will be higher. These higher rents must be sufficient to overcome the costs of delays for those buildings that are constructed.

By limiting development, permitting delays increase the cost to current users of the existing building stock. Permitting delays effectively limit the supply of new developments; new development would lower the average price to users. Various economic studies have confirmed that onerous permit processes drive up the cost of the building stock.¹

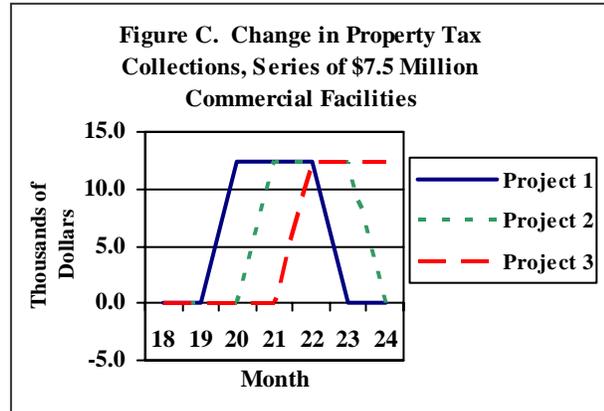
These higher rents will affect the cost of doing business in a community and will tend to push economic activity to other communities. This includes not only development activity, but also all tenants, including residential, who must pay these higher rents.

- 3. Accelerating permit processes can permanently increase local government revenues.** For a single project, accelerating permit processes by 3 months will temporarily accelerate property tax collections. That is, after the first three months on the tax rolls, property taxes for that project are at the same level as they would have been. Once the new processes are implemented, all subsequent projects will benefit. As a result, for a series of projects beginning after the date of implementation these increased property tax collections, that are temporary for individual projects, accumulate and result in permanent increases in government tax revenues. Figure C illustrates how this works using three projects that begin

¹ See, for instance Edward Glaeser, Joseph Gyourko, and Raven Saks, "Why is Manhattan so Expensive? Regulation and the Rise in House Prices," NBER Working Paper 10124, November 2003.

at one month intervals following the date on which process improvements first are implemented.

The acceleration in permit processes for Project 1 causes property taxes to be collected three months earlier than the baseline case. Thus, collections jump in month 20 (the first month of operation under the accelerated case) rather than in month 23 as under the baseline case.



From that month on, property taxes are unchanged. This change effectively becomes permanent as property taxes are collected three months earlier on Project 2 in months 21 through 23, on Project 3 in months 22 through 24, and on each subsequent project. That is, a permanent acceleration in permitting times results in a permanent increase in property tax collections.²

Once improvements are made in permit processes, a projection of projects initiated monthly over the next 5 years, shows that property taxes on the new development increase by 16.5 percent. This effect occurs before taking into account any increase in overall building activity and solely represents timing changes.

While achieving a reduction in permitting times is not costless (i.e., it may require one-time costs for implementing systems changes and potentially ongoing costs for the hiring of additional staff), these changes have the potential to be self-financing. The additional tax collections from more efficient permit processes could offset the investment made to achieve the improvements.

- 4. With competition between jurisdictions for new development dollars, more efficient permit processes can attract investment from other areas.** Local governments compete with one another for new developments. In addition to inducements such as preferential tax rates or regulatory relief, permit processes are a tool that localities can use to attract new investment. A municipality with efficient and predictable permit processes will attract investors because the risk of scheduling delays and cost overruns are reduced. All else equal, investment dollars will be attracted to these municipalities.

A jurisdiction with onerous or uncertain permit processes may not be aware of missed opportunities. Few notice the buildings not built, the jobs not present, or the local tax revenues not received or delayed. In most cases, these consequences are impossible to observe directly because the lack of a viable return on

² Other taxes and fees imposed by a jurisdiction not estimated in the calculator also may increase in the same way as property tax collections.

investment in a locality results in opportunities never being identified. Other localities with more efficient regulatory processes are the beneficiaries.

- 5. Acceleration of construction industry spending has broader economic consequences.** Local governments should consider the full economic impact of increased development. Construction-related materials and services will be purchased from local suppliers, local jobs will be created, these workers will spend the income they earn at local establishments yielding not only additional income for the community but also tax revenues, and local developers will reinvest earnings in more local development. Based on economic multipliers derived from U.S. Department of Commerce data, we estimate that for every 10 workers employed on a new project, there will be an additional 8 local jobs from these auxiliary effects.³ Similarly, for every \$100 in wages paid to construction workers, another \$80 in wages is paid to other local workers. Accelerating permit processes also would accelerate these indirect economic effects. Thus, improved permit processes can result both in direct and indirect local benefits.

In conclusion, improvements in permit processes can help a community promote economic development, lower business costs, and create jobs both within the construction sector and throughout the local economy. Increased tax collections can provide a revenue source that can help finance the costs of the systems and procedural improvements needed to accelerate permit approval.

³ Economic multipliers come from the IMPLAN economic model, which is maintained by the Minnesota IMPLAN Group.