

# Rediscovering the Master Street Plan: The Critical Missing Component in City Planning Today

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## Abstract

*The Standard City Planning Enabling Act and the Standard State Zoning Enabling Act of the 1920s were central to the changes in the laws dictating American development. But contrary to the Enabling Acts' intentions, the zoning ordinance of today has become the "comprehensive plan" in and of itself. This paper will reveal that today's zoning ordinance is operating without its necessary partner the master street plan.*

*Three primary questions will be addressed. First, what constitutes a comprehensive plan? Second, why is a master street plan critical in city planning? Finally, what legal powers can a municipality employ to implement a master street plan?*

## Introduction

The 1920's saw a shift in American city planning. It was a decade that attempted to both clarify and create the roles which municipalities, states, and the federal government would each have in the development process. At the center of these radical moves were the Enabling Acts which includes the Standard City Planning Enabling Act and the Standard State Zoning Enabling Act. These Acts were written by the Advisory Committee on City Planning and Zoning of the U.S. Department of Commerce. Together, these Acts were intended to be adopted by the States and to form the legal basis for the future of American planning and development.<sup>1</sup>

The Standard City Planning Enabling Act (SCPEA) describes the legal documents and physical maps necessary for the creation of a municipal master plan. Within the SCPEA, two maps are emphasized: the master street plan (for the management of public property) and the zoning plan (for the regulation of private property). The master street plan is the physical map of the overall city plan. At its core, it projects future public rights-of-way by preemptively subdividing the territory within a municipality. The zoning plan, on the other hand, is a separate map which describes the location of current and projected land uses exclusively for private property. The fact that the SCPEA separates public property and private property into these two distinct physical plans is critical and will be articulated further in this paper.

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<sup>1</sup> For further reading on the history of the Enabling Acts see Knack, Meck, & Stollman in the bibliography.

Subordinate to the SCPEA is the Standard State Zoning Enabling Act (SSZEA). This document describes the States' powers and procedures for the regulation of private property. The primary physical plan associated with the SSZEA is the zoning plan.

Counter to the original intentions of both the SCPEA and the SSZEA, the zoning ordinance today has become the main legal vehicle used to direct master plans in communities across the country. But even a cursory understanding of the SCPEA reveals that today's so-called master plans are acting without their necessary partner the master street plan. The ramifications of this dismissal of the master street plan from city planning has been unfolding for over 80 years now. The primary intention of this paper is to reintroduce the master street plan into its proper place within city planning and development.

With this goal in mind, there are three primary questions that will be addressed in this paper. First, what constitutes a comprehensive plan? Without a master street plan, can a zoning plan be considered a comprehensive plan in and of itself? Second, why is a master street plan so critical? How does a master street plan physically function and to what benefit? And finally, how does a municipality implement a master street plan? What legal powers are required?

### **What Constitutes a Comprehensive Plan?**

In the planning of cities, the comprehensive plan (or master plan) is the primary means by which future public infrastructure of the city is projected. The comprehensive plan is not merely a plan of visions and policies; it is a physical plan. The SCPEA defines the components of a comprehensive plan rather comprehensively:

“It shall be the function and duty of the commission to make and adopt a master plan. Such plan...shall show the commission's recommendations for the development of said territory, including, among other things, the general location, character, and extent of streets, viaducts, subways, bridges, waterways, water fronts, boulevards, parkways, playgrounds, squares, parks, aviation fields, and other public ways, grounds and open spaces, the general location of public buildings and other public property, and the general location and extent of public utilities and terminals, whether publicly or privately owned or operated, for water, light, sanitation, transportation, communication, power, and other purposes; also the removal, relocation, widening, narrowing, vacating, abandonment, change of use or extension of any of the foregoing ways, grounds, opens spaces, buildings, property, utilities, or terminals; as well as a zoning plan” (Advisory Committee on City Planning and Zoning of the U.S. Department of Commerce, 1928, pp. 13-14) .

While the elements listed are extensive in number they can all be grouped into just two categories: public elements (streets, viaducts, etc) and private elements (comprised of the zoning

plan). This separation of public and private elements of the city is the logical means by which the SCPEA seeks to divide the planning problem.

But in the context of today's zoning-dominated planning profession, that last line in the definition, "as well as a zoning plan," is a bit jarring. It makes it sound as if zoning was tacked on at the end almost forgotten. Or at least makes it out to be just one small piece of a much larger puzzle. As if to foresee these misgivings, the writers of the SCPEA included a footnote to make it clear: "Zoning is simply one phase of city planning" (1928, p. 16). Indeed, with this line the writers of the SCPEA clearly saw the zoning ordinance as a *part* of a comprehensive plan but not a comprehensive plan in and of itself.

The fact that the Enabling Acts exist as a pair emphasizes this point further. The SCPEA addresses the comprehensive plan itself while the SSZEA addresses a part of the comprehensive plan.

Harland Bartholomew, a contemporary of the Enabling Acts, concurred with the structure specified by the SCPEA and warned of the consequences if it was not followed: "There should be available a major street plan, a transit plan, a rail and water transportation plan and a park and recreation plan; in other words, a comprehensive city plan. Without such a comprehensive city plan, the framers of the zoning plan must make numerous assumptions regarding the future of the city in respect to all of these matters without the benefit of detailed information and study. Zoning is but one element of a comprehensive city plan. It can neither be completely comprehensive nor permanently effective unless undertaken as part of a comprehensive plan. If not so undertaken, the zoning ordinance becomes largely an instrument of expediency, subject to constant and often whimsical change. This leads to instability, uncertainty and ineffectiveness" (1928, p. 50).

While the SCPEA defines a comprehensive plan as containing all the projected physical components of the city including streets, sewers, public buildings, etc, judicial interpretation has defined a comprehensive plan in much less expansive terms. In *Bishop v. Board of Zoning Appeals of the City of New Haven* (1947), the court arrived at the following definition for a comprehensive plan: "A general plan to control and direct the use and development of property in a municipality or a large part of it by dividing it into districts according to the present and potential use of the properties." In other words, the court defined the comprehensive plan as a map of present and future land uses. By this definition, the comprehensive plan concerns all land within the municipality regardless of ownership. As streets, public open space, and public buildings are, by definition, not subject to zoning, the court severely limited the scope of city planning to include only the regulation of land uses. Thus, the stipulations of the SCPEA had no purpose in development law under the courts' interpretations. This is not to say the stipulations of the SCPEA were rendered illegal or unconstitutional. Rather, such a broad conflation of public and private property within the comprehensive plan allowed the zoning plan to replace the city plan as the comprehensive plan.

In 1955, Charles Haar, an attorney and long-time professor of law at Harvard, collected the arguments of the courts that had been made up to that time concerning whether or not a zoning plan constitutes a comprehensive plan. One argument Haar referenced was that “a comprehensive plan is one which is general, and that since a city-wide zoning ordinance is general it is by definition comprehensive” (1955, p. 1167). This kind of circular reasoning has allowed the zoning plan to overstep the SCPEA.

### **Why is the Master Street Plan a Necessary Element of the Master Plan?**

Streets are not just used for transportation and mobility, though this is an important function. Streets are the physical framework of a city. They are public means of access to private property. They give a face to private property. They allow light and air between parcels. They contain utility lines—power, sewer, water, and communications. And they are the places in which people spend the majority of their time when they travel for leisure; after all, the means by which one “sees Paris” is through Paris’s streets. Edward Basset, one of the authors of the SCPEA, related streets to the health, safety, and welfare of the public: “A civilized community needs streets for sewers, water supply, gas and electricity. This relates to the public health and comfort. It needs streets for water for fire protection and the movement of fire apparatus. This relates to public safety. It needs streets for foot and wheel traffic. This relates to all police power fundamentals” (1926, p. 12).

A master street plan is critical because it directly specifies the fundamental unit of urbanism: the block. Establishing a master street plan and determining block sizes upfront is the most effective way a municipality can absolutely insure walkability, sufficient access to parcels, and efficient accommodation of future land uses. While attempts have been made to use street connectivity metrics as a legal patch within subdivision regulations, these metrics cannot insure proper land subdivision (Knight, 2010). Zoning ordinances regulate the use of private land parcels only once they have been subdivided. Only a master street plan, created as part of the process of subdivision, can uphold the promise of walkability and access.

One of the most famous examples of a master street plan is Manhattan’s grid. The exact same 200’ x 800’ block of land was used repeatedly in Manhattan and has accommodated everything from wilderness to churches, houses, mercantile exchanges, and office skyscrapers. These ephemeral land uses of Manhattan have changed consistently and continuously over time and will continue to do so. The street plan of Manhattan, on the other hand, is constant; it is the framework within which these changes are allowed to take place. When land uses turn over, new uses can simply plug-in to the existing infrastructure.

An analogy may help to clarify the effectiveness of Manhattan’s master street plan. When an architect designs a skyscraper they do not tailor individual floors to projected individual tenants; they do not design the 5th floor any differently than they do the 17th floor. Instead, the developer wants the building to be as accommodating as possible to as many different tenants as possible

both now and in the future. Therefore, each floor is designed with maximum flexibility in mind. This allows a dentist's office, a museum, and a university to all fit within the same skyscraper if need be on any floor and at any time.

In this same way, the blocks in Manhattan, while all essentially the same in their physical characteristics, have accommodated an amazing array of land uses over time. Both Manhattan and the commercial skyscraper stand as testaments to the benefits of a predetermined and unyielding structure. The rigid framework of steel in the commercial skyscraper mirrors the rigid framework of rights-of-way in the city.

Because cities contain many different builders and many different property owners all working over different periods in time, the only way a coherent and holistic coordination of streets can occur is through the use of a master street plan. The Manhattan of today would be impossible if it had been founded simply upon a zoning ordinance and land use map. Unfortunately it is not difficult to imagine what form Manhattan would have taken if land uses alone had determined its physical destiny; numerous cases of this type of development have already materialized in almost every suburb across America. Any city that relies solely on a zoning map can only develop its form on a lot-by-lot, project-by-project basis; individual lots are regulated to the detriment of the design of the city as a whole. Manhattan's coherent and efficient network of streets and avenues would have been replaced by something more akin to circumstantial bubble diagrams separating housing, open space, and industry, a disposition that is all too common today.

The logical form of the city, just like a house, cannot be willed into existence; it must be designed.

### **How is a Master Street Plan Implemented?**

If a master street plan is so critical, how is it to be executed? What legal powers does a municipality have at hand for a street plan's implementation?

The power to create a master street plan is derived from the police power provision within the Tenth Amendment of the Constitution. This power is given to the states who in turn confer it upon their municipalities. The use of police power is intended to promote and maintain the health, safety, morals, and general welfare of the public. The public benefit of the master street plan to this end has already been presented in the previous sections of this paper.

Police power has been used extensively in American development law; one example of its use is the setback line. Since the 1920's, setbacks have been used to regulate bulk, area, and location of buildings. A master street plan is similar to setback lines in that it operates as a network of lines that delineate the areas to become future rights-of-way. Once established, these projected streets would remain clear until their eventual construction months, years, or decades later.

As long as the master street plan is established and protected, the length of time for it to be fully developed is relatively inconsequential. The plan will materialize incrementally at whatever rate the city is developed. This incremental approach was famously applied in Manhattan. While all of the city's streets were described in 1811,<sup>2</sup> their actual construction occurred over a period of 130 years up to 1942.<sup>3</sup> Additionally, as a further testament to the benefits of incremental execution, Manhattan's plan was altered in the 1850's in order to accommodate what was impossible to foresee in 1811: the creation of Central Park.

While in Manhattan's case the municipality financed and constructed streets, today's developers are largely left with that responsibility. But regardless of who ultimately constructs the streets, the master street plan would materialize in the same way. Over undeveloped land a master street plan essentially acts as a pre-approved subdivision plat. In this case, any developer would not have to have their street network approved; instead, they would have the plat already determined for them and would simply execute it as drawn. For the developer, this takes away the time lost during the approval process and thus saves money; for the city, this frees up administrative responsibilities and guarantees the desired form of the city.

In the case of retrofitting a master street plan onto previously developed and subdivided land, the legal and political implications become much more complicated. While street planning in this instance is still both possible and necessary, this is a topic that will have to be explored in a separate paper but has already been discussed in others.<sup>4</sup>

There are some examples today where the master street plan is showing signs of a reappearance. In Georgia, for example, the Beltline project<sup>5</sup> in Atlanta has within it suggestions for street connections to be made. Because of the project's emphasis on transit and reconnecting Atlanta, the organizers and designers are making big strides in directly planning for what streets should eventually go where. But while the Beltline example shows that the importance of street planning is making a comeback, today's planning methodology is still far from where it needs to be. The streets shown within the Beltline are limited to the scope of the project; it is not a city-wide street plan. Since the street network is critical to a city's success as has been shown, the all-encompassing street plan must be present in order to guide the construction of the city's physical formwork.

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<sup>2</sup> Bridges, W. (1811) *Map of the City of New York and Island of Manhattan with Explanatory Remarks and References*. New York.

<sup>3</sup> For a display of the incremental execution of Manhattan's master street plan visit: <http://www.nytimes.com/interactive/2011/03/21/nyregion/map-of-how-manhattan-grid-grew.html?ref=nyregion>

<sup>4</sup> See bibliography for works by Sitte, Gamble, and Knight.

<sup>5</sup> Visit <http://www.beltline.org/>

Because our development laws today have lost their essential association with the master street plan, its reintroduction will appear quite foreign to today's city planner. It should be noted, however, that it took decades for America to lose this powerful and effective city planning tool; it will take another set of decades to gain it back. In the meantime, the street plan will need to be reintroduced through efforts within or beside existing zoning ordinances, subdivision regulations, and municipal projects. The example of the Beltline is a small but critical step forward.

## **Conclusion**

It has been shown that the Enabling Acts intended to divide the components of city planning into two primary physical plans: the master street plan for the management of public property and the zoning plan for the regulation of private property. The combination of these two physical plans together comprise the comprehensive plan. However, subsequent judicial interpretations have rendered the master street plan as unnecessary. This allowed the zoning plan itself to become conflated with the comprehensive plan. But, as was shown, the master street plan is critical to insure that a walkable, vibrant, and sustainable urbanism can materialize over time. Operating without it, the zoning plan's "instability, uncertainty and ineffectiveness" (Bartholomew, 1928, p. 50) has today been affirmed.

The master street plan does not necessarily pose a legal problem, nor require new law to implement. Municipalities can easily work within their established powers to create it. Rather, the challenge in implementing the street plan is likely to be one of political will. While the sole purpose of the street plan ultimately is to provide for the public good, it would likely be viewed as an excessive intrusion of the regulatory function of government into the right of property. But the Standard City Planning Enabling Act obligates the municipality to undertake such a plan. If the municipality waits until all private property owners understand and accept both the public and private benefits to a master street plan, the problems associated with today's zoning plans will simply be perpetuated. If we think that current practices that minimize the role of the master street plan in favor of parcel-by-parcel zoning has produced the kinds of cities, towns, and suburbs we want, then all is well. However, if we think that we can and should build better places for people to live and work, then the education of both the public and the planning profession is the only way the master street plan can be restored to its proper place in the front lines of American city planning. With hope, this paper serves as a step in that direction.

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