Section 6: Costs and Timing of Private Land Conservation v. Public Land Use Planning and Regulation

6.1: Background

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Background

A number of tools—some via regulation others through private acquisition—are used at the local and regional scale for conserving land, biodiversity, water, and other resources. The application of these tools is often not systematic, begging the question of if and how these tools might support and, in some cases, undermine, each other. While there are a number of individual examples, no replicable formula seems to exist for calculating the costs and benefits of using each of these tools, making comparisons difficult, ad hoc, and largely dependent on local contextual factors (e.g., the development pressures).

That said, a number of resources do exist to help us understand how the costs and timing of applying some of these tools purposefully may increase social welfare and decrease overall costs of conservation.

Local governments, which face the rigmarole of public hearings, notices, and other state and federal provisions, are generally considered slower than the private sector as a means of conserving land. And, without a sense of threat or immediacy, there may not be the needed momentum to make headway in the public arena. Land trusts tend to have fewer parties at the table to attend to and do not face the same public process that local governments do. Yet, when a land trust relies on local government for funding or faces intractable landowners, this nimbleness may be substantially diminished.

Regarding costs, regulation is often considered a less expensive (and less permanent) alternative than acquisition. However, when governments find themselves compensating property owners and entangled in lawsuits, this convention becomes blurred.
Costs of Private Land Conservation

The costs for private land conservation are typically conceived as two categories: the acquisition costs (which include transaction costs) and the stewardship costs. As land is comprised of a bundle of rights, the acquisition may take a variety of forms, from in-fees ownership to acquisition of access, development, or mineral rights.

Acquisition Costs

In cases where land or development rights are not fully donated, acquisition costs may very well make up the lion’s share of the cost. Over the next thirty years, the least costly option for protecting 22% of the continental lands of the US (approximately 411 million acres) would be under a land rentals and leases scenario (Casey, McMurray, Kroeger, Michalack, and Manalo 2008). The undiscounted cost of this option would be $412 billion. Alternatively, fee simple purchases and associated management costs over the given time period would be nearly four times the former scenario. Yet, there is not presently enough conservation money for either of these options.

Transaction Costs

Transaction costs for purchasing or accepting donations of land or easements include paying attorneys, surveyors, staff members, and other experts for activities like baseline documentations, title searches, surveys, easement negotiations, appraisals, and recording the deed at a county office. For land trusts that are not all-volunteer organizations, paying for the staff and overhead involved in buying the land is another substantial cost. The mid-Atlantic region of the Trust for Public Land (TPL) studied its transaction costs and estimated it as a minimum of 10% of the cost of the land they were buying.

Stewardship and Enforcement

For conservation easements, stewardship includes the costs of managing, monitoring, and enforcing property rights or contracts. The stewardship costs may include paying consultants and staff members to prepare written reports, walk the property, take onsite and aerial photographs, provide narrative descriptions, and take vegetation measurements. For properties owned in fee, stewardship may involve these as well as larger capital costs of restoring land, improving it (e.g., creating trails for public access), and paying permanent staff to conduct regular management. Enforcement costs might include taking steps to prevent or mitigate trespassing and paying attorneys, mediators, and staff members to lead or participate in dispute resolution, attend court, or work with the landowner to halt violations.

Factors influencing the enforcement costs for conservation easements include:

Example of New Jersey Highlands:
Total acquisition costs for priority-listed agricultural and conservation lands (162,557 acres) is approximately $1.3 billion (Highlands Council, 2008).
• Whether the conservation easement or contract is clear and simple enough to be easily enforced in court

• The size of the parcel (there are fixed costs like traveling to a property that are irrespective of acreage, but others like walking the boundaries are incremental)

• Easement purposes (those allowing uses like a limited subdivision or mineral extraction will have costlier monitoring; those protecting wildlife habitat over open space will have restoration costs and often more complicated easements that are more easily and often violated)

• The resources and commitment of the violating landowner

Much like for any business, high costs may limit the amount of services that the land trust can afford to provide. In fact, conservation easements were developed in part to reduce the upfront costs by acquiring only the most relevant rights (e.g., the right to develop). With limited financial resources, land trusts engaging in private land conservation must consider which property rights to purchase. After discussing the costs and tradeoffs to purchasing an easement versus in fee title, Parker (2002) concludes that easements are more cost-effective than fee-simple when preserving large parcels of open space on working lands, and potentially less so on smaller, more actively managed lands.

These costs may be covered by a number of pots of money, including tax benefits (e.g., state income credits), individual giving (e.g., capital campaigns), institutional grants (e.g., state and local), fees-for-service (e.g., sale of ecosystem services), debt (e.g., state revolving loan funds), credit against income taxes due (e.g., new market tax credits), and equity (e.g., private Timberland Investment Management Organizations and Real Estate Investment Trusts)—all of which differ in complexity, risks, and returns. Still, as Story Clark noted: “At present, there is simply not enough monetary return on most conservation transactions to attract private investment and thus bring new money to the market” (Coady, 2007, p.2). While commercial banks show up from time-to-time in land deals, it is usually based on a strong personal relationship and clear collateral (Coady, 2007).

On its website, the Palmer Land Trust (PLT) of southeastern Colorado provides landowners a breakdown of hypothetical costs associated with granting a conservation easement. These include:
### Palmer Land Trust Conservation Easement Cost Estimates

<table>
<thead>
<tr>
<th>Items or Services</th>
<th>Cost</th>
<th>Rationale</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Counsel</td>
<td>$2,000-$10,000</td>
<td>Highly recommended</td>
</tr>
<tr>
<td>Financial Advisor</td>
<td>Cost varies widely</td>
<td>Tax incentives justify the expense</td>
</tr>
<tr>
<td>Baseline Inventory</td>
<td>$2,000-$4,000</td>
<td>Baseline documentation required</td>
</tr>
<tr>
<td>Title Commitment &amp; Insurance</td>
<td>$600-$1,500</td>
<td>Verify ownership and identify exceptions to title</td>
</tr>
<tr>
<td>Mineral Report</td>
<td>$0-$1,500</td>
<td>IRS requires for split estates</td>
</tr>
<tr>
<td>Appraisal</td>
<td>$6,000-$10,000</td>
<td>Required to claim federal and state income tax benefits for gift and to determine value of easement</td>
</tr>
<tr>
<td>Record Conservation Easement</td>
<td>$75-$100</td>
<td>Must be recorded in county where located</td>
</tr>
<tr>
<td>Palmer Land Trust Administrative Fee</td>
<td>$5,000</td>
<td>For portion of legal review expenses</td>
</tr>
<tr>
<td>Contribute to Easement Stewardship Fund</td>
<td>$15,000</td>
<td>Required by IRS</td>
</tr>
</tbody>
</table>


Other costs not accounted for in tabulations like these include the opportunity cost and expenses taken on by taxpayers. When conservation easements are acquired at discount through a subsidized charitable donation, public money is either expended or foregone as the tax subsidy “impose[s] financial losses and opportunity costs on government and conferring financial gains on landowners” (Echeverria and Pidot, 2009, p. 10870).

### Costs of Public Land Use Planning and Regulation

Much like land trusts, local governments have an array of conservation tools to choose from, each of which has its own costs. While there is debate among academics about how to quantify the transaction costs of public land use policy, we can begin to understand the various costs of developing, implementing, and enforcing plans and regulations from several examples.

#### Comprehensive Plans

Comprehensive plans typically include “maps, plats, charts, descriptive materials, and planning policies which will form the basis of the implementing tools of zoning and subdivision regulations, official maps for streets, parks, drainage, and a long term financial program” (Freilich, 1971, p. 69).

When budgeting for the planning process, local governments will consider the level of inclusivity, the number of special and technical reports (e.g., traffic and transportation analysis), as well as publicity and publication costs. While consultants
for towns or townships may range from $25,000 to $50,000, Purdue University Extension (2005) suggests building in 10-20% extra for unexpected costs like additional studies. In Tulsa, Oklahoma, the Comprehensive Plan Process Task Force estimated updates to the Comprehensive Plan to cost between $1 million – $2.5 million over the course of two-to five budget years (CPPTF, n.d). A survey conducted by the Task Force indicated that the costs in other cities range from several hundred thousand dollars to several million (ibid).

**Traditional Land Use Regulation**

For local governments adopting or revising zoning ordinances, much like with comprehensive plans, there are costs for staff and overhead involved to see the public process through. But, unlike comprehensive plans, there are also the costs of enforcement. While regulation is typically considered a less expensive option than acquisition, a number of additional costs, like compensating landowners for depreciated property values or court fees from defending regulations, may complicate this outlook. Additionally, as zoning may not protect all areas (e.g., incorporated areas of a county), additional costs of acquiring priority lands left unprotected by zoning must be accounted for.

In Flathead County, Montana, after a several-year lawsuit, the county recently settled to pay a developer $1 million in cash and to build and pay for roads and highway turn lanes (an additional $2 million) for the developer’s subdivision that the county had formerly denied (Hintze, 2010).

The initial period following the adoption of zoning may include complaints and lawsuits, with claims that regulations either favor some landowners over others, or that a takings violation had occurred without just compensation. In states like Oregon, where citizen initiatives may be placed on the ballot, Measure 37 was enacted after a citizen approval of 61%, granting land owners the right to compensation if, after taking ownership of a property, “the state or local government enact[ed] or applie[d] a land use regulation restricting the property’s use, thus reducing its fair market value.” (Carter, 2008, p. 150). Unlike other property rights compensation statutes, Measure 37 had a retroactive application. While the bill was later deemed unconstitutional and compensations not granted, over 7500 claims, covering 750,000 acres and exceeding $20 billion, were made (Carter, 2008).

**Transfer of Development Rights**

The idea of transfer of development rights (TDR) has been around since the early 20th century, when New York City passed a zoning ordinance that allowed landowners to sell unused air rights to adjacent lot owners, who could then exceed height and setback requirements. A TDR program

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**Example of New Jersey Highlands**

Initial capitalization of TDR Bank: $50 million (approximately $10 million per year for the first five years of the program) (Highlands Council, 2008).
requires that a local government “oversee (or contract out oversight of) the market; track and defend deed restrictions; and assist in proper preparation of easement documents” (Hanly-Forde, Homsy, Lieberknecht, and Stone, n.d.). TDR programs can potentially mitigate a number of public costs (e.g., by preventing loss of farmland, reducing sprawl, preserving environmental quality, and reducing community service and infrastructure costs). The administrative costs, however, tend to be higher than those of other traditional forms of zoning, as markets must be formed and monitored, and TDR credits created and administered (ibid). (See also discussion in Section 4: Efforts to Build Conservation Incentives and Requirements into Zoning Codes).

**Ballot Measures**

Financing campaigns for ballot measures differ from candidate campaigns in two ways: there are no state limits on an individual’s or organization’s contributions to ballot measure campaigns and disclosure procedures for disclosing ballot measure contribution and expenditure are much weaker than candidate campaign disclosure practices. Expenses may vary, often depending on whether industries, ideological groups, or grassroots and special interests are competing with each other. Conventionally, it is believed that robust spending to oppose an initially popular measure will likely ensure defeat, while heavy spending supporting a measure will not ensure its passage (BISC, n.d.). For example, during a 2006 ballot campaign in Arizona (Prop 105 and 106) to conserve several thousand acres of land, proponents spent over $3 million and opponents spent over $2 million (ibid). Despite the proponents efforts, the measure failed to pass.

Much like the nature of the parties involved, whether the campaign is for a citizen initiative or a referendum also has important implications for cost, with the former typically being a more expensive endeavor. In a recent campaign in Oregon over a proposed ballot measure to raise income taxes to support higher education and other social services, more than $12.5 million was spent by opposing sides (Maples, 2010). High costs, however, have put a damper on the number of initiatives in Oregon and elsewhere.

**Timing of Private Land Conservation**

Underlying the strategy of private land acquisition is the fact that it is voluntary. If a landowner is unwilling to sell or if his or her price expectations are too high for a land trust, the acquisition may be delayed indefinitely. Assuming a landowner is willing to sell and that expectations can be met reasonably, an action plan for a project typically is based on a 12 – 24 month timeline. The first few months might be geared towards negotiations and contracts, appraisals, title searches, and finding grants. Following these steps, the land trust might spend the next months creating a stewardship plan, conducting surveys and audits, and closing on the deal. Final months would go towards publicity and celebration, with stewardship and development continuing. Some processes do not last a year, while others drag on for much longer periods.
surveyor, for example, will not take his expensive machinery out in the rain, while other professionals may disappear during hunting season and the holidays. Don Morrow, an experienced project manager at TPL, recommends doubling the time you think you will need; then, maybe you’ll have enough time (Morrow, 2010).

<table>
<thead>
<tr>
<th>Action</th>
<th>Estimated Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Title</td>
<td>3-45 days</td>
</tr>
<tr>
<td>Environmental Audit</td>
<td>15-45 days</td>
</tr>
<tr>
<td>Survey</td>
<td>30-90 days</td>
</tr>
<tr>
<td>Appraisal</td>
<td>30-60 days</td>
</tr>
</tbody>
</table>


**Timing of Public Land Use Planning and Regulation**

“No ‘invisible hand’ can be relied on to produce a good arrangement of the whole from a combination of separate treatments of the parts.” – A.C. Pigou, 1929.

While acquisitions are considered to be quicker options for stopping the bulldozers, some government actions—with strong political and public support—may be able to quickly address a new or emerging public problem. Yet, while support may be garnered and while tools like mediation exist to abate conflicts and build consensus, gridlock and state and federally mandated procedures tend to make these inherently lengthy processes.

Just as the time to craft and adopt regulations and plans will vary, so too will their shelf life. Short-term, interim regulations may be employed to implement moratoriums on development until planning processes have been completed. For example, both Dade County, Florida and Fairfax County, Virginia adopted short-term sewer moratoriums to prevent issuance of building permits and thus development in areas lacking sewer and water facilities. Other controls like subdivision rules and minimum lot sizes tend to be longer-term forms of regulation that may last several decades.

**Comprehensive Plans**

Comprehensive plans typically have a long-term horizon of ten, twenty, and even thirty years. Far from static, planning is a dynamic process—at its best, “a continuous and systematic study and appraisal of conditions” that attempts to guide “the making and execution of important decisions coordinated with established objectives” (Freilich, 1971, p.72). Initial steps of preparation may include budgeting, writing request for offers, hiring consultants, conducting stakeholder analysis, assembling a steering committee, conducting background studies (e.g., demographic trends and history of the community), and updating or creating new maps. Creating plans entails the public process described in Section 3, while implementation is an ongoing process.
Comprehensive Plan Process and Timeline

<table>
<thead>
<tr>
<th>Action</th>
<th>Timeline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparation</td>
<td>3 months to 1 year</td>
</tr>
<tr>
<td>Creation</td>
<td>6 months to 2 years</td>
</tr>
<tr>
<td>Adoption</td>
<td>Up to 3 months</td>
</tr>
<tr>
<td>Implementation</td>
<td>Up to 30 years</td>
</tr>
</tbody>
</table>

Source: Purdue Extension, 2005

In Tulsa, Oklahoma, the Comprehensive Plan Process Task Force estimated that the steps involved in developing its comprehensive plan (research and analysis, data management, update and maintenance of base mapping, planning studies, citizen participation, and its ‘Growth Guidance System) would take from two-to-five years, depending on the scope of services involved (CPPTF, n.d.).

Traditional Lane Use Regulation

Timing as it pertains to zoning may have a number of facets, including how long the regulation lasts, how often it is revised, and how often the zoning ordinance is challenged and changed. Many elements of zoning codes are amended with regularity. In the city of Madison, Wisconsin, a city zoning administrator recently noted that the city amends its zoning code to accommodate individual projects with frequency. “It happens all the time. All the time. There are amendments to the text that relate to projects regularly.” Other cities like Kirtland, Ohio have not undergone major changes in their zoning ordinances since they were first adopted in 1975.

Transfer of Development Rights

While TDRs may provide incentives and flexibility for developers, they also can be very complicated tools to create and implement. In Section 4 of this series, Strobo describes the difficulty of identifying suitable receiving areas, determining the value of development rights, and establishing systems to track and record TDR credits. Due to these and other difficulties, TDR programs may take years to set up and several more to become effective conservation tools.

Ballot Measures

Campaigns for ballot measures tend to be short-lived efforts, typically lasting several months. However, as seen in Gallatin County, Montana, with the creation of the first public funding for conservation in the state, a ballot campaign can ripple to nearby counties and, as seen in Los Angeles and New York City, become part of a larger, dynamic series of campaigns.

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Source: Hazel Wong, Senior Campaign Manager, TNC. (2010). Presentation: Conservation Funding Through the Ballot. Strategies for Land Conservation, Yale School of Forestry & Environmental Studies.
Reducing Costs

While land trusts and local governments will coordinate with some regularity on such efforts like preacquisitions, in which the land trust will acquire and then transfer land to a city or county, strategies for public and private conservation efforts are typically not coordinated systematically across the public and private divide. When a single strategy is used to conserve land, a number of perverse results may emerge. For example, conservation easements and purchase of development rights will result in a patchwork of protected lands that will attract development on unprotected adjacent lands in a scenario in which zoning is absent (Bengston, Fletcher and Nelson, 2004).

Rather, a portfolio of tools and integrated strategies is needed. Managing growth and conserving open space requires interlinked, coordinated, and synergistic approaches. Maryland’s Smart Growth Program, for example, “utilizes an array of policy approaches including programs to encourage growth in existing developed districts (e.g., priority funding areas, brownfields redevelopment, live near your work, job creation tax credit, and expanded-transit programs) and programs to protect open land,” like the Rural Legacy and GreenPrint Programs (Bengston et al., 2004, p. 281). In addition to coordination, public policy tools must have flexibility and be contextual. Parker (2002) provides a federal example whereby the government could reduce costs using the case of the USDA Wetlands Reserve Program (WRP), which provides easements and cost-shares for landowners—but not in fee simple options. The rigid, standardized WRP easements do not permit flexibility based on local conditions. Rather, land conservation policies should support land trusts’ efforts to minimize costs by offering incentives to fully examine the tradeoffs involved in taking either a fee-simple ownership or a conservation easement (Parker, 2002).

A number of other steps have been developed to reduce costs. In the Highlands as well as the Pine Barrens, governments creating parkland zoning take proactive steps. Instead of taking the risk of potential litigation and hefty court fees, they have set aside money in advance to compensate landowners.

Discussion Questions:

- How might land trusts get a better handle on these costs or estimate them before they decide to embark down one path or the other?

- What are some local or regional examples where land trusts and local governments have worked systematically to reduce costs?

Useful Readings/Works Cited


Some of the examples, sources of information and key points from the discussion included the following:

- Regulating land use generally costs less than acquiring land (if there is no litigation involved), but it also:
  - Creates more winners and losers;
  - Is not designed to be permanent;
  - Lags the realities of real estate markets;
  - Has enforcement costs at the public expense;
  - Promotes too much sprawl.

- At the same time, acquiring land:
  - Has seasons – such as the current “cold winter of public funding”;
  - Is opportunistic and not as strategic as comprehensive planning;
  - Tends to be more durable than regulation;
  - Tends to be more politically popular than regulation; and
  - Tends to have more predictable timing.

- Acquisition tends to work best in one-off efforts to protect individual sites from development or for complicated parcels/deals drawing from multiple...
funding sources, while regulation works well across larger landscapes (particularly when paired with acquisition).

- There are cases where landscape scale regulation has promoted the acquisition of conservation lands, for example:
  - In the Adirondacks, the regulatory limits on subdivisions helped The Nature Conservancy purchase over 160,000 acres of timberlands from Finch Pruyn & Co.
  - In Maine, similar regulatory limits on development in the unincorporated townships helped convince Plum Creek to propose a combination of cluster development, donated working forest easements and outright conservation sales as a way to monetize its holdings.
- The Natural Lands Trust (http://www.natlands.org/home/default.asp) has been combining planning, regulation, ballot measure and acquisition tools for conservation in the greater Philadelphia area for many years.
- “Density bonuses” for developers – in the form of permissions for extra lots they can sell – may help ease the pain of limits on development elsewhere.
- One key challenge for regulation is how it can best help bring small, affordable lots onto the market.
- New Jersey has four large landscapes where planning and regulation provide the backbone for regional development efforts:
  - Great Swamp National Wildlife Refuge (http://www.fws.gov/northeast/greatswamp/) and the “ten towns committee” (http://www.tentowns.org/10t/)
  - The Highlands (http://www.highlands.state.nj.us/)
  - The Pinelands (http://www.state.nj.us/pinelands/)
  - The Meadowlands (http://www.njmeadowlands.gov/)
- Any of these regional efforts require information-based decision-making – land trusts have lots of useful information to contribute and they should do so.
- The New Jersey Conservation Foundation (http://www.njconservation.org/) partnered with state and local officials to build a state-wide network of greenway plans and then to make strategic acquisitions within identified priority areas.
- The skill sets for managing/stewarding sites and enforcing easements are not the same as those for acquiring sites. This will pose challenges for land trusts over time.
• Land trusts will need to find ways to work on green infrastructure in cities – or watch new organizations do so.

• Educational efforts and projects in cities will be increasingly important for the land conservation coalition.

• As land trusts seek to find new donors, they must remember that communities of color are increasing in wealth, as well as size and influence.

• The Obama administration’s focus on the Great Outdoors offers an opportunity to broaden the conservation community – land trusts should participate in the “listening sessions” being held across the US (http://www.doi.gov/americasgreatestoutdoors/).