The Master Street Plan
A Forgotten But Critical City Planning Tool

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Overview

Part I: What is a comprehensive plan?

Part II: What is a master street plan?

Part III: What are the benefits of a master street plan?
Part I: What is a Comprehensive Plan?
What is a Comprehensive Plan?

“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.”

A Standard City Planning Enabling Act, 1928, pp. 13-14
What is a Comprehensive Plan?

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What is a Comprehensive Plan?

Define: Zoning

“Zoning is the application of common sense and fairness to the public regulations governing the use of private real estate.”

A Zoning Primer, 1926, p. 1
What is a Comprehensive Plan?

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A Standard City Planning Enabling Act, 1928, pp. 13-14
What is a Comprehensive Plan?
What is a Comprehensive Plan?

PUBLIC

PRIVATE
What is a Comprehensive Plan?

**PUBLIC**

**MASTER STREET PLAN**

**PRIVATE**

**ZONING PLAN**
What is a Comprehensive Plan?

“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.”

A Standard City Planning Enabling Act, 1928, pp. 13-14
What is a Comprehensive Plan?

“Zoning is simply one phase of city planning”

A Standard City Planning Enabling Act, 1928, p. 16
What is a Comprehensive Plan?

Redefine: 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.”

Bishop v. Board of Zoning Appeals of the City of New Haven (1947)
Redefine: 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.”

Bishop v. Board of Zoning Appeals of the City of New Haven (1947)

This definition implies that...

1. A comprehensive plan only requires a land use map. The necessity of a master street plan is thus dropped.
2. The public and private components of city planning are combined into one map.
What is a Comprehensive Plan?

Zoning in Error

By definition zoning is the regulation of *private* property. Yet municipalities continue to unnecessarily zone their public rights-of-way. As a point in fact, here is a zoning map showing Interstate 85 in Atlanta zoned R4.
What is a Comprehensive Plan?

Civic: “Uses held in private or public ownership…”


Zoning Atlas of Miami
As adopted October 22, 2009
What is a Comprehensive Plan?

PUBLIC

PRIVATE
Part II: What is a Master Street Plan?

“The general location, character, and extent of streets…”

Advisory Committee on City Planning and Zoning of the U.S. Department of Commerce, 1928, pp. 13-14
What is a Master Street Plan?

“What the general location, character, and extent of streets…”

Advisory Committee on City Planning and Zoning of the U.S. Department of Commerce, 1928, pp. 13-14
What is a Master Street Plan?

Map source: Museum of the City of New York “Greatest Grid” exhibit
What is a Master Street Plan?

Components of a Master Street Plan:

Map source: Museum of the City of New York
“Greatest Grid” exhibit
What is a Master Street Plan?

Components of a Master Street Plan:

1. Private Property

Map source: Museum of the City of New York “Greatest Grid” exhibit
What is a Master Street Plan?

Components of a Master Street Plan:

1. Private Property
2. Public Property (or what will become public property)

Map source: Museum of the City of New York “Greatest Grid” exhibit
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What is a Master Street Plan?

Master Street Plan = Master Right-of-Way Plan

The intention is that these rights-of-way will become streets, but no curbs or sidewalks are drawn; only the public space of the right-of-way is delineated. A right-of-way can take on any character or function in the future. The important thing is that it is reserved for when it is needed. Remember: streets create property frontage.
What is a Master Street Plan?

Right-of-Way Width: **60 feet**
Location: 105th Street, New York
What is a Master Street Plan?

Right-of-Way Width: 60 feet
Location: 381st Avenue, Minnesota
The Master Street Plan in Action

Map Data from The New York Times

1809
Manhattan

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The Master Street Plan in Action

Map Data from The New York Times

1812
Manhattan

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Map Data from The New York Times

1814
Manhattan

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Map Data from The New York Times

1834
Manhattan

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1837
Manhattan

Map Data from The New York Times
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Map Data from The New York Times

1852
Manhattan

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The Master Street Plan in Action

1874
Manhattan

Map Data from The New York Times
The Master Street Plan in Action

Map Data from The New York Times

1899
Manhattan

Map Data from The New York Times
The Master Street Plan in Action

1942
Manhattan

Map Data from The New York Times
Imagine if Manhattan developed from a zoning map rather than a master street plan...
The Master Street Plan in Action

Savannah 1734

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Savannah 1735

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Savannah 1790

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The Master Street Plan in Action

1796
Savannah
The Master Street Plan in Action

1812 Savannah
The Master Street Plan in Action

1855
Savannah
The Master Street Plan in Action

Decker Ward
1734 Savannah, Georgia
The Master Street Plan in Action

1884
Decker Ward
Savannah, Georgia
Decker Ward
Savannah, Georgia

1994
What is a Master Street Plan?

ANALOGY

When an architect designs a commercial 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.
Summary

- Cities are composed of PUBLIC and PRIVATE elements.
- A truly comprehensive plan requires 2 physical maps: Master Street Plan (Public) and Zoning Plan (Private)
- A master street plan is a municipally established map to guide the future, physical framework of the city.
- A master street plan is executed incrementally over time.
Part III: Benefits

1) What can a master street plan do for the *physical* city?

2) What does a master street plan do for the *process of development*?
Physical Benefits

Block Size

The fundamental unit of urbanism.

Salt Lake City, UT
660' x 660'

Grand Forks, ND
300' x 300'
Block Size

*The fundamental unit of urbanism.*

Salt Lake City, UT
660’ x 660’

Grand Forks, ND
300’ x 300’
Physical Benefits

Benefit #1: Connectivity, Walkability

*Get from point A to point B more efficiently.*

![Comparison of travel distances](image)

<table>
<thead>
<tr>
<th>Diagram 1</th>
<th>Diagram 2</th>
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<tbody>
<tr>
<td>Travel Distance (ft.): 1,320</td>
<td>660</td>
</tr>
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</table>
Benefit #1: Connectivity, Walkability

*More route options between point A and point B.*

![Diagram showing route options between points A and B]

Route Options: 2 6
Physical Benefits

Benefit #1: Connectivity, Walkability

Distribute traffic across a greater network.

Available Network (ft.): 2,640 4,800
Physical Benefits

Benefit #2: Creation of Street Frontage

Greater access to private property.

Street Frontage (ft.): 2,640 4,800
Corner Lots: 4 16
Physical Benefits

Benefit #3: Adaptable Blocks, Reusable Infrastructure

Throughout history and around the world, land uses have operated within a relatively tight range of dimensions.
Benefit #3: Adaptable Blocks, Reusable Infrastructure

*Throughout history and around the world, land uses operate within a relatively tight range of dimensions.*

280’ x 520’
Physical Benefits

Benefit #3: Adaptable Blocks, Reusable Infrastructure

Chicago
Physical Benefits

Benefit #3: Adaptable Blocks, Reusable Infrastructure

Buenos Aires
Benefit #3: Adaptable Blocks, Reusable Infrastructure

Amsterdam
Physical Benefits

Benefit #3: Adaptable Blocks, Reusable Infrastructure

Walmart
90,000 sf + some parking
Physical Benefits

Benefit #3: Adaptable Blocks, Reusable Infrastructure

Walmart
145,000 sf
Benefit #4: Maintain Health, Safety, & General Welfare

“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.”

Edward Basset, Regional Plan of New York and Its Environs, 1929
1) What can a master street plan do for the physical city?

2) What does a master street plan do for the process of development?
### Procedural Benefits

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<th>Zoning-Dominated Model</th>
<th>Master Street Plan Model</th>
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Procedural Benefits

Zoning-Dominated Model

Master Street Plan Model
Procedural Benefits

Zoning-Dominated Model  Master Street Plan Model

Step 1: Zone
Zoning-Dominated Model

Master Street Plan Model

Step 1: Zone

Step 2: Subdivide
Procedural Benefits

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Master Street Plan Model

Step 1: Subdivide

Step 2: Zone
Benefit #1: Free Up Municipal Resources

As a pre-approved subdivision plat, the master street plan streamlines the review process. This allows planning authorities to focus on other issues.
Procedural Benefits

Benefit #2: Save Developers Time & Money

As a pre-approved subdivision plat, developers can get their projects completed more quickly and at reduced cost.
Procedural Benefits

Benefit #3: Prescriptive

No more rolling the dice with connectivity metrics* or parcel-by-parcel subdivision reviews. Once the master street plan is established you know what form the city will eventually take.

Benefit #4: Guides Incremental Development

While the master street plan is established up front, its execution occurs over decades and centuries. As the city grows, the master street plan is there to guide that growth.
A master street plan is like a jigsaw puzzle...
A master street plan is like a jigsaw puzzle...

Goal

Process
A master street plan is like a jigsaw puzzle...

Simile

Goal

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Goal

Process
Simile

A master street plan is like a jigsaw puzzle...

Goal

Process
Without a master street plan...

**Goal**

**Process**
Without a master street plan...
Without a master street plan...

Goal

Process
Without a master street plan...

Goal

Process

X
Frederick Law Olmsted, Jr.

“The street plan has always been regarded as the foundation of all city planning.”

Address before the Second National Conference on City Planning, 1910
Summary

- A master street plan can ensure that the qualities of good urbanism (walkability, efficiency, etc.) will materialize.

- A master street plan is established up front but is executed incrementally over time.

- A master street plan grows with the city.

- The suburban form is inevitable without a master street plan. You may get lucky from time to time with pockets of good urbanism, but you will always be missing the big picture.
www.MasterStreetPlan.com