

Producing the Urban Public Realm: Field Notes on Project Implementation

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Implementation

PETER HENDEE BROWN

[Producing the Urban Public Realm: Field Notes on Project Implementation](#)

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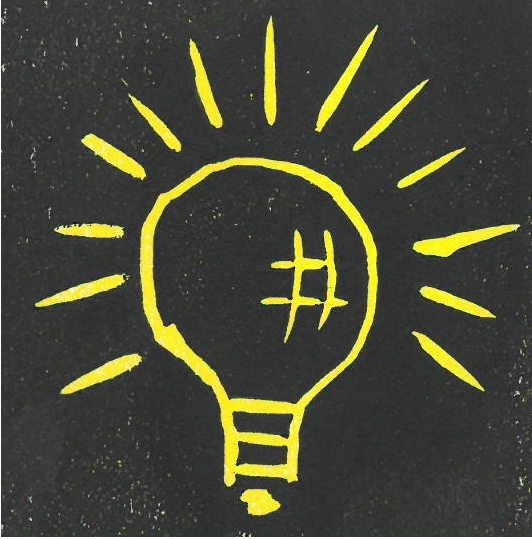
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ABOUT THIS BOOK

An Introduction to Producing the Urban Public Realm

Purpose

This book was written for use by University of Minnesota students of PA 5290, Planning and Design for the Urban Public Realm. This book is a companion to the class readings, which will expose you to a broad range of ideas and concepts – from the theoretical to the applied – around the experience and production of the urban public realm. As a complimentary and alternative view to the readings, this book will reveal to you the nuts-and-bolts reality of how places get built – from the original idea through planning, design, funding, construction, turnover, and day-to-day operations. The specific purpose of this book is to provide a simple framework for understanding project implementation – how to conceive of, produce, and operate new urban public realm projects in the 21st century American city. This manual does not reference many other sources, rather, it is a summary of “field notes” – my own experiences and observations about how recent public realm projects have been implemented in Minneapolis.



*Figure 2.
Ideas (The
Readings).
Author.*



*Figure 3.
Implement
ation (This
Book).
Author.*

Perspectives

The Perspective of this book

This book takes the perspective of the practitioner – the planner or designer – responsible for implementing a new urban public realm project. The purpose is to help that practitioner understand, plan for, and respond to all of the many forces that influence a public realm project. The objective is to help the practitioner increase their own chances of creating a project that is successful in the eyes of the many different project participants and stakeholders. Finally, rather than focusing on worthy aspirations of how things ought to be, this book takes the perspective that the practitioner must understand how things work in the real world today if they are to succeed. And to be clear, success in this context means a completed project.

Your Perspective – the Ethnographer

In the social science field of “ethnography” (the study of a group of people based on immersive field work) it is a common practice to begin a book with an introductory chapter that details the researcher’s own experiences as a way to illuminate their personal history, perspectives, biases, and blind spots. The idea is that one cannot study a social situation or a group of people (a study called an “ethnography”) without first cataloging and acknowledging one’s own “baggage” and laying it out for the reader. For the purposes of this course, think of yourself as an ethnographer. Attempt to be objective in your work but at the same time integrate your own

experiences and perspectives and view the public realm through your own personal lenses.

My Perspective

I was trained as an architect and worked in architecture for 12 years. I worked in several different firms from very small (eight people) to very large (550 architects, engineers, interior designers and other professionals and support staff). I worked on a broad range of project types from a 400 square foot house addition to an all new, 1.5 million square foot, 10-building, \$325M pharmaceutical R&D campus for a major drug company. During my time practicing architecture, I worked on single family homes, hospitals, nursing homes, assisted living facilities, commercial office buildings, corporate interiors, and pharmaceutical R&D laboratories. My projects included master plans, programs, additions, alterations, and all new facilities. By the time I left architecture I had worked on a number of very large projects, an experience that would influence my future work.

I then spent four years working in Philadelphia City government managing city capital projects – hiring and managing architects, engineers, and contractors to renovate and build new city facilities. These projects included window replacements in historic fire stations, a new police station, a new police forensic science lab (in a renovated, formerly abandoned elementary school), the exterior renovation of Philadelphia's historic, 1.2 million square foot City Hall, and the complete gut and renovation of a 450,000, 18-story office tower into new space for 2,500 city employees. The clients and departments I served included police, fire, fleet management, and administration. While at the city, I studied government administration and then I left to study planning full time. Upon moving to Minneapolis, I worked in real estate development for

four years, during the housing boom of the late 2000s, before working on the Orchestra Hall expansion project. For the past ten years I have worked as an independent project management consultant and much of my work has been on public realm projects for the City of Minneapolis.

So, my perspective is that of an architect who switched over to the other side of the table and learned how to be the owner – both for government and then for developers and other private and non-profit clients. I have helped hire and manage not only my own fellow professionals – architects – but also engineers, landscape architects, interior designers, brand and creative agencies, and communications and media consultants. I have also learned how the cultures, values, and methods vary amongst the different professions and disciplines. I believe that this broad experience has exposed me to the strengths and weaknesses of my own profession and made me a more objective and open to understanding how each of the other professions sees things – and sees one another.

Running a project can be like managing a zoo – you need to have both the tigers and the monkeys (and the snakes, sharks, and pandas, too) but you also need to keep them from eating one another. I have worked on large and small projects; new projects, renovations, adaptive reuse and historic preservation; and I have worked for private clients, government clients, non-profit clients, and real estate developers. Over the past ten years I have worked primarily on large, complex, public-private partnership-driven, urban public realm projects in downtown Minneapolis. Because I have worked in government and studied it, I have a good idea of what government people are trying to accomplish and how to work with and communicate with them. At the same time, because of my private sector experience, I have a pretty good idea of what the business community and private individuals are trying to accomplish.

My blind spots are that most of my projects have been large, costly, signature, downtown projects. While I understand

operating budgets and work with operators, my perspective is skewed towards the capital project and planning, design, and construction. Because I live and work downtown, I get to experience the city and the places I have worked on, for better and for worse: When you walk by it every day, you are constantly reminded of things you wish you had done a little differently. Also because of where I live and work and the things I have worked on, I have a very downtown/urban perspective but I have little experience with small, local neighborhood parks, for example, other than visiting them and using them with my family (which we do all the time). I also have government experience but it is all with large central cities and mostly with Philadelphia and Minneapolis. I have worked with the county, met council, and state, but only in relation to the local projects I am working on.

An old and very successful real estate developer once told me that, “a successful project is a completed project,” and I agree. Some projects are wrong-headed and I try not to work on those, but if the basic idea at the start is right and you can support it personally and professionally, then it is worth finishing. There is nothing more disappointing than working on something for years that is never completed. On the other hand, if a project doesn't seem right, you should think twice about working on it in the first place.

Roadmap

This book is comprised of this introduction, four core chapters, and a conclusion. Each of the core chapters will focus on a different nuts-and-bolts subject, from planning and design through finance and politics. The chapters build on one another although the subjects of these chapters do not necessarily occur in this neat chronological order, as all of these issues must be considered in parallel throughout the duration

of a project, from inception through design, community engagement, fund-raising, construction, grand opening, and ongoing, day-to-day operations.

A Proposition

The flight to the city is on, and to enhance both productivity and quality of life in our cities, we must invest in our urban public realm. Many of the 75 million members of the millennial generation are abandoning their suburban upbringings and demanding a new urban lifestyle, complete with new real estate product types for living, working, and playing, all with an emphasis on shared social spaces – inside and out. Many of their parents – the 74 million baby boomers – are demanding similar things. Together, these two cohorts represent nearly half of our population and they will reshape our cities in powerful ways.

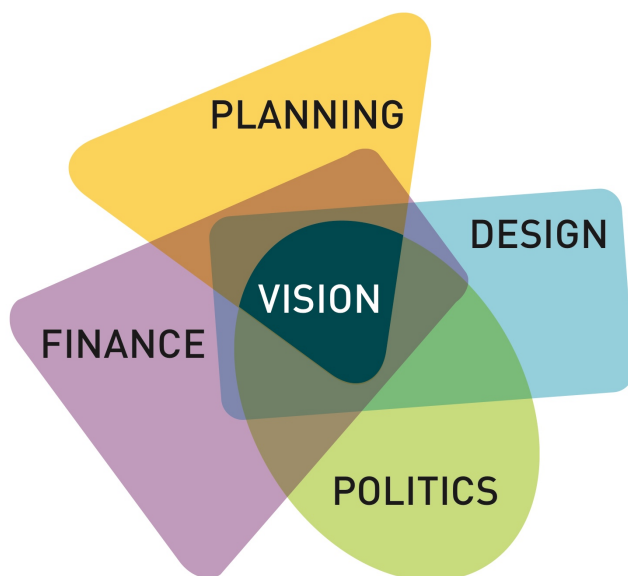
Cities will need to reinvest in older parks, plazas, and streets, but they will also need to provide new public spaces in developing areas that never had them – waterfronts, industrial sites, rail yards, and acres of surface parking. As important will be the re-envisioning of the public right-of-way – the street – as a place that accommodates not just cars but multiple transportation modes including cars, buses, rail, and bicycles, all integrated into a pedestrian-friendly and green environment. The greening of city streets will become critical for the creation of lush and livable places while also producing social, economic, and environmental benefits. At the same time, the production of the public realm must address resource use and climate change by minimizing the use of water, power, and other non-renewable resources while managing stormwater runoff, reducing light and noise pollution, and providing opportunities for landscape and habitats.

Perhaps most important, the work of improving our public realm will require commitment to multi-disciplinary collaboration and broad and genuine stakeholder engagement processes at an entirely new level. Complicated public realm projects will require a form of project team leadership that relies more on a form of representative democracy than on the grand vision of a single designer. Facilitating this process – and successfully building this new public realm – will require uniquely skilled and open-minded planners and designers who can help us envision a better way to live together in our cities.

The purpose of this course will be to help planners, designers, and other city builders come to understand the opportunities and challenges of project implementation – taking a plan from inception through planning, design, construction, and grand opening to public use and ongoing improvement – through the lens of a specific project type: The urban public realm project.

A Framework

Since the purpose of this chapter is to introduce the implementation half of the course, let us begin with a framework for your consideration. This framework argues that, for the successful completion of an urban public realm project, we must create a vision that clearly and consciously considers planning, design, finance, and politics. I propose that a vision that neglects any of these dimensions is a one that will not be realized. For example, a great design that lacks political support simply will not get built. Similarly, a design that does not attract political support will not attract necessary funds. Let us consider each element of this framework.



*Figure 4. Planning + Design + Finance + Politics = Vision
© Peter Hendee Brown 2019. All Rights Reserved.*

Planning (Can you envision a clear path through to completion?):

Planning in this model means project planning. We are not yet concerned with formal “planning” in terms of comprehensive plans, zoning codes, or regulatory processes – we assume that if we can manage the design, finance, and politics of the project, that we will be able to find a way through those traditional planning processes. Nor are we concerned yet with the “community engagement” aspect of planning – that is critically important but we will address it later under the subject of politics. Project planning here means figuring out all of the little steps, processes, and decisions required to move the

project from a glimmer in someone's eye through the assembly of the project team, hiring of a designer, the management of a genuine engagement process, the creation of a compelling concept design, the funding of the project, the completion of design and construction, and the turnover and start-up of normal day-to-day operations in the new space. A public realm project can take many years to complete and there will be many twists and turns, so while you cannot plan the entire process from beginning to end, you must be able to identify a path through to completion and, if you cannot, then you should reconsider starting. As with all of the elements of this framework, planning is constant and ongoing from the beginning of the project to the end and overlaps and runs parallel with design, financing, and politics.

One of the first and most important steps at the beginning of any project is for the leadership team – the elected officials, key staff, and the public and private stakeholders promoting the project – to come to agreement on a set of key principles and a vision for the project that can be expressed clearly and succinctly with words. If you cannot explain the project with on one or two slides and a twenty-second “elevator speech” then you may not be ready to start.

Design (Can you create a design that generates broad support?):

The purpose of the design phase is to translate the vision created by the project leaders into a physical, three-dimensional design that everyone can visualize, understand, and support. The first step in this process, however, is to use the principles and vision as the basis of a selection process for a qualified project design team. Once the designer is on board, they will complete a site analysis and interview users

and key stakeholders to develop a program for the new place. For example, it may be a grassy park, a bike facility, a water feature, a plaza, or some combination of those things. The design team and project team together must come to an understanding of how the place will be used and by whom. These studies will lead to a series of designs, beginning with very conceptual diagrams and ending with highly rendered images, with community and stakeholder engagement at each step of the way. The final design must be a legible, coherent idea that people can understand and explain and that is beautiful. It must offer features and amenities that make sense for its users, such as play structures, protected bike lanes, water features, and food and toilet facilities. The design must also reflect its place in the community, be legible, and create a sense of place. In the end, people need to be able to first understand and then accept, own, and promote the design. The design must satisfy potential users, nearby neighbors, the larger community, elected officials, and other key stakeholders and funders. The design is one of the most important elements in generating funding and political support for the project. A good design may be realized but a poor one can result in disagreement and division and no one wants to support or fund something that some of their neighbors and friends hate.

The design must make sense and be attractive to a lot of different people and, if it does, you may just be able to raise enough funds to build it. It is important here to note that different people have different ideas of what “good design” looks like and the designer’s idea of good design may not always reflect what the community members and other stakeholders want.

Financing (Can you attract the funds required to build and operate it?):

It takes a lot of money to build a new public place and it also takes a lot of money to run it once it has been completed. It is easy to think of a park as being relatively cheap compared to a building, for example. All you really need to do is sprinkle some grass seed around and buy a goat, right? Wrong: Public realm projects – even grassy parks – are expensive to build and expensive to operate and maintain. So, who's going to pay for it? First of all, sources of funds for a capital project (the design and construction of the public space) are different from those used for ongoing operations. Public realm projects are often “public-private partnerships” (“PPP” or “P3”), as they are funded with a combination of government funds (federal, state and local tax revenues and proceeds from sales of bonds) and private dollars – corporate, foundation, and personal donations. In a later chapter we will learn about the difference between a capital and operating funds, “sources and uses of funds,” bond finance, the timing of cash flows, and the role of public-private partnerships. Regardless of the details of finance

Big public projects cost a lot of money to build, own, operate, and maintain, and if you cannot create a realistic budget and then envision how you will raise the substantial funds required to cover those costs, you should think twice about beginning. There is no amount of good design or good will that will result in a completed public realm project if there is not a realistic plan for paying for it.

Politics (Is there enough political will and public support to complete it?):

Politics in this context means everything from “Capital P”

politics (elected officials) to “small p” politics – stakeholder engagement and a lot of one-on-one relations. Small-p politics may include working with nearby property owners, the neighborhood association, and other special interests such as the cycling community, pedestrians, the disabled, and environmentalists. Last but not least, politics includes bureaucratic politics – the relationships between government officials and between and among agencies and departments. Key people in bureaucracies play very large roles in the success or failure of projects and some are important power brokers in their own right. In the end, there must be enough political support for the project if it is to succeed. This includes everything from the elected officials who must vote to allocate public funding for the project to the nearby neighbors who must support it.

Big public realm projects often require the support of the mayor, the district council member, and the whole city council, but they must all have the support of the community, too, and the project team and designers must do everything they can to generate that support.

Vision = Planning + Design + Finance + Politics

The vision always considers and balances these four elements. Projects take a long time to complete and go through many twists and turns. Elections happen, key people come and go, funding changes, designs evolve, construction costs increase, and so on. Over the course of a project you must become accustomed to and comfortable with the constant fluidity, ambiguity, and uncertainty of the process and recognize how a million little changes will influence each of the elements of this framework over time. You must adapt constantly to these little

and big changes, shifting two degrees left then three degrees right, but throughout you must always “keep your eyes on the prize.”

CHAPTER 1 - PLANNING

1.1 Introduction



Figure 5. Word cloud generated from early survey responses at the beginning of the Commons project. Hargreaves Associates.

**If I knew I had eight hours to chop down a tree,
I'd spend the first six of them sharpening my axe.**

– Abraham Lincoln

**Proper Planning and Preparation Prevents Piss
Poor Performance.**

– The “7 Ps” is an old British Army Adage

I start with Abraham Lincoln's quote because it sums up the point of this chapter.

Public projects are really difficult. In the private sector a project is measured simply by whether or not it works

economically – if it is profitable. In the public sector, however, while economics matter, a project must also help a city or government to achieve a number of other policy objectives determined by our elected representatives, based on the interests and demands of their constituents – the voters. These objectives might include designs that are iconic, user-friendly, welcoming to all, equitable, accessible, and sustainable, as well as those that protect or restore habitats and the environment, manage stormwater, provide for public art, and ensure that economically disadvantaged firms receive a fair share of contracts and minority and women workers get jobs. As compared to a private sector project, it can be more challenging to balance such objectives with costs and economic performance. This is even more difficult with public realm projects where there are many more interested stakeholders – including every member of the public.

One of the big challenges with any project and particularly this type is that it is impossible at the beginning to know how it will turn out in the end but you have to start somewhere, so the question is, when you know that you will be “building the ship while you are sailing it,” when do you know enough to get started? You can increase your chances of success with thorough project planning at the beginning and that includes trying to imagine every possible contingency and event that might happen – and how you might respond or react to it. The saying goes “plan the work and work the plan.”

Good project planning will eliminate some variables and reduce risk although unexpected things will still happen. If you have planned well, however, there will be fewer distractions, so you will have the energy and capacity left to manage the completely unexpected events, which will also happen. Another good planning axiom goes, “how you finish has to do with how you start,” which means that if you start organized, you increase your chances of successfully completing the project but if you start disorganized, you may have less control

over how the project turns out. Another, more cautionary saying is “if you don’t know which way you are going, any road will get you there.” I interpret this two ways: 1) better to know which way you are going before you set out, if possible, but 2) if you aren’t sure, it may still be better to get started than just stand still – you’ll get somewhere and some action will lead to learning and clarification of direction. A last summary approach is, “get a plan, create the vision, find the money, assemble the team, and go for it.”

In this chapter we will consider these topics:

- Definitions: What is the “Urban Public Realm?”
- Types of Urban Public Realm Projects
- WWWWWH: Who, what, where, why, when, how?
- Timing, and how does it all start?

1.2 What is the Urban Public Realm?

(Definitions – thanks to Wiki)

Public realm is defined as any publicly owned streets, pathways, right of ways, parks, publicly accessible open spaces and any public and civic building and facilities. The quality of our public realm is vital if we are to be successful in creating environments that people want to live and work in.

– United Kingdom

Local Plan Issues and Options Consultation,
Appendix 1, Glossary
Chelmsford City Council, Chelmsford, Essex,
England

[http://consult.chelmsford.gov.uk/portal/
issues_and_options/
issues_and_options_consultation?pointId=s1
447062431371](http://consult.chelmsford.gov.uk/portal/issues_and_options/issues_and_options_consultation?pointId=s1447062431371), accessed July 26, 2019.

According to English Heritage, the public realm

'...relates to all parts of the built environment where the public has free access. It encompasses: all streets, squares, and other rights of way, whether predominantly in residential, commercial or civic uses...'

– United Kingdom

Designing Buildings Wiki – Public Realm

https://www.designingbuildings.co.uk/wiki/Public_realms, accessed July 26, 2019.

The public realm includes all exterior places, linkages and built form elements that are physically and/or visually accessible regardless of ownership. These elements can include, but are not limited to, streets, pedestrian ways, bikeways, bridges, plazas, nodes, squares, transportation hubs, gateways, parks, waterfronts, natural features, view corridors, landmarks and building interfaces.

– Abu Dhabi Emirate

Abu Dhabi Public Realm Design Manual,
Chapter 1, page 3.

[https://www.cip-icu.ca/pdf/2011-HM-Urban-Design2\(1\).pdf](https://www.cip-icu.ca/pdf/2011-HM-Urban-Design2(1).pdf), accessed July 26, 2019.

Municipal Development Plan (MDP) defined public realm as the space around, between and within buildings that are publicly accessible, including streets, squares, parks and open spaces.

– Federation of Calgary Communities
(Canada)
Municipal Development Plan, Calgary,
Ontario
[https://www.calgary.ca/PDA/pd/Pages/
Municipal-Development-Plan/Calgarys-
growth-and-development.aspx](https://www.calgary.ca/PDA/pd/Pages/Municipal-Development-Plan/Calgarys-growth-and-development.aspx), accessed
July 26, 2019.

Role of the Public Realm: The community's development fabric is composed of two distinct, yet inter-related components: the "public" realm and the "private" realm. The "public realm" consists primarily of the publicly-owned street rights-of-way and other publicly accessible open spaces such as parks, squares, plazas, courtyards, and alleys. The "private realm" consists of privately-owned areas in large part developed with buildings and associated improvements, and is more limited in its accessibility to the public.

– San Diego, CA
Urban Design: Role of the Public Realm

https://www.sandiego.gov/sites/default/files/legacy/planning/community/profiles/uptown/pdf/4_3_streets_the_public_realm.pdf, accessed July 26, 2019.

Public realm belongs to everyone. It comprises the streets, squares, parks, green spaces and other outdoor places that require no key to access them and are available, without charge for everyone to use. Public realm should not be seen in isolation but in the context of its adjacent buildings, their uses and its location in a wider network of public and private space. The three key elements that influence the public realm are:

- *The buildings that enclose and define the space;*
- *The space itself; and*
- *The people that inhabit the public realm and the way they use the space.*

– Local Government Association of South Australia

Prepare, plan, deliver: Public Realm Urban Design Guidelines, Local Government Association of South Australia, 3 March 2014,

page 8,

<https://www.lga.sa.gov.au/webdata/resources/files/Public%20Realm%20Urban%20Design%20Guidelines.pdf>, accessed June 6, 2019.

The public realm consists of all of the spaces and places where Philadelphians have shared encounters each day. Sidewalks, streets, parks, and plazas are the areas where we can come together, socialize, intermingle and experience the city. The physical surroundings that define our public realm contribute to creating a sense of place and a quality of life that is unique to Philadelphia.

– City of Philadelphia, 2035 Plan
The Plan, Philadelphia 2035 Plan,
<https://www.phila2035.org/plan>, accessed
July 26, 2019

The quality of the public realm—streets, sidewalks, plazas, and other publicly accessible spaces—influences our city’s livability, sustainability, safety, and health. More people will choose to walk

as a mode of transportation if the surrounding environment is well-designed. A vibrant and high-performing public realm also contributes to the region's competitiveness and the image of the city, attracting people to live, work, and visit Minneapolis.

– City of Minneapolis 2040 Plan
Minneapolis 2040: The City's
Comprehensive Plan
<https://minneapolis2040.com/>, accessed
July 26, 2019.

1.3 Types of Urban Public Realm Projects

The purpose of this section is to list types of places, projects, sites, features, geographic locations, benefits, and trends affecting the urban public realm.

Types of Places

- New Signature Park
- Revitalized Park
- Pocket Park
- Neighborhood Park
- Plaza (hardscape)
- Playground
- Dog Park
- Historic Landscape/Cultural Landscape
- Places of Remembrance
- Public “Right-of-Way” or “ROW” (Street, sidewalk, bikeway, etc.)
- Traditional street
- Transit mall, pedestrian mall, shared street, “woonerf”
- Transit ways (buses, streetcar, LRT)
- Bridges
- Playground
- Bicycle Facilities
- Rails to Trails
- Expressway lid
- Levee
- Roadway Infrastructure remnants – land around cloverleaves, spaces under bridges and overpasses

- Street Tree programs
- Parks/gardens on vacant house lots (urban agriculture)
- Public Art
- Conservation
- Stormwater management
- Environmental remediation
- Related Amenities/Concessions
- Privately owned public spaces (“POPS”)
- Urban Core places
- Suburban town centers
- Suburban and exurban places
- Sub/exurban Lifestyle centers

Types of Sites

- Old sites/places in need of revitalization
- Old sites/places in need of repositioning as a new use
- Newly envisioned/needed places in locations that do not yet have them
- Abandoned/contaminated industrial sites
- Waterfronts, marine terminals
- Rail yards
- Landfills
- Undevelopable land (poor soils, environmental conditions, subsurface structures, pipes, tunnels)
- Historic assets
- Valuable developable land (how to put a park in an urban area where land values are high – who pays?)

Features of Urban Public Realm projects/ places

- Grass, fields, lawns
- Trees
- Plantings
- Topography/landforms
- Landscape
- Hardscape (plazas, sidewalks, streets, boulevards)
- Fixed furniture
- Loose furniture: benches, chairs, tables, umbrellas, waste receptacles
- Recreational and programming facilities such as ping-pong tables, Jenga, other games, lending libraries
- Water features (ponds, lakes, fountains, splash pads, natural water, rain gardens, stormwater management features)
- Lighting: Light poles, up-lights, feature lighting, programmable lighting
- Signage: wayfinding, rules, interpretive
- Food and beverage concessions – fixed buildings and seasonal, mobile carts
- Toilets – permanent and temporary
- Event and performance spaces and facilities
- Rentals, equipment and game rentals

Geographic Locations of Public Places (relative to city)

- Downtown urban/commercial core
- Urban residential neighborhoods
- Urban commercial corridors
- Urban parks, plazas

- Neighborhood parks (playgrounds, pools, courts, and recreation facilities)
- First ring suburban neighborhoods, town centers, and commercial corridors
- Suburban and exurban town centers and commercial corridors

Trends Influencing Urban Public Realm Projects

- Rebalancing of the public right-of-way (ROW) to provide more space for other modes – prioritizing transit, bicycles, pedestrians, and disabled people over car-oriented designs
- “Road/lane diets,” traffic calming measures, shortening of cross-walk distances, bump-outs at intersections, shared streets/woonerfs, emphasis on pedestrian safety e.g. Minneapolis Vision Zero objectives: to eliminate deaths and life-threatening injuries on our streets
- Multi-modal streets and facilities
- Growth in cycling, demand for more bicycle facilities including shared and separated
- Urbanization of first ring suburbs – e.g. new adding sidewalks in St. Louis Park
- Growing aging population – facilities for pedestrians and the disabled
- Future – Autonomous vehicles/driverless cars – land use impacts
- Evolving technologies – Projection, dynamic lanes, fountain technology, programmable lighting and sound, etc.
- Increased interest in and use of active programming of public places, as a way to increase street /public life and as

a way to generate income to support operations

- Universal design, accessible design, compliance with the Americans with Disabilities Act (ADA)
- Evolving needs and ideas about what comprises the public realm and who its users are
- Evolving financing models – Public-Private Partnerships (for the capital project), operating reserves, foundations (for ongoing operations)
- Evolving operating models – business improvement districts (BIDs), non-profit operators, conservancies, land trusts, foundations, and etc.
- The public realm's increasing value as an amenity (residents & businesses)
- Funding sources such as park dedication fees, e.g. "Sense of Place" fees in Sunnyvale, CA
- Public safety and Crime Prevention Through Environmental Design (CPTED)
- First Amendment rights (freedom of assembly and freedom of speech);
- Laws, ordinances, and the regulatory framework of public places, e.g., the elimination of spitting and loitering laws perceived to be targeted at specific groups
- Equity in the distribution of public facilities – geographic and socio-economic
- Equity in access to public spaces including, for example, studies of immigrants and other groups feeling less welcome in public spaces

Benefits of Public Realm

- Health and wellness
- Other measures of personal attainment including income, education
- Sociological

- Creative, public art
- Environmental, habitat, sustainability, resource use
- Climate, heat island effects
- Economics, business attraction, productivity
- Uses/User needs
- Happiness
- Strengthen social life and bonds of a civil society in urban areas

1.4 Creating the Urban Public Realm: Who, What, Where, Why, When, and How?

How does the Urban Public Realm get produced? More specifically, how do urban public realm projects get implemented? The focus of this section is on how these questions relate specifically to the creation of new public realm projects in urban areas in America since 2000. As you consider how public places are created and used, always ask yourself “who, what, where, why, when, and how?”

Who:

Whose idea was it in the first place – who conceived it? Who promoted the project – from the public and/or private sectors? Who was responsible for implementing the project – the government agency, the private property owner, or some other central actor? Who owned the property before and who owned the new public place once the project was completed? Who designed it and what kind of designer were they – architect, landscape architect, engineer, lighting, or something else? Who paid for it and who raised the funds? Who operates, maintains, programs, and activates the space? Who were the key stakeholders, who are the intended users, who is the project for, and who else benefits from it and how? Who lost something and who gained?

What:

What exactly is the project? How big is it? What is it like in character? What is its primary purpose and function? What else does it accomplish? Is it a street, plaza, or pedestrian mall? Is it an entry plaza for a building or buildings? Is it a park or playground? Is it an event or sports facility? What type of improvements will you be making – new structures or renovations to existing facilities? How did the type of project – the “what” influence the “who” of who conceived of it, and who implemented it? Is it a building, a landscape, a historic preservation project, an urban design, or some other type of infrastructure? Does it mitigate a brownfield, help with stormwater management, or restore habitats for birds and pollinators?

Where:

Where is the project located? How is it accessible and how do you get there? What part of the city or region does it serve and is it intended to serve? Why is it in that location? Was the property available? How does the project’s location influence who the users are – and who the promoters of the project are?

Why:

Why was the project initiated? What was the need? What was there before – and who was there before? Did something change? Was the old place worn out? Or did need and demand arise for something completely new that had not been there before? Was it a parking lot that became a park, or an old street that was redesigned and rebuilt as a new street? Did

new development drive new needs for amenities? What other user needs or trends caused the project? Did the needs and demands of pedestrians, bicyclists, property owners, or other uses and users, influence the need for the project?

When:

Really, why now? What caused the project to happen? Was there a driver, such as an adjacent project or the opening of a new transit facility or building nearby? Was it an old place that was in poor shape and needed to be refurbished? Did nearby development or investment or shifting demographics have anything to do with it? Did an impending major sporting, cultural, political, or other type of event drive the need? Did some new source of funds become available that made the idea more viable? Sometimes money chases projects, rather than projects chasing money. (And sometimes solutions are looking for problems rather than the other way around.)

How:

How did it get done? Assuming you have the answers to the previous five questions, how was the project implemented? In the next section we will explore this question from the perspective of timing, how a project gets started, and then how it unfolds.

1.5 Timing and How does it all start?

Urban public realm projects are initiated for a number of different reasons. In some cases, they start as routine capital projects, for example, the reconstruction of a street. In other cases, a major private stakeholder or group of stakeholders may push for a project that they hope will achieve some goal. Here are some examples of how some recent Minneapolis projects have started:

Street Reconstruction:

A routine city capital project, initiated by city public works department when a street is at the end of its useful life and publicly funded with a combination of federal, state, and local dollars (cash or bond proceeds backed by tax dollars generated by street assessments).

Signature Downtown Street Redesign and Reconstruction:

The business community approaches the city and asks that the city begin the project with the idea that it will be funded 50/50 with public and private funds. The public funds are to be a combination of state and city funds and the private funds are to be generated through an area-wide special assessment (an additional tax) on all private property owners downtown who will benefit from the project. The street is considered to be the front door of Minneapolis, the Twin Cities, and the State for business and the first and most important impression for many businesspeople and visitors from out of town. This is “Minnesota’s Main Street” and the business community considers it a “must-see destination.” The street is over 25 years old and in need of replacement.

New Playground:

Special capital project by the parks department or park board

and funded with tax dollars and some private fundraising. Driven by nearby neighbors and the neighborhood association who asked the MPRB to undertake the project. This is in a rapidly growing neighborhood where there previously had been little housing and few children. The site is a comfortably shaped and located piece of land on the riverfront that all can agree is suitable for a playground.

New Park:

Privately funded new signature park, initiated by a wealthy donor and paid for entirely with private funds. Process began with a city RFP for the sale and development of City-owned property with the idea that the parcel would be attractive to housing developers. Several housing developers proposed, along with a private individual who offered to personally fund a new park instead, and elected officials approved of and supported that vision. The private donor hired the landscape architect and paid for design and construction and then turned the park over to the city. The private donor also helped create an operating fund although operating duties and costs are now shared between the City and the fund.

Signature Downtown Park:

Creation of a large new urban park in the center of downtown – the first new urban park in a century in support of a larger, district-scaled, mixed-use development that included a new NFL stadium, two office towers, ground floor and skyway retail, skyway connections, parking garage, pedestrian bridge, and a hotel all surrounding the new public park. Funded by the NFL Team, the State, the City, and a private development company. Developed on land owned by the Minneapolis Park and Recreation Board (MPRB), leased back to the city, with improvements owned by the City, and all operated by a non-profit operator under contract to the city. Complicated.

Historic Riverfront Park Including Restaurant:

The Minneapolis Park Foundation (MPF) and key leaders and donors propose to raise funds for the creation of a new park

and restaurant at a historic location on the riverfront. The project will be funded by a park foundation fundraising effort, and owned and operated by the park board once completed. A major feature will be a destination café/restaurant with an award-winning chef located in a restored historic building on the riverfront. (The MPF is different from the MBRB, which owns and operates the City's park system. The MPF is a charitable non-profit organization that raises funds for new park capital projects that the MPRB will then own and operate once complete.)

New Bridge Connection:

Traffic is rearranged to accommodate the new US Bank stadium project and one freeway ramp is replaced with a new one in a different location, freeing up the old ramp for new uses. The state (MNDOT) donates the abandoned ramp to the City. Demolition of the redundant ramp would be costly and so the mayor has the vision to redevelop the old highway ramp into a new community pedestrian bridge connecting an immigrant community with downtown.

Other General Purposes:

- Reinvest in an old facility that needs to be revitalized
- Create a new facility for uses and needs that did not previously exist
- Redevelop parking lots and under-utilized or blighted properties for better uses
- Activate a place and welcome people
- Enhance safety – real and perceived – in two ways:
Personal security/crime, and pedestrian and bicycle safety from injury from cars
- Modify social behavior and enhance the experience and use of a place
- Create, strengthen, enhance connections between places
- Provide public facilities for bicycles and pedestrians that re-balance modes, reduce the dominance of the

automobile, and reduce death and injury due to traffic accidents

- Vanity projects where a strong advocate with an interest, funds, and/or influence promotes a project that may not be the highest priority from the standpoint of the public or government. Maybe an individual or small group of individuals or a non-profit organization or leader/individual

1.6 Project Management 101: Purpose, Scope, Schedule, and Budget

For any project, there must first be a shared understanding of the project's purpose, scope, schedule, and budget. This needs to be clear and succinct and you will use it to explain the project over and over again from beginning to end. It may take the form of a single page project summary – a “one-sheet” – or it could be expanded to become the first few slides of every slide presentation you will do for the duration of the project. It pays to get this narrative right – or at least very close – early on and then to tweak and improve it constantly along the way to reflect new information, changing conditions, and ongoing feedback from all of the stakeholders. Still, at the end, those first few slides should not be very different from those you showed at the very beginning of the project.

Purpose

What are you trying to accomplish with the project? This is basically a “mission statement,” in the form of a short paragraph or a handful of bullets, perhaps based on a one or two-page list of principles, but not much more. The goal is to arrive at a short version that, with repetition, becomes a brief elevator speech that everyone on the team can remember

at any time when someone says, “what is the project about, anyway, and why are you doing it?”

Scope

What is the nature of the project? How big is the site? What work is actually involved? What will it be when it is finished? Are you building an all-new facility or renovating an existing one? Is it a new project, a renovation, an adaptive reuse, a historic preservation project, or a greening project? What is the character of the project? Can you describe it in a few sentences?

Schedule

How long will it take to complete? How long will it take to engage the stakeholders, complete design, obtain approvals, raise funds, bid, contract and construct, and when will it be open to the public for use?

Budget

How much will it cost and who will pay for it? How much will it cost to design, build, and furnish – the capital costs – and what is the anticipated operating budget once construction has been completed and it is open for public use? What are the potential risks and costs associated with owner and contractor driven “change orders,” unforeseen conditions, and other “known unknowns” and “unknown unknowns?” How much of a cash surplus or “contingency” should you carry on top of the budget to cover unanticipated costs?

1.7 Project Management Example

Mark Twain once began a letter to a friend with these words: “Forgive me, if I had had more time, I would have written a shorter letter.” It is not difficult to explain a big project, but it takes a lot of time and effort to be clear and concise. Below is an example of a “one-sheet” created to explain the first Peavey Plaza redesign to key stakeholders and potential funders and donors. There was also a longer (ten slides) slide show but this captures the whole project on one page.

Peavey Plaza Revitalization

Scope, Schedule, Budget

July 19, 2012

- 1) **SCOPE:** The complete revitalization of Peavey Plaza based upon the concept design approved by Minneapolis City Council November 4, 2011



- 2) **SCHEDULE:** Complete construction by the end of November 2013

Year/Quarter	2012				2013				
Activity	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Complete
Design Development									4/30/12
Bid Documents									8/31/12
Contract Bid/Award									11/30/12
Fundraising									8/31/12
Collect Funds									11/30/12
Close on Bonds									1/31/13
Construction									11/30/13
MOA Construction									6/1/13

- 3) **BUDGET:** \$10M total project cost (\$8M construction/\$2M soft costs)

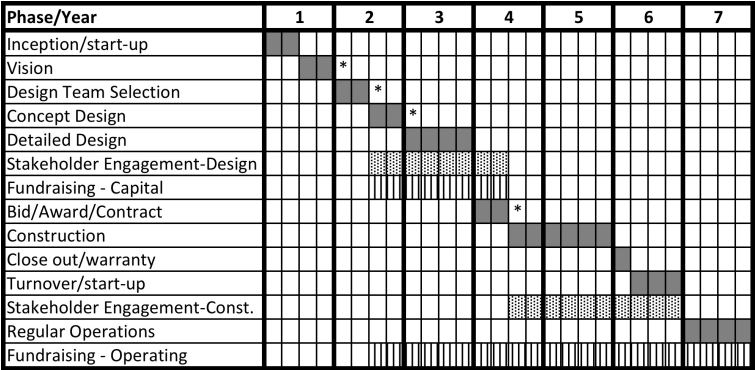
- a) MN has allocated \$2M in bond proceeds for the project
b) Approximately ***\$8M must be raised***

Sources	%	Amount
MN Bond Proceeds	20%	\$2,000,000
City/Corp./Private/Other	80%	\$8,000,000
Total Sources	100%	\$10,000,000
Uses	%	Amount
Construction	80%	\$8,000,000
Soft Costs	20%	\$2,000,000
Total Uses	100%	\$10,000,000

Figure 6. "One sheet" used to explain the first attempt at the Peavey Plaza revitalization project, 2012. City of Minneapolis.

Time

Once you have considered the WWWWWH of a project and figured out the purpose, scope, schedule, and budget, the next thing you must do is to apply your answers and plans to a timeline and start thinking about how the project might unfold. In many ways this is like writing a play, and for the typical project, I propose there are eight acts to this play: Inception/start-up, Design Team Selection, Stakeholder Engagement, Concept Design, Detailed Design, Fundraising, Construction, and Normal Operations. This is what these acts or phases look like when applied to a conceptual bar-chart type of schedule:



* Government approvals

Figure 7. A conceptual schedule for a public realm project. Author.

This schedule could apply to any reasonably sized project and while seven years seems like a very long time, when you think of everything involved, time passes quickly. In this case, the public would begin to notice the project in year three and begin using it in year six, so it is really a three-year project, but the start-up could take a year or two and the switch over to regular operations and fine-tuning of the facility and the

operations could take another couple of years after construction has been completed. Below is a more detailed description of each phase:

Phases

Inception and start-up:

This is when a project promoter assembles a group of key actors to propose a project. It may be a single meeting or it could be the creation of a working group that meets regularly for a few months or a year or two to convene the key stakeholders, come to agreement on the need and principles, and draft the framework for how the project might be implemented. This could be led by city elected officials and staff or a combination of city, private, non-profit, or other interested parties getting together and agreeing that a project is worth trying to implement. The original vision can come from a small group of businesspeople or community members or it can be a single person like the mayor, a business leader, a philanthropist, a property owner, or a developer.

Vision:

The next step is to create a governing group that will shape the vision and help lead the project forward. This might be a small group of city staff and elected officials or it may include representatives of the business community, potential donors, nearby property owners, and other key stakeholders. This group may form a “steering committee,” an “advisory committee” (advising city staff but not deciding), or an “implementation committee” (with a greater role in decision making). There may also be a fundraising committee made up of private individuals and representatives of businesses who will help fund the project and therefore will also have a say in design and implementation. This group will develop a vision and principles for the potential project. This group may also

approve and promote a very conceptual schedule and budget developed by staff. The same group may also take steps to secure support of the city government for the project, either unofficially or more officially if, for example, some funding must be appropriated or if it is necessary to acquire property.

Design Team Selection:

Assuming a funding source of some kind (the city, state, or maybe a donor), the leadership group and staff will structure a designer selection process. This may be a design competition or, more typically, a process that begins with a “Request for Qualifications” (“RFQ”) followed by a “Request for Proposals” (“RFP”) (sometimes there is no RFQ). Since most public realm projects have some kind of public participation and public funding, the design team and contractor selection process is likely to be run as public procurement process through the city’s purchasing department and the process must be transparent and competitive. Usually, you cannot just decide to hire someone you like.

The group leading the project will use their vision and principles as the basis for the RFQ/RFP. The RFQ/RFP should give the potential designers enough background and direction so that they understand the project, including history, objectives, conceptual budget, and schedule constraints. They will submit a proposal that describes their understanding of the project, their approach to the work, and their key team members. They will also include examples of similar relevant projects, resumes, and a fee proposal. The leadership group will play a role, along with city staff and perhaps other stakeholders, in reviewing the proposals, creating a shortlist of finalists, participating in interviews with the finalists, and recommending a winning design firm or team. (More on this process in Chapter 2.)

Concept Design/Stakeholder Engagement:

Once the Design team has been hired, they will analyze the site, meet with and interview a variety of key stakeholders, host

public meetings, open houses, and other events, and use online surveys and social media to seek input, all with the purpose of validating the vision and creating a “program” for the place. The program describes both the quantitative needs of the place describes not just the physical size and characteristics of the place (for example, two soccer fields of regulation size and a 200 square foot, one-story public restroom building that includes storage for maintenance equipment) but also the anticipated use and experience of the place (for example, a public plaza with specific power and lighting infrastructure in support of intensive use for organized programs and activation use vs. a park with grass, shade trees, and benches for relaxation). More important than the physical and quantitative needs of the place is a clear understanding of the intended use and experience of the place.

They will then create a series of preliminary design drawings – site analyses and bubble diagrams to begin with – for review and discussion with these groups and stakeholders. Using an iterative process, the designers will add detail to their drawings and integrate the feedback they receive from all of the stakeholders into a single “concept design” that is based on the vision and principles, input from their initial meetings with the group steering the project, and community engagement process including public meetings, surveys, and other information gathering processes. The objective is to combine site analyses, user needs, and stakeholder perspectives together into a concept that satisfies the original objectives and the key stakeholders and that fits a budget. The concept design will include a cost estimate that the team will use to establish a more detailed budget – and to determine the amount of funds that must be raised.

Is Designing for Active Programming Good?

In recent years, there has been a move in park production to design and build to maximize organized programming, events, and activation. For example, a park may be designed to support 80 revenue generating programs a year, small, medium, and large, including music events, arts fairs and so on. A part of this movement is based on the idea that programming revenue will significantly offset operating costs and perhaps even make the park revenue self-sustaining but in practice this rarely works out and more often the revenue does not meet initial projections. At the same time, the operating costs go up with the event usage, as events require more security personnel, power, the trash pick-up, as well as the costs of wear and tear and maintenance, for example the replacement of damage grass after a concert.

But more important, when the emphasis is on programming, the idea of a just relaxing in an un-programmed park may get lost. Landscape Architect Mary Margaret Jones has become concerned with the growing emphasis on active programming, concluding that, “too often, people ask ‘what do you want to do in the park’ when the real question should be ‘how do you want to feel in the park?’” The first question pre-disposes people

towards thinking about “activities” when the second gets at just enjoying being in a park.¹

Fundraising:

At the very beginning, the project leadership must develop a strategy for raising the public and private funds required to pay for the project and the concept design will become the primary tool used for that fundraising effort. The concept design will include renderings that help people understand what the project will look like. Potential funders – both government officials and potential donors – will have opinions and feedback on the design and these will be incorporated into the design and renderings, if feasible and reasonable, to cement their support.

Fundraising has two components: “Capital Funds” and the “Operating Reserve.” The first priority will be to raise enough funds to design and build the project. Some funders will only promise funds with the stipulation that other funds are raised and promised before they will write the check. For example, the state of Minnesota often makes grants to these types of projects however it requires a complete and detailed capital and operating budgets (and a lot of other information), as well as proof that all other funds have been secured, before it will distribute any funds to the project. The state’s funding is the “last-in” dollars. More generally, with a public project, you cannot start with half the funds – you have to have all of the funds secured before you sign a construction contract.

Therefore, cash flow is important because in addition to last-in grants, like those from the state, some donors may elect to

1. Mary Margaret Jones, interview with the author, 3 November 2016.

give timed gifts. For example, a donor may give \$500,000, in annual installments of \$100,000 per year, every year, for five years. But if you need all of the money in year one to get started and plan to complete construction in year two, this isn't really a helpful gift – not that you don't want the money. In this case, a different party (for example the city) may make a “bridge loan” by loaning the project the full amount of the grant (or 4/5ths of it) in the first year and then collecting the proceeds to repay itself over five years. The loan is secured by the pledge or promise of the donor to make the future donations. The reasons a donor – whether it be a private individual, a corporation, or a foundation – would choose to make a timed gift with a specified payment schedule may include estate planning purposes, taxes, future income or cash flows, or other business or personal reasons.

Detailed Design:

Once the concept design has been completed and has secured general support from city elected officials, stakeholders, and funders, the design team must continue with detailed design. Concept design may take six months and go from blank sheets of paper to renderings of a place. Detailed design can take much longer – another six or twelve months, but this phase is more about refining the ideas and the details. This might include deciding what type of plants, benches, and light poles to use and where or how to detail the paving – concrete, pavers, or other. Detailed design bring the project from soft focus into clear focus – from big ideas to detailed refinement. The detailed design won't look very different from the concept design but it will result in more information – enough to solicit bids from contractors. The product of the completed detailed design phase is a big set of drawings and a specification book – a thick book filled with detailed information describing every product and system from how to compact the dirt and the exact ingredients of the concrete mix to exactly how many outlets of which type will be purchased and at what height

they will be mounted on the light poles. The drawings and specifications (“specs”) together are called the “construction documents.”

The design team will also prepare a more detailed cost estimate based on these documents to determine if the project is still within budget and help prepare for analysis of the bids. The estimate may be over or under the previous estimate (usually over) and when that happens, the project team may choose to change or delete certain features through a process known as “value engineering” to reduce costs; or to bid certain features as discrete “alternates” – kind of like making something an extra or upgrade for a specific price, in the same way the fancy wheels, rust-proofing, or navigation system in a car is sold as an extra above the base price. In the case of public realm, “add alternates” (increases to the price for specific changes) may include larger trees, paving stones rather than poured-in-place concrete for sidewalks, and a water feature that can be deferred if not enough funds can be raised.

Bid/Award/Contract/Construction:

The city will issue an invitation to bidders. The bid documents will include the construction documents (drawings and specs) as well as the invitation to bid, instructions to bidders, schedule requirements if any, and requirements for SUBP (small underutilized business participation) targets. This is the expected minimum percentage of the contract value that will go to minority-owned and women-owned businesses and the expected minimum amount of labor that will go to women and minority laborers.

Interested contractors will acquire the bid documents and will take the set apart and bid out pieces of it to a number of subcontractors such as demolition, earthwork, concrete, steel, plumbing, electrical, lighting, and so forth. These subcontractors will each review their parts of the documents, determine the cost of doing the work (labor and materials) and submit a bid for that scope of work. The General Contractor

("GC") will select the lowest qualified bid from each set of bidding subcontractors and assemble them all into one bid (adding up all of the subcontractors' bids) for the entire project.

The City will receive bids at a certain location by a certain date and time and will open them in the "bid room" at a published time. A bid opening is open public so anyone can attend and listen as the envelopes are opened and each bid is read out loud – contractor name, total bid/price, and the prices of any alternates. In public bidding the lowest qualified bidder wins. The lowest qualified bid will include a price as well as participation numbers that the contractor must honor. The procurement department will review the detailed information submitted with each bid to make sure it is qualified. For example, the GC must include with their bid proof of insurance, a series of bonds, and anticipated percent and dollar amounts of contracts or subcontracts that will go to minority and woman-owned firms and jobs that will go to women and minority workers. Once the bid has been approved by procurement, the City Council will vote to authorize staff to negotiate with and execute a contract with the lowest qualified bidder.

Once all parties have executed the contract, the contractor will "mobilize" and begin construction. Construction may begin with the setting up of a temporary construction fence surrounding the site, a project trailer and a truck or shipping container full of tools and material. The first work will include demolition, tree and shrub removal, and excavation/earthwork, depending upon the type of project. Subsurface systems will be installed (electrical, plumbing, water, sanitary sewer, storm sewer or stormwater management system, and irrigation) and then construction will proceed vertically.

The contract typically stipulates a completion date – called "substantial completion." At this point the project is 95% complete or so and ready to be turned back over to the owner/operator and opened to users. The understanding is that

contractor still has work to complete but to the average person it should look complete. At this stage the contractor is also required to turn over to the owner an “owner’s manual” – typically a large book of information and instructions on how to take care of, use, repair, replace, and clean all the systems and materials in the new project. This may include information about how to maintain pumps and how often to change their filters, for example.

The contractor must also turnover a set of “as-built” or “record” drawings. During the course of construction many things change, small and large, and the contractor constantly marks up these changes on a set of drawings (paper or digital). So, if an underground pipe is relocated during construction because it can’t go where it is shown on the drawing (maybe there is a boulder in the way that would be costly to move), then the final location of the relocated pipe is shown on the as-built drawings. In the end all of these changes are integrated into one “conformed” set of drawings so that the owner has a record of exactly what was actually built and where.

Close-out/Warranty Work/Turnover:

Between “substantial completion” and 100% completion the contractor completes what is called the “punch list” – a list of items agreed upon between the owner, the designer, and the contractor that are remaining to be corrected or completed prior to the 100% completion of the project and the final payment to the contractor. A one-year warranty begins at substantial completion so during the closeout period and up to the one-year anniversary of substantial completion, the contractor will also be completing warranty work – fixing things that have not held up such as cracked concrete and dead plants and trees. During the closeout period the contractor will largely disappear from the site, and the operator of the new project will take over operations. This can be city or park staff or a non-profit operator.

Normal Operations:

Once the contractor's work is complete and they are gone from the site, the operator will take over responsibilities for day-to-day operations, maintenance, and programming. Duties including cleanup, maintenance, repair, augmented security, programming, and so on. The operator may be the City in the case of a street; it may be a special improvement district such as the Minneapolis Downtown Improvement District, which provides augmented clean, green, and safe programs in a specific areas downtown that pays a special assessment (a special assessment district); or it may be a non-profit or for-profit operator that subcontracts with a variety of vendors to provide the services. Services include things such as trash pick-up, snow removal, sprinkler maintenance, care and watering of trees and plants, enhanced safety and cleanup through the use of "ambassadors," and programming such as musical events, block parties, farmers markets, and other forms of activation. The operator will spend the first year or two fine-tuning operations – figuring out how everything works, how to take care of the place, and how to maximize use, activation, and in some cases event revenue required to offset costs of programming. During this period the operator will also be fine-tuning their operating, maintenance, and programming budget to reflect real conditions and costs.

Repeat:

And in twenty or thirty or forty years, when the place is physically worn out, stylistically dated, and no longer capable of meeting changed user needs, the whole process will start all over again.

Conclusion

In future chapters we will learn more about Design, Finance, and Politics. We will end this chapter with examples of different types of schedules and timelines, and a little more information

on how projects happen over time, from the moment when they are a just a glimmer in someone's eye to the day when they are completed and people begin to experience a new public place.

1.8 Exhibits: Schedules

Types of Schedules

- Macro/conceptual schedule (the entire project duration)
- Micro/detailed schedule (a discrete phase, part, or process)
- Graphic timeline schedule (for use in public meetings)
- Detailed meetings schedule (for managing a large design team from out of town)
- Stakeholder engagement schedule (for event, communications, media planning)

The following examples illustrate several types of schedules for use in project planning and management. I use the terms “macro” and “micro” to differentiate between simple overall schedules for use in explaining the project to stakeholders and the public and detailed schedules created for the purpose of mapping out all of the steps and processes in one phase of a project for use by the project team. When the design team is from out of town, one effective approach is to schedule several days of meetings every month when the team will be in town. Each month there is an agenda and a set of goals and objectives as well as a meeting schedule designed to share and collect as much information as possible in a compressed time frame. For this kind of process to work a carefully organized meeting schedule maximizes the value of that team's visit.

Below are the original schedules for the Nicollet Mall project in Minneapolis. These schedules were created at the very beginning of the project as a part of the competition planning process. The first three schedules are “macro” schedules that offer a conceptual timeline for the entire project from beginning to end. The first schedule is the very first one created for the internal project team in March 2013. The second

schedule is a revision to the same schedule, four years later, in the summer of 2017, when the project was almost complete. The third schedule is a simple graphic version that was used in public presentations in 2014.

The schedule changed significantly between 2013 and 2017 and construction was finished about sixteen months later than originally planned. There were two big schedule “busts”: 1) The elimination and redesign of a major feature (the “island,” including grand stairways from the street up to the skyways), which took about four extra months, and 2) The overall redesign and rebidding of the construction documents after the first bid process yielded only one bid that was much higher than estimated (the bids were expected to come in around \$35M and the one bid the city received was for \$59M). Redesign and rebidding took another four months.

Weather is an issue for road projects and while the project team had planned to begin construction in late March to get a full season in, (the season for outside work in Minneapolis runs April 1 through November 30), rebidding meant contracting in May (rather than January) so the construction start date slipped to June. Even then, that first year was slow because by the time the project had been rebid, most contractors had already won enough work to “fill their work pipelines” for the season so the winning contractor’s plan was to get started slowly during that first year and then to really hit it hard and finish it all with a full construction season the following year. Together, these delays cost a full season, and that added time too.

The Macro Schedule – Three Versions

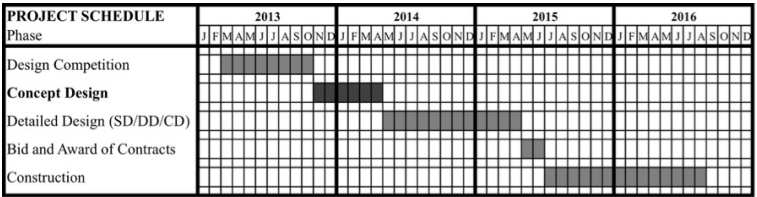


Figure 8. First draft of the macro schedule for the whole project, spring 2013. City of Minneapolis/Author.

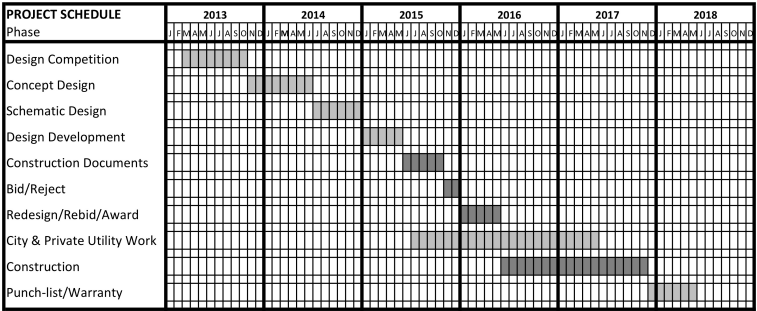


Figure 9. Revised macro schedule for the whole project, summer 2017. City of Minneapolis/Author.

Macro Schedule – The Public Version, Spring 2014

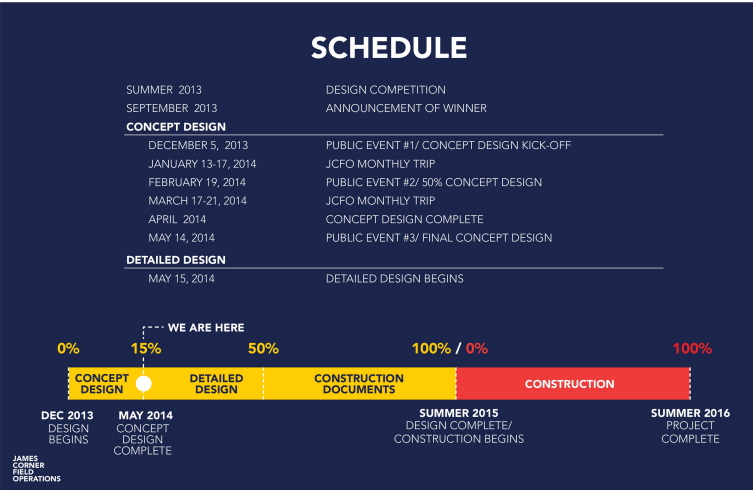


Figure 10. The macro project schedule used in public meetings, spring 2014. City of Minneapolis/JCFO.

Detailed Schedule

Detailed Schedule – The Design Competition Phase

The key milestone at the start of the Nicollet Mall project was the selection of a design team by fall 2013. The reason was simple: Mayor RT Rybak’s term was coming to an end in November and he had decided not to run again but he had a personal stake in successfully launching the project before the November election and the end of his term the following January. Planning started in March and it took every bit of

effort to successfully complete the competition before Rybak went out of office in January 2014.

A central part of the plan was obtaining a large grant from the state – the Minneapolis Department of Employment and Economic Development (DEED) – in the upcoming legislative bonding bill which would be passed at the end of the legislative session in May 2014. The City hoped to win a grant from the state that would cover half of the project cost – \$25M on a \$50M project budget. Timing of grant requests is important, too, because the state legislature traditionally only passes bonding bills in even-numbered years and elections for state representatives occur every two years (also in even-numbered years), which means that the make-up of the house can change between bonding bills, increasing or decreasing a project's chances of receiving funding. So, if you don't get the grant this time, you don't know who will be deciding next time, which is a long two years away.

Indeed, the City had made a request for a grant for Nicollet Mall in the previous bonding bill cycle, in 2012, and received no funding, in part because the legislators felt there was not much of vision, so they didn't understand the need for the project and the funds. Mayor Rybak knew that the city needed the funds from the state and that the City would need a very compelling vision in order to get those funds. After twelve years as mayor, he also knew what was involved, he had a lot of good will and political capital and influence at the state level, and he knew that if he didn't get it started, it may languish for several more years as the next mayor determined his or her own priorities.

The following schedule was created in March 2013 for the purpose of determining if the project team (which was then three people) could meet the mayor's schedule and, if so, which pinch points and critical path items required immediate attention. This is a detailed version of the bar on the above macro schedules called "Design Competition" (March-October,

2013). The project team met and revised this schedule every week for seven months.

The biggest issue was that a large number of people had to meet repeatedly and approve decisions to allow the project to keep moving. These people included key individuals, key city council-members, and key council committees including the Transportation and Public Works (T&PW) committee, the Ways and Means and Budget (W/M&B) committee, the Committee of the Whole (COW) and the full City Council. The project team also had regular meetings with the public-private “Nicollet Mall Implementation Committee (“NMIC”) over this period (The nine-member NMIC was comprised of five elected officials and four representatives of the business community). Those groups all meet on cycles based on a monthly schedule and the project team had to fit the work to those schedule and dates. Some people are harder to schedule than others and often those are the people who are most important to have in the room. A meeting that is missing a key decision maker is a meeting that you must have again when that person is available, or you must at least find a way to brief that person on the side and secure their support.

Finally, the schedule had to accommodate the proposing design teams, all of which were from out of town. The project team expected them to visit for an informal tour and meeting and then come back for a final interview and public presentations at the Guthrie Theater. There were four finalists from around the country (one dropped out so then there were three) and the design of the schedule had to allow each design team enough flexibility to make sure their key people could all be in town.

DETAILED COMPETITION SCHEDULE																											
Phase/Task/Week (key date)	February			March			April			May			June			July			August			September			October		
	4	11	18	25	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	31	7	14	21	28	
Project Management Set-up					P	P	P	C	C	P	P	P	P	C	P	P	P	P	C	P	P	P	P	P	P	P	C
Scope, Schedule, Budget, Q&A									C	C																	
City Review Work Plan & Docs									C	C																	
IC Approve Work Plan & Docs									C	C																	
Draft RFQ									C	C																	
Draft RFP/Design Brief									C	C				C													
Draft Design Principles									C	C				C													
Design Competition Stage I																											
RCA for April 16 T&PW														cc													
CC Approval of RFQ, Process																	C										
Issue RFQ (4/29); Quals Due (5/31)														C													
Staff Review Quals/Propose Finalists																											
NMIC Approve Finalists (6/11)																											
RCA for June 18 T&PW																											
T&PW Approval of Finalists (6/18)																											
Design Competition Stage II																											
Finalize RFP/Design Brief																											
Issue Comp. Brief to Finalists (6/20)																											
Design Phase (6/20 - 8/15) (8 Weeks)																											
Submissions Due (8/15)																											
Internal Staff Review																											
Presentations, Interviews (9/11)																											
Decision (9/12)																											
CC Approval of Winner (10/4)																											
Exhibit of Designs (Optional)																											
Concept Design Phase																											
Contract Negotiation/NTP (10/31)																											c
Start Concept Design (11/1)																											c

Meetings

P: Public Works Team Meeting (Weekly)

C: Implementation Committee Meeting (ASSUME MONTHLY THROUGH SEPTEMBER - WE WILL SCHEDULE)

Key Dates (Tentative):

- C RFQ Announced and Posted Monday, April 29
- Qualifications Submission Deadl Friday, May 31
- Review quals; propose finalists t Week of June 3-7
- C NMIC Approval of Finalists Tuesday, June 11
- Finalists/Des. Brief @ T&PW Coi Tuesday, June 18
- Competition Brief Issued to 4 Fir Thursday, June 20
- Submission Deadline Thursday, August 15 (8 weeks)
- Internal Review of Designs August 16 - September 9
- C Public Presentations by Teams Week of September 9
- C NMIC Interviews with 4 Firms Week of September 16
- C NMIC Determines winner Week of September 16
- Public Display and Review of De Optional/TBD
- CC Approval of Winner Friday, October 4
- Contract Negotiations Month of October
- Start Concept Design/Engageme Month of November

Figure 11. The detailed schedule used to plan the design competition phase of the Nicollet Mall project. City/author.

Detailed Meeting Schedules

Once City's project team had hired the winning design team, which was led by the New York-based landscape architecture firm of James Corner Field operations, they had to develop a schedule of meetings that maximized the productivity of their time when they came to visit, usually for 3 days, once a month. The idea was that the one-month work cycle would be based on three weeks' work and preparation followed by an intensive week of meetings, including travel time. The following two meeting schedules show how the project team used a carefully crafted schedule each month to maximize the value of the team's time together and accommodate a wide variety of stakeholders, down to and including lobbying state legislators at the capitol in Saint Paul. Because so many people were involved, these schedules were very difficult to set up and so the project team started planning the next month's schedule in the last meeting of the current month, before the design team had left for the airport to go home and work for the next three weeks.

NICOLLET MALL DESIGN COMPETITION
SCHEDULE FOR FEBRUARY 18-20, 2014
JCFO Meetings in Minneapolis

		James C./David F.	Team		
DAY/TIME	TUE 2/18	WED 2/19	WED 2/19	THU 2/20	FRI 2/21
8:00					
8:30	Core Team CH 319				
9:00	Comm/Med/IGR		CenterPoint	Maybe Core Team	
9:30	CH319	Travel to Saint Paul	Al Swintek CH 319	Warp up instead of afternoon	
10:00					
10:30	TAC - CH 319	James Corner on MPR			
11:00				Travel to SP	
11:30				Sen Hayden CR B	
12:00	LUNCH	Hold for Melissa Legislators	LUNCH	Travel to MPLS	
12:30					
1:00		Rep. Dean SOB 301			
1:30					
2:00	NMIC	Travel to MPLS			
2:30	CH 319	Public Meeting Prep & Set-up	Public Meeting Prep & Set-up	Core Team Wrap-up	
3:00				Ch 203 Dir Conf	
3:30	Opus - Leith, Craig			Megan Born/	
4:00	Dave Menke			Mary Altman	
4:30	PW 203	Open	Event (4:30 open)		
5:00		Presentation (5:15 Start)	Presentation (5:15 Start)		
5:30		Q&A/Discussion	Q&A/Discussion		
6:00					
6:30		BREAK-DOWN	BREAK-DOWN		
7:00	JC Dinner Opportunity?	JC Dinner with NMIC	Team Dinner		
7:30					
8:00					
	JC Arrives +/- 6:30PM			JC Departs Early Morning	

STAKEHOLDERS TO SEE

Westminster
Mortenson
BOMA
Safezone
Trades
MPRB staff/board
Megan with Mary Altman

Figure 12. Meeting schedule for the Nicollet Mall team during the concept design phase, spring 2014. City of Minneapolis/Author.

The project team also planned lunches every day (if you skip lunch people get low on calories, they get “hangry,” and everyone falls apart) and one dinner with the design team each visit, so that everyone could get to know one another. Team bonding is a good investment because, while it is all fun and games in the early days, when something goes wrong halfway

through the project, you want to know one another – and be committed enough to one another – to pull together and succeed together, and that will not happen if you haven't already built trusting relationships. After signing the Declaration of Independence, Benjamin Franklin said to his fellow conspirators, "We must, indeed, all hang together, or most assuredly we shall all hang separately." This sentiment holds for any team that hopes to complete a project successfully.

CHAPTER 2 - DESIGN

2.1 Introduction

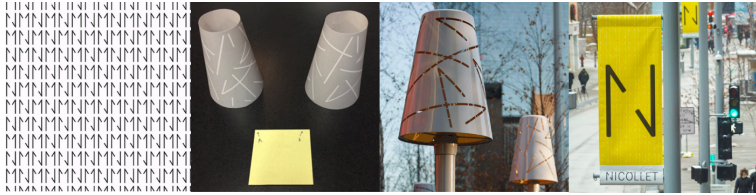


Figure 13. Development of the Nicollet Mall brand. The custom “N” design is made up of two arrows pointing up and down the mall and was used on everything from banners to the lanterns.

“Design” is a big word and encompasses many aspects of any project. While there is a discrete project design (the arrangement of land, buildings, features, materials, and systems) as well as the work produced by design professionals (architects, landscape architects, and engineers), there are many other things that require “design thinking” if you are to produce a successful project. The first thing to design is the vision for the project – a combination of words, ideas, numbers, and assumptions related to budget and so on. Next, you must design the team that will lead and implement the project, from the vision through the execution. This team may include elected officials, government staff, business leaders, non-profit leaders, and community members. Once you have the leadership team in place, you must design the process for selecting the actual professional design team. This process may be a simple RFP or a complicated public design competition or any number of variations in between. And after this process is complete, you must integrate the design professionals into the team and then begin the process of engaging the public and the users and developing a concept design based on their feedback.

Once you have created a concept design that has generally broad acceptance and support, there is the longer and more nuts and bolts process of detailed design, followed by construction. Other important design efforts will include the design of an identity or brand for the project as well as graphics, logos, and all of the applications for the brand. Depending on the scale and duration of the project this work may include branding and graphics for the process as well as for the final project and design. A related and equally important process is the conscious design of a communications, public relations, and media relations plan for the project. Public projects can attract a lot of attention and if you don't plan ahead for how you will communicate, you risk becoming unnecessarily bogged down and distracted by negative media attention and public critique.

Last but not least, throughout the process you have to plan and design for the actual final funding, activation, operation, and use of the place on an ongoing basis. Many decisions in the early days will have big impacts on the people who have to run it day-to-day for years to come – from cleaning to changing light bulbs, emptying the trash, and removing the snow.

2.2 Project Leadership

The first question is who will be providing the project leadership and guidance at a policy level. This is likely to be the person or people who have initiated the project and it may be a single individual – an elected official, a business leader, or a leader in the community – or it may be a group of people who come together to promote a project. For some projects it may start as a working group or a committee and then become formalized as the group that will establish the vision, provide high-level guidance throughout the duration of the project, and help raise the funds for the project. For other projects the leadership may come from the Mayor’s office or the district councilmember. Yet other projects may originate with senior staff in the City – for example in the public works or planning and economic development departments.

In practical terms, the project leadership group meets periodically (monthly, quarterly, or as needed) and the day-to-day work of the project is planned and executed by the project team. The project team will work together with the chair of the committee and other key team and committee members to plan the leadership group’s work, draft the agendas, and help facilitate the meetings. The following are recent examples of project leadership groups in Minneapolis:

Peavey Plaza:

The Peavey Plaza project is a “public-private partnership” led by a seven-member “Steering Committee” comprised of elected officials and business leaders. The city staff running the project and their hired design team report to and update the Steering Committee on a periodic basis or as needed and involve them in all major decisions including design issues that bear on public’s perception of the project, the interests of nearby neighbors, fundraising efforts, and donor interests.

Nicollet Mall:

The Nicollet Mall project is also a public-private partnership led by the “Nicollet Mall Implementation Committee” or “NMIC.” This group originally started meeting in 2012 as the “Nicollet Mall Working Group,” when business leaders began lobbying elected officials to get the project started. The original idea was that the \$50M project would be funded 50/50 with \$25M in public funds (state and local) and \$25M in private funds (property owner assessments).

The NMIC began with nine members: Five elected officials (a majority) and four business leaders, and was chaired by a City official because, despite the 50/50 funding agreement, Nicollet mall would remain a City-owned street. After several years the “NMIC” committee grew to ten (five and five) and leadership shifted to a representative of the business community as chair for the last several years.

The committee met monthly for the first several years and then less frequently (typically quarterly) as the project was in construction. Members of this committee worked together on everything from lobbying the state legislature for grant funding at the beginning of the project to reviewing design options throughout and then helping to assuage the concerns of the many property and business owners who were affected during construction. Often the public and private representatives played roles that their counterparts could not play.

Together, this group helped select the final design team and review and approve the concept design, detailed design, and many details such as street light fixtures and brand design. Later, this group collaborated through a long and sometimes stressful construction period when all members of the committee received pressure from people who they knew personally and who were affected by the project, from the businesses to the media to people who were inconvenienced during their morning and evening commutes.

US Bank Stadium:

In 2012, The Minnesota State Legislature passed what was called the “Minnesota Vikings Stadium Act,” commonly known as the “stadium legislation,” which created a new Minnesota Sports Facilities Authority and defined the capital and operating funding sources and amounts for the project. The act also prescribed a unique design and review process, which included a requirement that the City of Minneapolis create a “Stadium Implementation Committee” through the appointment of a combination of public officials and private citizens. The purpose of what became a 27-member committee was to review and approve the final schematic design in lieu of the City’s typical development review processes.

The committee met monthly for a year and in order to remain on schedule, their review and approval of the schematic design was required by the end of the summer of 2013. However, in a unique twist of legislative drafting, the stadium legislation left no time for schedule hiccups or redesign – it had to be approved by the end of August, 2013. For example, if the committee were to reject the schematic design and ask for a redesign that would take four months, the overall schedule and funding did not allow for it and the project would collapse. So, the City staff, the Committee, and the design team had to do everything possible to use those monthly meetings to build support for the design along the way to avoid a “no” vote at the end of schematic design. City planning and regulatory affairs staff, too, were closely involved in reviewing the project throughout the entire process to minimize the chances of missing a code issue that would cause a schedule impact. Once the implementation committee approved the schematic design, their work was done and the committee was disbanded, although some members were then appointed to the implementation committee for the “Downtown East

Commons” park, which was adjacent to and physically and financially connected to the stadium.

The Commons:

The project originally dubbed “The Yard,” then the “Downtown East Commons,” and now just the “Commons” was led by The Commons Steering Committee, which was made up of some of the former members of the Stadium Implementation Committee (but fewer members – around a dozen) and included city officials, members of the design community, and members of the business community. The steering committee’s role was to develop a vision for the Commons, select the design team, and raise funds for the project. Once the vision had been established, some members of the committee carried forward as the “Fundraising Committee.” The Commons project was part of the redevelopment of a larger, multi-block district that was funded with a combination of city and state funding for the stadium and private funding for surrounding private sector development projects including the Wells Fargo towers, Radisson Red hotel, Millwright Office Building, Edition apartments, and Mills Fleet Farms Ramp. The Commons was initially funded as a part of this overall project but only at a ~\$2M “base” level – black dirt and grass seed – a scheme called “the green carpet” that all agreed was inadequate.

So, a big role for this committee, once the project was designed, was raising the additional funds required to implement the full vision. The total project was to cost \$22M but only \$14M was raised, requiring the deferral of several key features including the concession pavilion, the water feature, and a building designed to house public toilets and park offices and storage. These features may be built in the future when additional funds have been raised.

Hennepin Avenue:

A Minneapolis Public Works department project team led the Hennepin Avenue Downtown Project, with input from a

“Stakeholder Advisory Committee” of five members, each representing five major stakeholder groups: The transit company and its transit users; arts and culture, with an emphasis on the performing arts; the downtown business community; the real estate community and, specifically, the property owners on Hennepin; and the downtown neighborhood association.

This project began as standard City Capital Project (see chapter 3) for a “base” street reconstruction project to be a fully funded with local, state, and federal dollars (so this was not intended to be a public-private partnership, like Nicollet Mall). One typical share of the local funds for a street reconstruction project comes from a standard roadway assessment added to the tax bills of the owners of the properties that front on the street. The idea is that the properties benefit from the reinvestment and therefore they should pay to receive that that benefit. The assessment amount can be paid at once or over time in installments that correspond with the term of the bonds for the project (see chapter 3) However, because Hennepin Avenue is also the home of the City’s historic theater district, including three theaters owned by the non-profit Hennepin Theater Trust, there was early interest from some stakeholders in the option of an additional special assessment (above the standard roadway assessment) to pay for enhancements above the base design, such as custom and programmable lighting, more and bigger trees, planter beds, custom concrete sidewalks, and more benches and street furniture.

While these stakeholders were originally meant to play an advisory role rather than directly decide on planning, design, and spending matters, in practice, the stakeholders played just as important a role as the other groups described above. As of the summer of 2019, the project budget was approximately \$35M, which included a \$31 base project (standard roadway) and an additional \$4M in enhancements. The 55 property

owners along the street were asked to reply to an advisory petition with a non-binding “yes” or “no” answer to the question of whether they were willing to pay the additional assessment required to fund the enhancements. The results of the petition and a public hearing will influence City Council’s decision fall 2019 as to whether or not they support the enhancements package. Over time, the combination of stakeholder interest in creating more of an arts and culture district through enhanced public realm design caused the project to shift from a city-led, base street reconstruction project to more of a public-private model, but more along the lines of 85/15 public/private split as compared to the 50/50 Nicollet Mall project.

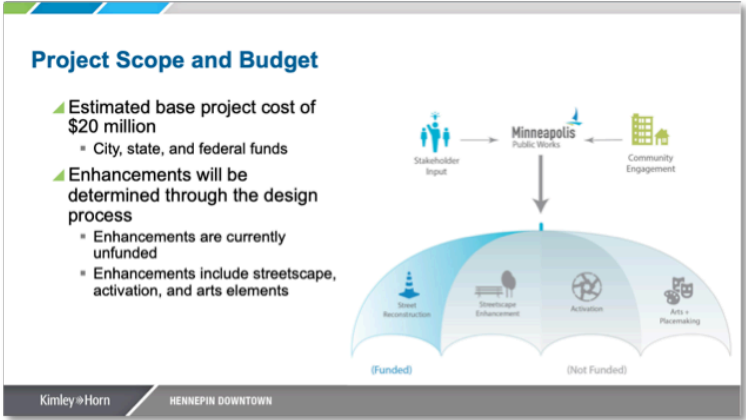


Figure 14. An early budget diagram used to discuss the base budget and the budget for enhancements with the Stakeholder Advisory Committee. City of Minneapolis/KHA.

2.3 Team Structure

In addition to the leadership group, there will also be a project team that does the day-to-day work. The project team will start out as a small group of staff who are assigned the responsibility of planning and implementing the project and will be led by a department head or senior staff person. As the project develops from an idea into a vision, the staff project team will help the leadership team throughout the process of hiring the design consultant and other key consultants required to implement the project.

For a large project, the project team will meet regularly – often several meetings per week – to review work, brief and update other project leaders and stakeholders, and develop the project from a vision to a concept and through detailed design and construction. Over the duration of the project, the project team will grow from a small handful of people to include tens if not hundreds of team members as the consultant team grows and the contractors are brought on board. This project team will be a combination of city staff, their consultants, and, during construction, the contractors.

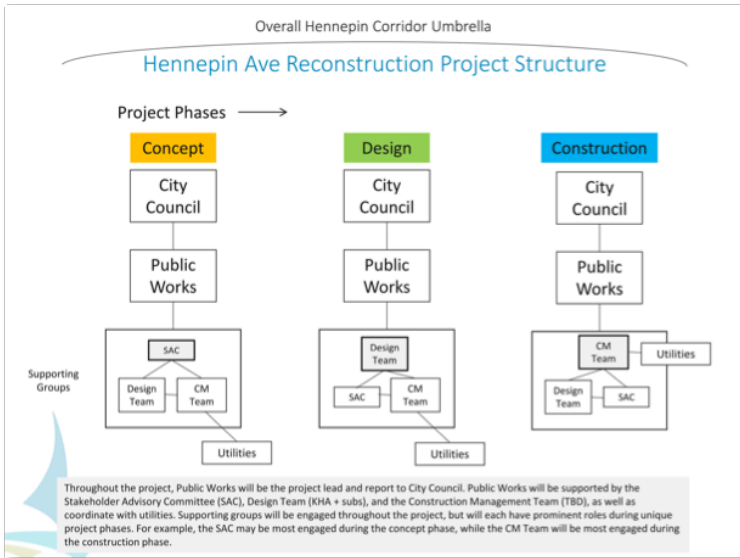


Figure 15: Plan for the evolution of the project team for Hennepin Avenue, with different leadership roles for the vision and concept design, detailed design, and construction phases. City of Minneapolis.

Over the duration of a project – anywhere from three to ten years – the composition and leadership of the team will change and shift. Key people will join the project and may also move up or move on. For a project that is going to last five years, the team structure has to be able to allow for change and growth as the project moves from one phase to the next. The diagram above was created at the beginning of the Hennepin Avenue project to figure out and plan for how the project would run during the three main phases of concept design, detailed design, and construction. The idea is that the “Stakeholder Advisory Committee” or “SAC,” primarily leads the vision and concept phase, with the support of City staff and the design team; the design team leads the detailed design phase with input from the SAC and the construction management (CM)

team; and the CM team leads the construction phase with the support of the SAC and the design team. All three of those teams are present throughout the duration of the project, each influencing one another's work, but depending on the phase, a different team – the one with the greatest role to play at that time – is in the lead.

2.4 Vision and Project Purpose

Before any designer puts pencil to paper and starts sketching up concepts, it is critical for the leadership team and the project team to collectively define the vision. This vision should consider the “who, what, where, why, when, and how” of the project. It should include an understanding of the project budget and politics. But the vision must also capture the objectives of the project team and the promoters of the project. The vision may include a list of principles or simply summarize the idea behind the project in a few cogent sentences. But before anyone hires a designer, they need to know what they are going to ask them to design.

At the beginning of the Nicollet Mall project, for example, there was a meeting with the Implementation Committee where the question was, “what are your objectives for the new Nicollet Mall?” The notes from that meeting were translated into a three-page, bullet-form list of principles that, when completed, the project would embody. At a high level, Nicollet Mall was to be a “must-see destination” “a place for people,” and a mile long “commons.” The team also sought feedback from the Transportation and Public Works (T&PW) Committee of City Council and members of that committee added several more principles. For example, the chair, Councilmember Sandra Colvin-Roy, suggested that the team not overspend on materials for the horizontal surfaces (street and sidewalk) but rather that they concentrate resources on the vertical elements (light poles, banners, flower baskets, etc.) that people would see as they were walking along and looking straight ahead, particularly in the winter, when snow, ice, and salt cover the ground. Councilmember Betsy Hodges suggested that the

team not just design the project to be “sustainable” but to design to anticipate the effects of climate change over time. Her point was that the project was expected to last 30 years and during that time the weather is going to change – and become a lot wetter. Her challenge to the team was to make sure the project was designed to reflect that future – from stormwater management to ensuring trees and plantings would remain healthy. It can be difficult to remember four pages of bullet priorities so the project team worked with the Implementation Committee to summarize all of that feedback into a vision that everyone could remember and that would fit on one PowerPoint slide that the Nicollet mall project team used in every presentation for the next five years. Over time that vision was shortened to: “Pedestrian friendly, green, and cost effective to build, own, operate, and maintain.”

Many projects have similar objectives but each will have their own unique ones as well. For example, priorities for different projects may include preserving a historic asset, providing the capability for active programming, providing a place of respite, increasing public safety, balancing different types of users, balancing different types of transit modes, and generally activating and attracting the public to a new place, or an old one that has been revitalized. Each project will be different but it is important to know what the priorities are before you go to the next step of hiring a design team. Below are the summary vision slides for Nicollet Mall, Hennepin Avenue, Peavey Plaza, and The Commons.

Project Objectives

- **A Place for People**
 - Pedestrian-friendly
 - Green
 - Year-round use
 - Active use of all 12 blocks
 - Integrated transit modes
- **Elegant & Durable**
 - Excellent urban design
 - Climate appropriate design
 - Sustainable design
 - Durable materials
 - Cost-effective O&M



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Figure 16. The vision for Nicollet Mall. City of Minneapolis/JCFO.

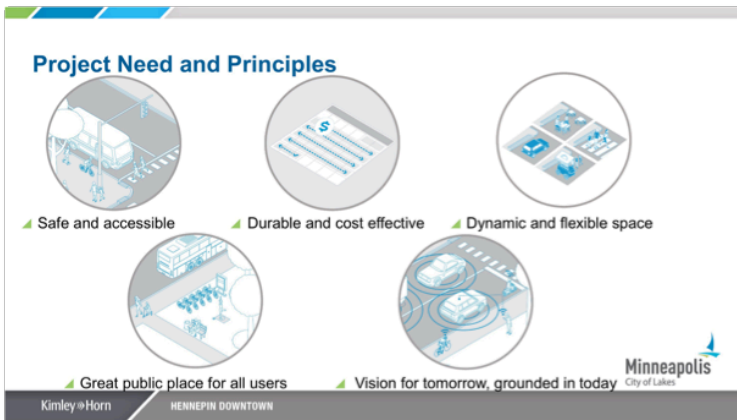


Figure 17. The vision for Hennepin Avenue. City of Minneapolis/KHA.

OUR APPROACH

- TAKE A UNIFIED APPROACH TO THE PLAZA
- REHABILITATE CHARACTER DEFINING FEATURES
- IMPROVE LONG TERM SUSTAINABILITY AND MAINTAINABILITY
- PROVIDE ACCESSIBILITY AND SAFETY
- RE-ACTIVATE THE PLAZA

THE REHABILITATION OF **PEAVEY PLAZA**

COEN+PARTNERS | PVM | FLUIDITY | BARRI TILLET

Figure 18. The vision for Peavey Plaza. City of Minneapolis/Coen+Partners.



Figure 19. The vision for the Commons. City of Minneapolis/Hargreaves Associates.

2.5 Designer Selection Process

What Type of Designer?

Once you are clear on your vision, you will need to hire a design team to realize it. But before that, you need to be clear about what type of design consultant should lead that team. For most projects a complete design consulting team will include a number of disciplines ranging from architecture, landscape architecture and engineering to lighting, soils, irrigation, environmental, and so on. But a key question before you begin a project should be “what type of consultant should be the lead designer – who should assemble and lead the team and set the tone and direction of the project?

The answer to this question will vary depending upon the type of project you plan to design and build. For example, an architect may be the best primary consultant for a new public building such as a library. For a park or plaza, a landscape architect may be the best design leader. Civil engineers may be best qualified to lead the redesign of an urban street. In all cases, the other consultants will also be on the team but they may play supporting rather than leadership roles. For the library, a landscape architect working for the architect will design the site. Similarly, for the park, an architect may work for the landscape architect to design a concession building or toilet facility. And for the street, a landscape architect may work for the engineer to help design landscape and select trees and plants and there may even be an architect designing structures such as bus shelters. Despite these generalizations, however, architects have designed plazas, landscape architects

have designed streets, and a variety of other arrangements are possible.

Indeed, when it comes to urban public realm projects, there is so much overlap that sometimes, multiple disciplines want to act as the lead consultant and the team and selection panel can become confused by proposals from different types of teams and firms. And while you should remain open minded about alternative approaches and team structures that you have not thought of, at the same time, there is probably no one who understands better than you what type of designer should lead in the specific instance. You can change your mind if you get a really compelling proposal from a team with a discipline that you hadn't anticipated in the lead. However, if it is a largely engineering driven project, you may not want to hire a landscape architect as the lead. By the same token, if you want sophisticated urban design and a real sense of place, you probably do not want a civil engineer leading the design. Whatever type of project, the leadership team and the project team together should have a clear idea of which type of consultant is most appropriate to lead the specific project before starting the consultant selection process.

Three Typical Processes

There are three typical processes used for the selection of a design team for a public project. Each process presents a different set of opportunities and constraints. A really thorough, three-stage process may be good for transparency and building consensus, but it is administratively complex, more time consuming, and more costly for proposers. For smaller and more routine projects a simple, one-stage "request for proposals" or "RFP" process may suffice. Similar to knowing which type of designer you want to hire, you should also have

an idea of how public you want the selection process to be and how time consuming and costly a process you are willing to administer. For a large project or one that will attract great public interest, you should err on the side of maximum public participation and transparency. For a more routine project, you may not need to meet the same standard.

Request for Proposals (RFP) One-Stage Process

There are several different ways to select the designer but because public realm projects are typically produced by and owned by governments (city, county, state, and federal) the process is typically some kind of competitive process that allows multiple proposers – most typically a Request For Proposals (RFP) process. The Request for Proposals (RFP) process is the most typical process and it is used in government and the private sector for small to medium or routine project types. The RFP process has pluses and minuses but in the end, because it is such a standard method for so many governments, the best approach is to embrace the positive qualities of the RFP process, which generates competition and proposals that are easy to compare and evaluate on a side-by-side basis. You can do this by carefully crafting and tailoring the text and content of the RFP to show potential proposers that you know what you are doing, know what you are looking for, and that you are serious. The RFP illustrates to potential proposers how well the owner understands the project and process, and how committed they are to helping ensure success. The worst thing from a potential proposer's perspective is a standard, fill-in-the-blank, "boilerplate" RFP that shows how little time the owner has spent considering the problem. An owner that does not know

or care what they are doing is a risky client and the potential for misunderstanding is increased because such clients assume that they can pass off all responsibility to the designer. A good client shows that they have a stake in the success of the project and that they will be a willing, collaborative, and active partner to the designer.

An RFP typically does two things: First, it explains the project to potential proposers, including background, need, anticipated uses, scope, schedule, and budget. Second, the RFP describes the requirements for and the contents of a complete proposal including submission method and date/time. The proposal will include a written text that includes the proposer's understanding of the project, approach, team, examples of relevant work, resumes of key team members, an organizational chart for the team, a schedule, and fees broken down by phase, discipline, firm, hours, and including hourly rates for individuals for use in negotiating changes to the scope and fees later on, after the contract has been signed. A well-written proposal takes time to prepare and assemble and a serious firm spends a lot of effort and money producing a good and responsive proposal. Less serious firms produce more boilerplate proposals that are less relevant and customized and/or that largely regurgitate back the language in the RFP. For those who write RFP's it is always interesting to read the proposals and see if they are original or if you are just reading your own words again. A proposal is more time-consuming and costly to produce than a qualifications package, which is the first part of the two-stage process that we will consider next.

The owner's team reviews all of the proposals, decides which to discard and which to consider. They may ask a "short list" of firms to come in for an interview (highly recommended) and they may also ask for clarifications to the proposal and the fees. After the interview the selection team will make a final recommendation and the project staff will negotiate a design contract with the winner. In the private sector an owner

may invite some number of hand-selected firms to submit proposals but in the public sector an RFP process is almost always an “open call” which means that anyone can submit a proposal.

Request for Qualifications (RFQ)/Request for Proposals (RFP) Two-Stage Process

The RFQ/RFP process is a two-stage version of the RFP process described above. This process is used for larger and more unique projects, as a way to attract big-name designers from farther afield, generate more competition, or accommodate interest from a lot of firms. The way it works is that before firms are asked to submit proposals (above), they are first asked to submit a package of their “qualifications” through an open call or a “Request for Qualifications” (RFQ). The RFQ should be as well developed by the owner as the RFP in terms of showing project objectives and expectations, but the qualifications packages that the owner expects to receive – the “statement of qualifications” or “SOQ” – are easier, quicker, and less expensive for a proposing firm to produce and submit. A statement of qualifications typically includes a cover letter and brief statement of interest but the rest is boilerplate project experience and resumes – marketing materials that all firms have on hand for this purpose and that require little customization. The RFQ process allows a lot of firms to compete in the first round and gives the owner a larger pool from which to begin the selection process.

The selection committee reviews the qualifications and then develops a shortlist of firms that are invited to submit more detailed proposals – an “invitation only” list as opposed to an open call for proposals as in the standard RFP process. The second stage is very similar to the RFP process described

above, leading to a smaller number of proposals, a short list for interview, and a single recommendation of the firm that the selection panel wishes to hire. One benefit of this process for the owner is that you can learn from the qualifications round and improve, refine, and better target the RFP before sending it out.

RFQ/RFP/Design Competition – Three-Stage Process

The competition is a two-stage or three-stage (or more) version of the RFQ/RFP processes described above. In addition to a proposal, the invited teams produce conceptual design ideas and images and present these to the client as a part of the interview or in a separate/discrete design presentation that may be held in public. A design competition requires significantly more work than assembling a qualifications package or a more detailed proposal, so firms short-listed to participate in the competition are usually compensated with a modest stipend to offset the firm's costs. In reality, firms that compete in competitions usually overspend on labor hours in the hopes of out-designing their competitors and winning. The risk for firms is that it can easily become an arms race as firms spend some of their marketing budget, plus the stipend, plus they may also spend a little more as they get excited about the project, and it can be difficult to control the spending. Many designers are ambivalent about competitions, because while they may lead to recognition, most competitions are poorly compensated or uncompensated and they rarely lead work

through winning or to increased fees for firms later (because of increased exposure).¹

Competitions offer a unique set of pros and cons. On the pro side, they can help to generate interest and excitement for a project and begin to build the political and funding support required to complete a major project. The project can be used to attract media attention and public support by hosting open interviews that draw the press and the larger community. On the down side, media attention and public participation can bring significant risks. For example, if a competition is public, there is the risk that the public likes one firm when the selection committee prefers another. The information possessed by the public and the selection panel is uneven because the selection panel has spent months on the process, developing the principles, writing the RFP, reviewing qualifications packages, reviewing proposals, analyzing fees, and attending interviews. But the public may only see a thirty-minute presentation and slide show in an auditorium.

1. My Personal opinion: As both an architect and as someone who has managed a competition for the owner, I am very skeptical about the usefulness of competitions. As the owner, it worked well for Nicollet Mall, which I attribute to a well-run process, lots of luck, and a qualified team that had both the experience and depth to win in the interview, and the images and charisma to win in the public presentation. In a different, more cautionary example, as an architect I once led a team on a competition for a project where we received a \$10,000 stipend and then went on to spend over \$250,000 on design time, renderings, and a scale model, only to come in second place. The design professions are ambivalent about design competitions and some see them as unethical as owners obtain ideas for low or no cost while architects provide services for little or no compensation. See for example for example, Arcilla, Patricia, "7 Takeaways from Van Allen's Survey on Architectural Competitions," in ArchDaily, April 28, 2015. Accessed July 5, 2019 <https://www.archdaily.com/624647/7-takeaways-from-van-alen-s-survey-on-architectural-competitions>

What, then, if a charismatic presenter with compelling renderings makes a better show than the firm the selection panel prefers? What if a quiet and reasoned approach explained in an interview feels like a better fit than a great showman or woman on stage? Once the process becomes public, there likely will be an expectation that public opinion should influence the final decision. And even when that is not the intent, a strong public response can sway a selection panel, rendering all of the other work and information moot and leading to a snap decision. Experienced designers are rightly fearful that a long, costly process can easily turn into a “beauty contest” at the end and that the stated criteria for the final decision will be cast aside in the final, heated moments of the process.

There is another risk to the people running the process, which is that it is easy to lose sight of the purpose of the competition, which is to select a team you want to work with – not to select a final design. The competition design entry is meant to help the selection panel pick a firm but it will not be the final design and you would not want it to be. Indeed, the designer has not yet come to know or understand the design problem, the client, or even the city if they are from elsewhere, and is not in a good position to propose a realistic design. The public or key individuals, however, may be attracted to a design or a feature of a design and, once those images and features become public, people can get attached to them, even if, in the end, they are not very practical or likely to be realized.

Competitions are risky for firms, too, because the presentation styles of the presenters matter more – during the selection process – than their actual skills, experience, working style, or approach to the process. What if the public likes one firm or design and the selection panel likes another? In the worst case, the project leaders will be questioned about their transparency and the criteria for the selection and there may be suggestions that the selection process was “rigged” from

the beginning, the winner was already decided in a backroom, or there was some favoritism in play because, after all, the clear winner – in the public’s eyes – lost.

In addition to uncertainty, competitions also present financial risks to design firms, so when the economy is doing well and firms are busy, they will avoid competitions because it is easier, less costly, and less risky to obtain work. In good times – when it is a seller’s market – it may be harder for an owner to generate interest in a competition from the design community. Firms usually overspend and lose money on competitions so the project has to be really unique and/or the firms have to be really “hungry” because the economy is weak and work is scarce. Competitions also attract new and young firms that are seeking to make a name for themselves while more established, qualified, and experienced firms (the type you may want to hire) will stay away because they don’t need the work. When the economy is really strong, most firms are in a position to turn away work that does not promise to be profitable – whether it be less desirable clients or non-paying or low-paying competitions.

Last but not least, many designers have had a bad experience with a competition and may be leery of a project in an unfamiliar place. If you are competing from a distance, then you do not know the key actors and the local culture, so you cannot tell if the process will be fair. Last but not least, a competition can take a long time to implement and the longer something takes, the better the chances that something funny will happen or a strange twist will occur. For example, the economy can improve and reduce interest from the design community. Or an election loss could take out a key project promoter (or bring in a new official opposed to the project). Even worse, a project could be turned into a campaign issue itself. Or a legislative bill could fund or defund a project. Developers like to say, “time kills all deals” or, alternatively,

“speed is life.” Timing matters and if you miss the window because of a long process, your project may just evaporate.

As an example, for Nicollet Mall, the entire process from conception through the final interviews and decision took seven months. The RFQ resulted in 21 qualifications packages. The project team and selection panel together narrowed those down to four firms that were invited to submit proposals and participate in the competition. One firm dropped out (they won another big commission and were no longer interested in the work). Each of the three teams were required to visit Minneapolis for a tour of the Nicollet Mall with the project team and, later, two project team members visited the three finalist’s offices in their home cities and toured their local projects. All three teams came back to Minneapolis for two days, during which the selection panel of thirteen interviewed all three firms privately, one at a time for 1.5 hours each, all in one day. That same evening, each firm presented on stage at the Guthrie Theater at an event that was open to the public and advertised through the media. Approximately 150 people attended as well as all of the newspapers, TV stations, and Minnesota Public Radio. The next day the selection panel met again and made its final decision. Immediately after, project team members called the winner and the two losers to deliver the news. Each team was paid a stipend of \$30,000 to help defray their costs, which included design time, meeting time, and airfare, food, and lodging for the two trips to Minneapolis.

Selection Criteria

One of the most important things to do when creating a selection process is to determine the criteria that will be used to make the final selection. This helps create a common frame and some guardrails for all of the people on the selection panel

– each of whom brings a different perspective. For example, some people are swayed by pictures, and other by words, ideas, and numbers. The finance person will care about fees, the design person will care about the qualifications, experience, and reputation of the firm, and the promoters will be excited by the idea of having a big-name designer or “starchitect” doing the project. Because there will be such diverse perspectives, agreed-upon selection criteria – including a simple rating form – can be used to quantitatively measure and rank the firms. In many instances if the process is run well, the winner will be self-evident although for unusual projects, there can be differences of opinion that require more discussion. No matter how you measure and evaluate the proposers, there are a few basic criteria worth keeping in mind.

First, are they really qualified? Proposing firms must be qualified and capable of doing the project for which you are hiring design services. They should have successfully completed several projects of similar scope, scale, and budget for similar client types. You do not want a consultant learning on your project – you want them to be focused on the project itself. For example, consultants who have never worked for government face a steep learning curve. They may not understand the amount of time it takes, the number of meetings required (many more), how politics influences design decisions, and the way public projects are funded. You want a team that has practiced on others first – and who won’t be practicing on you. The project will be difficult enough with the right team. You want a firm that already understands how government works, how community engagement works, and how to work with the key stakeholders, the public, and the media. They need to know how to talk to and get along with elected officials and business leaders as well. And, of course, you want them to have talent, vision, capable staff, and great team members and collaborators.

Second, who am I really getting? Often the name partner of

the firm leading the team in the interview will become scarce as soon as the project has been awarded and the actual work starts. There is nothing wrong with this, but you do want to ask – and find out – who the real lead for the project will be and who the key people are who will actually be doing the work. In the RFP, you should make it a requirement that those key individuals be in attendance at the interview. You may also want to let them know in the RFP that their names will be written into the contract, as a way to signal that you won't be happy if the presentation team goes away and a completely different team shows up for the first meeting. Starchitects can attract a lot of attention but whom from the firm are you really getting? Will the “great wo/man” come to any meetings after they get hired or will you get saddled with brilliant, very confident, young hotshots? You need to find out who will actually run the project, come to the meetings, interface with your key stakeholders, and do the work.

Third, can I imagine working with them – and getting along with them – for three, four, or five years? The most important part of the process is the interview. This is when you meet the people, find out what they are like, and imagine what it would be like to work with them. Sure, they will all be on their best behavior (and unfortunately, a very few are really good actors who will change once hired), but generally you should be able to get a feel for what the people are like. If they have gotten as far as the interview they are already well qualified and capable of doing the project. The purpose of the interview, then, is to learn more about how they approach and solve problems, what they are like, and if you want to work with them for several years. When you are hiring a designer for a big project, you should think of it as if you are getting married, because you are going to spend a lot of time together and you need to be able to build a trusting and collaborative team. One challenge during the selection process is that some of the key decision makers will spend little time with the team once hired, and

may not value “chemistry” as much as the people who will manage the contract and the team on a day-to-day basis. Still, it is important and team chemistry can make or break a project.

Fourth, what do their previous clients think of them? One of the easiest, most important, and most often overlooked steps in the selection process is the actual calling of references. All RFPs ask for references but they are not worth anything if you do not actually call them and ask them pointed questions. Don’t just say, “how were they?” People don’t like to give negative feedback so it is easy to be generally positive. Better to ask, “what were they like to work with when the budget had problems?” Or “are they capable of balancing their own design desires with the user’s needs and budget?” If the firm has a reputation for busting the budget on every project, ask specifically about that. Some other firms are known to be difficult to work with – will that be worth it in the end for you? It can be easier for a private individual to work with a prima donna but a large government committee may not be able or willing to tolerate it.

Fifth, are their fees competitive? My number one piece of advice for owners is “never pick the winner based on fees.” Unlike construction projects, which are typically “low-bid” for governments, professional services contracts are often awarded based on qualifications and not on price, so the selection panel has the discretion to recommend a firm that does not have the lowest fees. The idea is that this is a more subjective area, so the selection panel should have some room for maneuver. The bigger point is this: The fees represent a relatively small share of the overall project budget – maybe 7%-15% on average. Even more important, the designer has a big impact on the rest of the project so it is foolish to haggle over design fees when the right firm will help you spend the construction dollars well. That said, if five firms propose and you want to pick the firm that has proposed the highest fees,

say twice as high as the low firm, you may be able to do it, but you have to be prepared to explain publicly why you made that choice. If you want to pick the firm that is second low or in the middle because they seem best qualified, you can more easily justify that decision.

And sixth, have they thought about the project? The proposal should be a thoughtful, original response to the RFP. You want to see that someone understands your situation and has thought about how best to address it. The worst proposals are those where the words from the RFP have been scanned and entered back into the proposal response. In this case, the proposer thinks they are telling you what you want to hear but, what you really want to hear is new, original thoughts and ideas that you haven't thought of yet. Don't be easily flattered when the proposal repeats your own brilliant thoughts back to you, rather, look for new ideas and even comments or questions that conflict with or challenge your original vision. These are the signs of a serious proposer who is trying to figure out the client and the project.

Pick the Firm – and the People

Last but not least, one of the most important but undervalued aspects of a design firm that a client should take very seriously is that of fit – with the project need but, as important, between the design team and project team members. When selecting a designer, you should remember that you will spend a lot of time with them over several or many years – so you need to be able to get along. Think of it like you are getting married for the next five years. Can you get along? Are your values similar? Do you communicate clearly and effectively with one another? It is all fun and well at the beginning, but when the first big crisis happens (and it will), will you be able to work together to

resolve it, or will you retreat to your corners and fight it out? Will you be able to trust each other when you need to?

The Firm...and the People



Figure 20. Consider chemistry – you will spend a lot of time together. Nicollet Mall took six years to complete, during which time several team members got married and had babies. Photo by author.

One more word on interviews and people:

In my own opinion, the best process is one that gives the owner multiple opportunities to meet and interact with each team before having to make a decision. This is more difficult to do with a standard RFP process, but for a big important project it is worth prioritizing. For example, the design competition process for Nicollet Mall took seven months and included numerous touch points with each of the proposing teams. In addition to phone conversations to arrange their visits and meetings, each team was invited to Minneapolis for a tour of Nicollet Mall, which gave them a chance to meet and get to

know the project team and vice versa. When the City's two project team members visited the three finalist firms in their own home cities of New York, Montreal, and Berkeley, they were able to tour the designer's offices and one or two of their projects and then get to know them a little more over dinner. City staff also spent a lot of time talking to the three teams and arranging schedules and logistics in the run-up to the interviews and the public presentations in Minneapolis. By the time of the final interviews, the two team members who had spent the most time with the three teams had a pretty good idea of what to expect, who they wanted to work with, and who they thought would win. They had had enough contact to see consistency from each team and had a pretty good idea of what they would be like to work with for five years. In the end, the design teams acted the way those two cCity staff expected they would at the interviews and the presentations. The selection panel saw what those two people saw (and asked for validation), and picked the best team for the project and for the City of Minneapolis team. That team won for a few reasons. First, their design ideas were the most pragmatic, in that they were flexible and based on adapting to the unknowns on the site. Specifically, they knew that tree planting decisions would be influenced in part by the locations of underground pipes and power lines. This design approach differentiated the winning team from the others by showing the city that they understand how important the role of the infrastructure would be in determining the final design. The team also won because their big name and their work on the Highline was impressive, but at the same time they were not egotistical and they appeared to be able to balance high design with practical considerations. Finally, the city team members liked and trusted their team members and felt that they would all work well together. In the end, all of those instincts and judgements proved to be correct, and the strength of the combined team

was a big reason why the project was completed successfully and, frankly that it was completed at all.

Summary: Steps in the process and example durations

The typical RFQ/RFP selection process and durations can be broken down as follows:

- Develop principles – Leadership Group and Project team (4-8 weeks)
- Draft and Revise RFQ – Leadership Group and Project team (4-8 weeks)
- Issue RFQ, receive and review Qualifications, establish short list (3-4 weeks)
- Issue RFP and receive and review proposals, establish short list (3-4 weeks)
- Interviews, decision, announcement (3-4 weeks)
- Contract (2 months)
- Begin Design
- Total duration: 4-7 months

Example Durations of the Selection Process:

- For Nicollet Mall, it took nine months to complete a three-stage competition through the execution of the contract with the winning design firm
- A more typical two stage RFQ/RFP process takes four-six months
- A simpler, one-stage RFP only process takes three-four months
- In all cases, time must be included to allow for city review and approval processes (purchasing, civil rights

review for minority business participation, legal review, City Council approval, Mayor's final signature, contract negotiation and execution), which together can add months to the process

A final thought: “How you finish is how you start”

That says it all. If you think carefully about what you are doing before you start, you will develop a clearer picture of what a successful project will look like when complete, and this picture will guide all future decisions while reducing risks and variables. As former US Defense Secretary Donald Rumsfeld observed, there are both “known unknowns” and “unknown unknowns.” The more you plan for and mitigate the first type in advance, the more energy you will have later to address the second type, when they invariably crop up. Most important, how to conceptualize the project, assemble the project team leadership and pick the designer, will set the tone for how the whole rest of the project will go.

2.6 The Design Process

The lead design consultant for a public realm project is usually a landscape architect, an engineer, or an architect. The lead designer typically assembles the full design team and manages the process overall, working closely with and for the owner or client. The lead design firm will subcontract with other consultants including the landscape architect, architect, and civil engineer, as well as the structural, mechanical, electrical, and plumbing engineers, and other specialty design consultants such as lighting, soils, horticulturalists, water feature specialists, brand and graphic design, and others, as required for the project and based on input and approval from the owner.

The design team will then embark upon an iterative process, beginning with bubble diagrams describing programmatic relationships and adjacencies before moving to rough sketches and then ever more refined scaled drawings. The amount of detail and information grows throughout this iterative process. The design team and the owner together will constantly review and refine the design, along with periodic construction cost estimates, leading in turn to more revisions and refinements.

The lead designer will coordinate with the other consultants and incorporate their drawings and specifications into a single package of information. This package is typically called the “construction documents.” These documents are used to solicit bids from contractors to build the project. Later on, I will discuss more the different phases of the design process but for now, we will focus on just three key phases: concept design, detailed design, and construction. Concept design is the part of the project that attracts the most attention from the public, the media, and funders as it starts with blank sheets of paper and stakeholder input and results in a plan and renderings.

Detailed design is more work but during this phase the look of the project does not change very much, rather, many detailed decisions are made regarding size, location and dimension of features, materials, and systems. Finally, the construction phase also attracts less attention unless it creates a lot of disturbance for the public as in the case of a street reconstruction. The opening of the project and its activation and operation will be discussed later. The focus in this section is on the part of the project that draws the most interest and attention from the most people – concept design, which begins with the program.

Program Confirmation

The first thing the consultant will do once they have been hired is to interview all of the key users, beginning with the people who were on the selection committee at the interview. The goal is to gather more detailed information than was included in the RFQ/RFP and to get a better understand of the motivations behind the project, and the objectives of the project's sponsors. This is an opportunity to find out what someone meant when they asked a question in the interview, to identify potential conflicts between goals and users, and to get a better understanding of the underlying interests, politics, and funding constraints. The program itself is the document that describes the objectives for the project, the intent and function of the place, the allocation of space, the general features, the needs of the users, and any infrastructure requirements such as water, irrigation, lighting, roadway access, or public toilets. The program is subject to adjustment based on stakeholder engagement.

Stakeholder Engagement

The concept design phase will include public meetings and will start with an analysis of the existing site and bubble diagrams showing how different features and elements might be located and how they could relate to one another. As these ideas become fixed, the design will be refined until there is enough information to produce realistic digital renderings of what the place will look like when it is done. Planners on the design team and in government will assist with the design and implementation of the engagement process as well as with the management of the administrative processes. The concept design will be a communications and consensus-building tool that will help many people reach a point where they can support the project. There is a saying that “a good deal is one where all parties are equally dissatisfied.” The case is the same with designing for the public realm. The outcome will be a compromise and no one will get everything they want. But if the job is done properly, the project will satisfy most stakeholders and attract support, or at least not cause significant opposition.

Big Ideas, Diagrammatic Plans, and Renderings

Good designers start with big, over-arching ideas and concepts that are easy to explain – and easy for the public to grasp. They then create diagrams that illustrate these ideas and last but not least, realistic renderings that people can understand. Below are three images from Nicollet Mall that illustrate the big idea, a diagrammatic plan, and what it might actually look like in person.

The Big Idea: “The Stitch” (shown in red) represents the designer’s idea that there is a big continuous loop of nature around Minneapolis but that it is interrupted in downtown. Their proposal was that Nicollet Mall would serve as a green stitch connecting nature from Loring Park to the River.

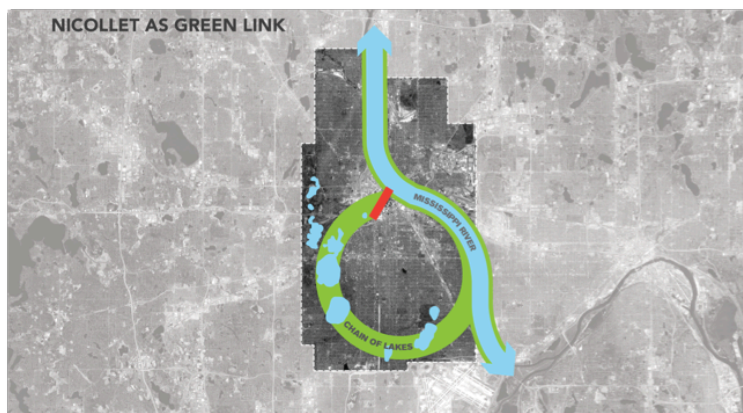


Figure 21. Nicollet as green link. JCFO.

Diagrammatic Plan:

The second and third images are early and later versions of the concept plan – the designer’s idea of how to vary the design of the twelve-block, mile long street, from the north and south ends in nature to the most urban part of the downtown core, through three zones called the “woods,” the “groves” and the “center.” The woods are more informal and natural and have landforms, the groves are still informal but with more sidewalks, and the Center is very urban with straight rows of trees and other more urban architectural elements.

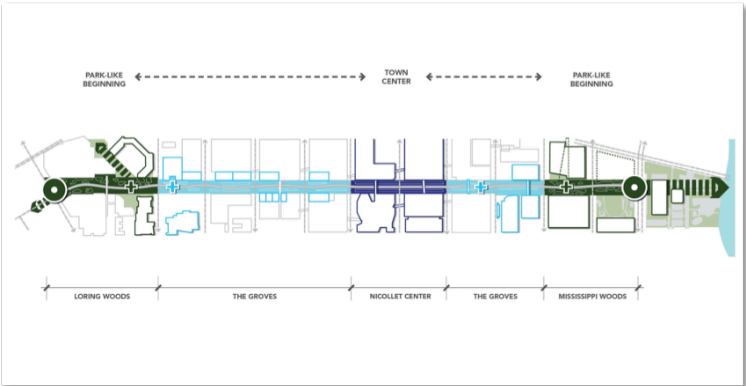


Figure 22. Nicollet Mall Concept Plan, 2014. JCFO.

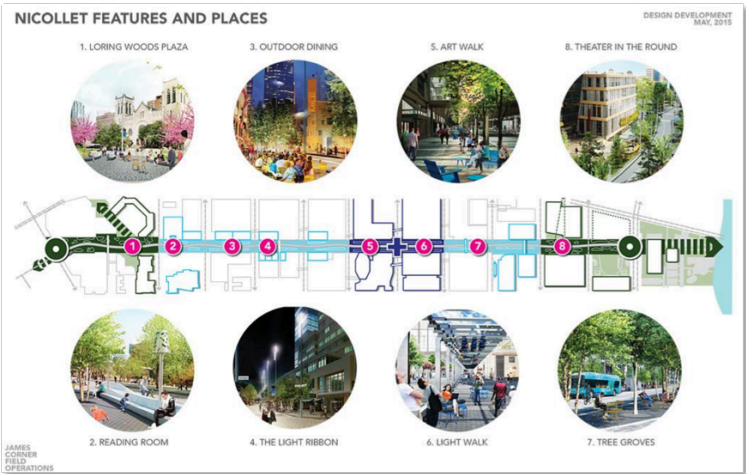


Figure 23. Nicollet Mall Concept Plan, 2015. JCFO.

Renderings:

Finally, the last image is an early rendering of how the center area would look and feel if you were to be walking through it.



Figure 24. Nicollet Canter, 2015JCFO.

The Purpose of the Concept Design

The Concept Design for a public space must serve a number of functions. First, it must begin by offering a narrative and a vision that is clear, comprehensible, attractive, and that satisfies the wants and needs of most of the key constituents

– it must generally address the functional needs of potential users as well as those of the future operators of the place. Second the concept design must attract political support. Third, the concept design must help raise funds.

Fundraising Brief or “Pitch Pack”

The design images created during the concept design phase will become the basis of a fundraising brief or “pitch pack.” The fundraising materials will include a simple “one-sheet” that can be handed out at presentations and at meetings with individual potential donors. There will also be a slide show that shows the big ideas, plan, renderings, schedule, and an overview of the design process as well as a conceptual budget.

Media Briefing and Information Package

Similar to the Pitch Pack and at around the same time, the City or owner may choose to send out a “press release” sharing the project goals and objectives, renderings, budget, and schedule. For big projects there may be a press briefing where members of the press are invited to a presentation by the project team and the designer to explain the project. In the case where there is sensitivity to timing of, for example, City Council meetings where the project will be presented for review and approval, representatives of the media may be given the renderings and information in advance with a strict embargo on their use – in other words – they are given the information in advance of an important meeting so that they can write their article in advance and then as soon as the meeting is over they can

publish it, but they must promise not to publish the images in advance. The media creates stories and for a big project, one of the most important things you can do is make sure the media's story is accurate and that it does not get ahead of your story or your process with incomplete or wrong information.

The Entitlement Process

One important aspect of any urban project – public or private – is what is called “the entitlement process.” Entitlements are all of the approvals you need to obtain from City government to be allowed to proceed with the project. And even if the City will be designing, funding, building, owning, and operating an urban public realm project, it will still have to seek approvals.

For example, a new park in an area zoned for commercial buildings may require re-zoning for park use. The new park may also be required to provide certain stormwater management systems if it is greater than a certain minimum size. There will also be minimum requirements for lighting that the city's public works department will have to approve. The fire department may have opinions on how their vehicles may access the park and if any additional curb cuts are required. The design may also be reviewed by the planning commission to ensure that it conforms with design standards, and if there is a land use change, then the zoning and planning committee may have to weigh in and approve the request. The police department may want to review the project from a public safety perspective to determine if it adequately reflects the principles of “Crime Prevention Through Environmental Design” (CPTED). There may also be a need for a new drive entrance to the park that will require an easement as the vehicles will be crossing the public right-of-way. Even signage is regulated by the city and the number, size, type, materials

and lighting of signs are all subject to approvals. There may also be advisory committees that will have opinions on the design. For example, in Minneapolis, the Pedestrian Advisory Committee (PAC), Bicycle Advisory Committee (BAC), and the Minneapolis Advisory Committee on People with Disabilities (MACOPD) are all typically invited to review designs as they develop and participate in early planning and design meetings regarding public realm projects.

For any project in the city of Minneapolis the owner must apply for site plan review through the Preliminary Development Review (PDR) process, where all of these issues will be discussed. Once you have satisfied all of the various requirements and received the final package of approvals, variances, easements, zoning changes, and related funding agreements, you have received all of your “entitlements” or your project has been fully “entitled,” which means you can complete design and then seek a construction permit and other related permits. This may include approval from the Planning Commission, Heritage Preservation Commission, zoning and planning committee, Transportation and Public Works Committee of City Council, City Council, watershed district, county commission, Metro Council, MNDOT, or the state. Obtaining these approvals may be very political and you may be required to solicit and earn the support of surrounding neighbors or local neighborhood groups, environmentalists, historic preservationists, and any number of formal or informal special interest groups whose representatives may appear in a public hearing to testify on your project, either in support of it or against it.

Narrative, Graphics, Brand

For larger projects, the creation of a narrative, an identity, and

a “brand” for the project will become important as a way to highlight the project, generate support, and begin to create an identity for the project. The identity and brand will be used first to promote the project on materials from public meeting invitations to the design of the project’s website. As the design develops the brand will be refined and integrated into features that will be completed in construction. These may include anything from a chair with the project name on it to a logo on a physical feature like a sign or a light fixture.

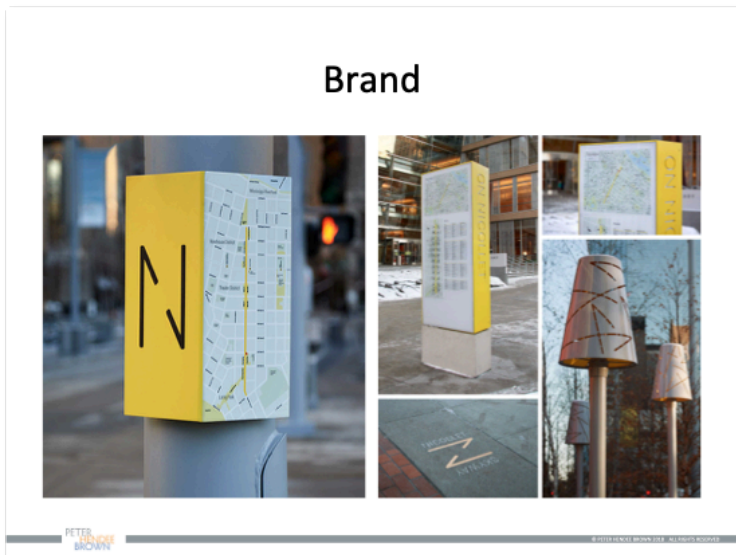


Figure 25. Use of the Nicollet Mall “N” on a wayfinding map, an information “totem,” lanterns, and directions to the skyway system. JCFO/Pentagram.

Communications, Public Relations, Media

Another related process that requires attention and design

thinking is that of planning for and consistently communicating with the many stakeholders over the duration of a project. Communications may include everything from public meetings, one-on one meetings, and block-by block meetings with property and business owners to solicit feedback and just keep people informed. There should also be a website with an FAQ and all previous design presentations available for public viewing. And there should be a plan for working with the media.

One of the most challenging aspects of a public project is the role played by the media – and social media – in covering, explaining, and offering critique of the project. Some stories are good, others are critical, and often they pop up suddenly and can become a big distraction for the project team, as everyone scrambles to provide an explanation for why, for example, so many new trees seem to be dying or dead. You can't always plan for those surprise stories, but you can have a plan in place for who will talk to the media. You can also keep a current version of an FAQ document that can be used in explaining the project when responding to a particular issue.

PR, Communications, and the Media

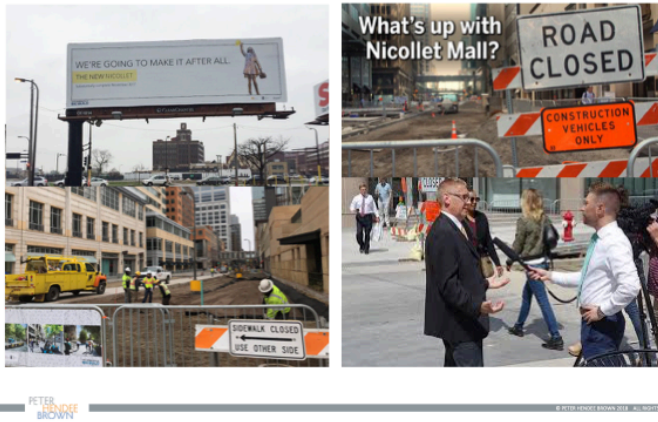


Figure 26. PR, Communications, and the Media. Author.

Another key part of the communications plan has to do with how, during the construction phase, you communicate with the property and business owners who are being directly affected by construction activity. For recent major street projects in Minneapolis, the city has used weekly stakeholder meetings to explain what work was completed during the previous week, what work would be completed in the coming two weeks, and how that work would individual stakeholders. The following map was revised every week for the Nicollet Mall stakeholder meeting to show generally how the work would impact traffic and access to buildings and businesses.

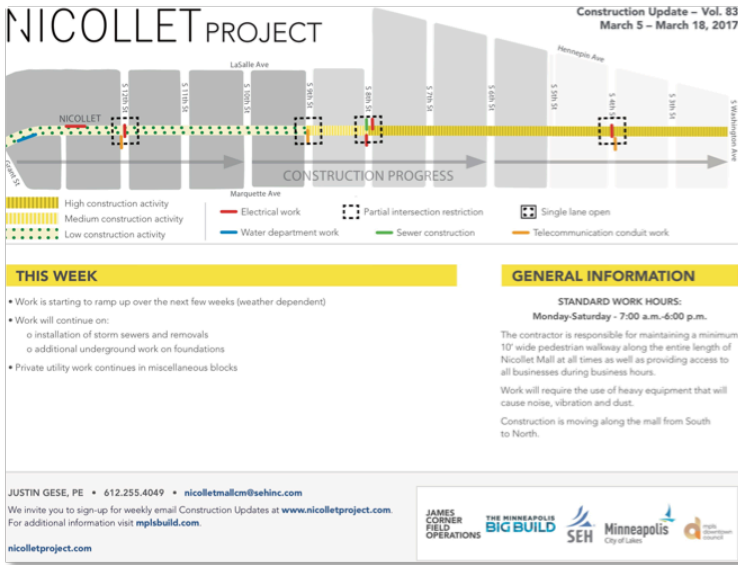


Figure 27. Nicollet Project Construction Update, March 18, 2017. S E H.

Detailed Design

In the previous sections I have discussed design in a variety of contexts and the idea and use of “design thinking” in project management. The purpose of this section is to describe the design phases as they are typically understood by consultants and described in consulting contracts. This is a narrower definition of “design” but it reflects how consulting contracts, scopes of services, fees, and payment are understood in the design and construction industry. The American Institute of Architects characterizes the phases of the design process as follows (Engineering design phases are similar but are expressed as simple % complete):

Programming:

The designer and owner discuss the goals, needs and function

of the project, design expectations, budget, and relevant building code and zoning regulations. The architect prepares a written statement setting forth design objectives, constraints, and criteria for a project, including special requirements and systems, and site requirements. For a building a space program includes a list of all rooms and their sizes and functions as well as net square footages per room and overall gross square footage for the building. This information is used to establish a conceptual budget. The owner reviews and comments on the program and budget and then the designer revises and finalizes both. Once the owner has officially approved the program based on the feedback and revisions, the designer will begin Schematic Design.

Schematic Design (30% Design):

The designer consults with the owner to ascertain the requirements of the project and prepares schematic studies consisting of drawings and other documents illustrating the scale and relationships of the project components for approval by the owner. The designer also submits to the owner a preliminary estimate of construction cost based on current area, volume, or other unit costs. The owner reviews and comments on the schematic design and preliminary cost estimate and the designer revises and finalizes both. Once the owner has officially approved the schematic design and preliminary cost estimate, the designer will begin Design Development.

Design Development (60% Design):

The designer prepares more detailed drawings and finalizes the design plans, showing correct sizes and shapes for rooms. Also included is an outline of the construction specifications, listing the major materials to be used. An updated estimate of construction costs is also included. Once the owner has

officially approved the Design Development and revised cost estimate, the designer will begin Construction Documents.

Construction Documents (90% Design):

Drawings and specifications (the construction documents) created by the designer that set forth in detail requirements for the construction of the project. Specifications are a part of the construction documents that are contained in the project manual and consisting of written requirements for materials, equipment, construction systems, standards and workmanship. An updated estimate of construction costs is also included. The Design team does a coordinated check of their own drawings at the same time that the owner reviews and comments on the drawings. Once the construction documents have been completed, the owner, with the assistance of the design team, will “bid” the work to qualified contractors (or negotiate with one or two). These contractors will analyze the documents in detail to determine amounts and quantities of material and equipment as well the amounts of labor by trade that will be required to build the project.

Bid/Negotiation/Award/Contract:

Contractors submit “bids” for the project to the owner and, under a traditional public bidding process, the bids are opened publicly in a bid room, at a specific time, and read out to those in the room. Usually, a project team member and all of the bidders attend the bid opening but anyone may come and, for a really large and important project, someone from the media may attend. The lowest qualified bid wins the project. The city procurement staff must evaluate the bids as well as civil rights staff (for minority business participation) and then, once qualified, the low bidder is awarded the contract. The city and the contractor negotiate and execute a contract for construction that includes the total price of the work and a scheduled completion date.

Construction:

Once the contract has been signed, the contractor begins to mobilize and takes over temporary control of the project site. Demolition comes first followed by excavation, utilities, and generally the work proceeds vertically from the bottom of the hole up. Last come structures, fixtures, buildings, light poles, and so on. There are actually two completion dates for construction. “Substantial completion” is when the work is about 95% complete. The contractor and owner agree that the project is substantially complete. At this point, the owner takes back control of and responsibility for the site (which has been under control of the contractor for the duration of construction project) and re-opens it to the public.

Following substantial completion, the contractor is required to provide a complete set of Operations and Maintenance (O&M) manuals to the owner, explaining how all systems are operated and maintained and including “as-built” drawings of the project. Many changes happen during construction to adapt to field conditions, unexpected changes, owner-directed changes, and other things unknown during design, and it is the responsibility of the contractor to keep track of these changes – and what was actually built and where. The owner will use the as-built drawings in the future for operations and maintenance. Following substantial completion, the contractor may be on site completing small fixes and repairs or installing items that took longer to arrive, but this will be relatively minor activity. Substantial completion also triggers the start of the warranty period, which is typically one year for most systems and materials. The contractor must replace any work that fails within the one-year warranty period (dead trees, cracked concrete) at no cost to the owner.

Closeout:

Throughout the warranty period, the owner withholds a very small portion of the contractor’s total contract amount – called

“retainage” – as a way to ensure that the contractor has an incentive to complete any unfinished work and honor warranty repair work. At the end of the warranty period the final payment is made to the contractor(s) and the contract is closed out. If the contractor for some reason does not complete the work or honor warranty work, the owner can use the retainage to hire another contractor to complete this work.

“The Three-Legged Stool:” Quality, Cost, Schedule (you can have two out of three)

In the design and construction industry, there are three, interconnected variables that an owner (or anyone else who plans to build) must pay attention to: cost, schedule, and quality. There is also a commonly held understanding that an owner may only ever have real control over two of these three variables. Thus, while you may be able to have a high-quality project delivered at a relatively low cost, it may take a long time to complete, because contractors, subcontractors, and laborers are not financially incented to perform and other, more profitable projects are attracting their attention. Or, you may be able to get your project delivered quickly and at a reasonable cost, but the quality may be less than you had hoped for, because the contractor must settle for less when it comes to available labor and materials. Finally, you may be able to have a project that is high-quality and delivered on a fast schedule, but you can be sure that it will be very costly, as the contractor will be required to pay top dollar for labor (including overtime) as well as for materials and equipment that may be costly to fabricate and deliver quickly. Based on these rules, consider the replacement for the collapsed 35W bridge vs. the

new Guthrie Theater. Which variables do you think the owners of the two projects prioritized?

All three variables are important to any owner and one must work to determine the best mix of the three. While the reality is grayer than simply saying “if you want it fast and cheap then the quality is going to be poor,” it is helpful to think in these terms when making decisions about design and construction. Do you really need that fancy marble from Italy that is going to take sixteen weeks to quarry and ship and will cost three times as much, or would Kasota stone from Mankato work just as nicely and play better politically too, since it’s locally sourced and more sustainable?

2.7 Construction

Planning for the Construction Process



Figure 28. Author.

Bidding and Awarding the Construction Work

When the construction documents (the drawings and specifications) are finished, you will “put the project out to bid.” For a public project, this process will most likely be managed by the City’s procurement or purchasing department. The City will “advertise for bids” (in the local paper and the local business

newspaper) and will post a notice on the city's website, letting qualified contractors know that there is an opportunity to bid on the project. Hopefully, a number of general contractors (GCs) will choose to bid on the project, ensuring competition. Each GC will assemble a single bid for the entire project based on bids received from a variety of subcontractors and material suppliers who hope to provide labor and furnish and install materials products, and systems. For each scope of work, the GC will ask three or more different subcontractors to provide bids (for, example, for lighting and electrical) and then take the lowest bid. The GC may plan to perform some of the work with its own forces, for example demolition, earthwork and concrete. The CG will then combine all of those low bids and add their own bid for the work they intend to "self-perform." The GC submits a single bid or price for the work and will also be required to provide insurances and performance bonds.

The "bid opening" is public and anyone can attend. It is held in the procurement office on a certain date at a certain time. The bidding GCs can submit up until the time of the bid opening, for example 10AM Tuesday, July 23rd, 2019. At exactly 10AM, the purchasing officer opens the envelopes one at a time and reads off the name of each contractor and their price. This information is placed into spreadsheet and the procurement department has a day or so to review and evaluate the bids to make sure they are complete, qualified, and "responsive." The lowest qualified bidder wins the project.

There is a direct relationship between the quality of the construction documents, the conditions in the market (amount of competition, availability of labor, prices of commodities), and the final pricing. One of the most important things a team can do, particularly in a strong economy with a tight labor and materials markets, is to design clearly and thoroughly and try not to make the project any more exotic or unusual than necessary. When work is plentiful, contractors will opt for more straightforward projects every time – they are

easy to make money on and the unknowns are few. If a project is a little out of the ordinary, or if the design is not clear and easy to understand, then you run the risk of attracting fewer bidders and higher bids from those who do show up. Nicollet Mall was put out to bid twice. The first time there was only one bidder and the bid was very high: \$59M almost double the cost estimate of \$35M. The project team determined that in trying to design the street like a plaza, the project attracted neither road builders nor ground-up/vertical building contractors – it “fell between two chairs.” Over four months the team redesigned the project and modified the drawings and specifications to clearly make the project look like a road reconstruction. This strategy worked, because when the project was rebid, the City received six competitive bids from roadway contractors and the lowest bid was below budget at \$29M.

More generally, the bidding process is important because it encourages competition and results in better pricing and information for owners. Even for the smallest projects, it is important to obtain competitive pricing for every part of the work if you hope to obtain the right mix of cost, quality, and schedule. For public projects it is even more important to receive competitive pricing or you run the risk of facing political pushback if you cannot prove that you did everything in your power to get good, competitive pricing. If you only get one bid or price for any part of a project, from design fees to construction costs, you do not know what the real cost or price ought to be. And if you have a hard time attracting enough interest, then your design may be too special and it needs to be repackaged as something a number of potential contractors can provide.

Cost Control Throughout the Construction Phase:

One of the most important things to understand about a design and construction project is that you won't know how long it will take to complete and how much it is going to cost until it is actually done and you have received – and paid – the final bill. Many “budgeteers” and finance types believe that on the first day of a three-year project you should be able to know the final cost of the building down to the last penny and be able to know which day it will be complete three years hence.

This is hogwash. While you can make your best estimates, there are too many internal and external variables affecting a construction project to be able to predict costs and schedule with such precision. To be sure, if expectations are reasonable at the beginning you should be able to come within striking distance of a good estimate, but so many things will happen that are beyond your control, and the larger the project and longer the schedule, the greater the uncertainty. For example, consider the impact of increased oil prices on all aspects of a construction project or similarly, increased steel prices due to tariffs. So, it is important to include “contingencies” in your budget, to actively manage the process, and to enforce discipline – on yourself and the other members of the team – when it comes to considering changes to the design that will affect costs.

Contingencies:

Contingencies are dollar amounts added to a project budget to cover the costs of things that you cannot anticipate happening at the beginning of the project. At the beginning of a project it is common to budget for multiple types of contingencies. For example, you may carry a “fee contingency” (a percent of your budgeted design and specialty consulting fees) in case

you need to hire additional services or consultants you had not anticipated. You may also carry a “design contingency” that is a percentage of the anticipated construction budget and that accounts for unexpected impacts to the project budget due to the increasing amounts of information and design detail over the course of the design phase. You will also carry a “construction contingency” (a percentage of anticipated construction cost) that would cover unexpected costs that arise during the construction phase such as change orders or unforeseen conditions. On top of all of these contingencies, a wise owner carries a contingency on soft costs as well as an overall project contingency (a percent of the entire project).

Over the course of the project, as the amount of information grows and uncertainty decreases, contingencies are often adjusted downwards, reflecting the lessening of risk but even then, they are often spent and these contingencies can add up to big money. Consider the impact on a project of incorporating a 10% design contingency, a 10% construction contingency, and a 10% overall project contingency at the beginning. Of course, when the budget comes in too high, the first instinct is to reduce contingencies, but can you afford to do that? Contingencies are also established based on the type of project. A very simple project with few unknowns may have a lower contingency, for example 5%, but the renovation of an old building or plaza with many unknowns as to the condition of systems and what is underground suggests a higher contingency, from 10% to 15%, for example.

Unforeseen Conditions:

The easiest thing to do is a project on a “greenfield site” in the far exurbs, however, much of the work of planning and design for the urban public realm involves urban places with known and unknown existing conditions. For example, you may know that the site of a new park you are planning has some contaminated soils because it used to be a gas station, tannery,

commercial laundry, or electroplating factory, but there may be more contamination than the environmental study uncovered and, worse, you may not know until after you have started digging that there are also old building foundations in an inconvenient location and that you will need to pay extra to remove those. You may also hope to reuse existing underground infrastructure, such as water piping for a fountain, but you may find that in some places the pipes are too badly rusted and clogged to be reused and must be replaced. This is why you have “contingencies” (see above).

Change Orders:

A change order is a formal modification to the construction contract to reflect a change in the scope of work. This may be in response to an unforeseen condition (like the wall, above) or it can be as simple as the need to add a plaque to accommodate the names of the donors. The actual change order specifies the original work that will be eliminated, if any, the new work that will be completed in its place, the net cost of the change (it can be an increase, a decrease, or no change to the total price) and the impact on the schedule in days, if any, which in the end may extend the completion date.

How loud is your eraser?

The most important thing to keep in mind throughout design is that the later in the process that you make a change, the more costly it is likely to be. If you decide to move one wall during the schematic design phase, it will only require the architect redrawing the wall on the sketch plan. In the design development phase, it may require modifications to the site plan as well as the engineer’s structural drawings and details. During construction documents phase, the electrical engineer will have to change his drawings to reflect the relocation of electrical outlets and light fixtures affected by the relocation of that wall. At this point, we are still talking about lines on drawings and, as you can see, changes in the later phases are

likely to cost more in design fees as more lines, drawings, and consultants are involved.

But if you want to move a wall that has already been built, it is a lot more expensive. This is why it is good to review the design thoroughly before construction begins. Sometimes you just can't visualize something until you have seen it built at which time you realize that you don't like it. Other times you have not studied the drawing closely enough and do not realize what was designed until it is in place. Yet other times you may not like the construction quality, but then you must make a good case if the GC is to replace the work at no cost – something contractors are typically unwilling to do without a fight. In any case, if you are inclined to randomly or liberally tear out and replace completed work, you will soon eat up your contingencies with change orders that could have been avoided if decisions had been made earlier in the process. As one architect I knew used to say, “the louder the eraser, the higher the cost.” If you need a jackhammer to make a change, it is probably going to cost you a lot more than if you had just erased some lines on the sketch plan at the beginning.

2.8 Exhibits - List of Consultants

In the case of complicated urban public realm project, the list of consultants can be extensive and an owner must know how to hire the right ones at the right time and task them with providing the right amount and type of information at key points throughout the process. Below is a list of consultants that may be hired during the course of a project, in roughly chronological order starting at the beginning:

Survey:

Review existing government data and physically survey the site to determine the nature and location of all existing features including topography, buildings and structures, curb cuts, parking areas, landscape areas. The survey will also show all manholes, utility lines, sanitary and storm sewers, electrical, phone, and water lines, above ground and buried, both on site, on adjacent properties, and in public rights-of-ways. The survey will inform many of your decisions regarding locations of new structures and site access. The survey describes the property in dimensions (feet and inches) and locates it in three-dimensional space relative to other properties (and relative to sea level, 830' here in the Twin Cities). The survey will also show all easements for example, city right of way, utility easements, and access and maintenance easements.

Environmental:

Sample soils on site, survey existing structures, take samples of building materials and perform laboratory tests to determine composition. Evaluate, recommend action, specify, bid, and award work related to cleaning up contaminated soil, removal

and disposal of underground storage tanks (USTs), asbestos containing materials (ACMs), fluorescent light bulbs (coatings on the inside), switches (mercury), and abandoned elevator pits and plungers (hydraulic oil). Cleaning up a contaminated site can be costly but worse is proceeding with work based on inadequate investigation and having to stop work and do an unexpected and costly cleanup on the fly. Sometimes site excavation uncovers historic objects or features that are significant, requiring the addition of archeological services to the team.

Soils/Geotechnical:

Obtain and review historical data for subsurface conditions on surrounding sites. Many geotechnical consultants have deep local knowledge of the geological character of the region and have done work on nearby projects. Based on this information and preliminary development plans showing new building or structure locations (where bearing capacity for foundations will matter the most), as well as parking and landscaped areas. Core drill in strategic locations, dig “test pits,” and perform laboratory tests on cores and soil samples to determine bearing capacity of subsurface soils and rock, identify underground water issues, and recommend foundation systems type(s) to structural engineer based upon anticipated loads. In other words, the weight of a building including concrete, steel, walls, furniture, and occupants, is transferred from beams horizontally to columns and then vertically down to footings which must be able to support the specific calculated load on each column. Foundation system costs can vary significantly depending upon soil quality so you don't want to skimp on this work. For example, simple spread footings on good soil or bedrock a few feet below grade are very cost effective but piles driven 180' into soil with a lot of decomposed organic matter are very expensive. More important, even on a small site,

subsurface conditions can vary dramatically affecting design decisions about building locations and foundation types.

Landscape Architecture:

For many municipalities, such as Minneapolis, a site plan is required for preliminary development review (PDR) at the very inception of a project and this often means not only buildings, structures, and civil engineering but also a plan for trees, plantings, green space, and fences as well as for “impervious” surface areas such as parking lots, sidewalks, and roofs. The site plan is typically produced by the landscape architect or the architect or both (depending upon the nature of the project) and in collaboration with the civil engineer.

Engineering:

Civil engineers are responsible for designing the project site plan from the standpoint of making connections between services in the building (electricity, water, sanitary sewer, storm sewer), to underground and above ground utilities on site and in public streets and rights-of-way, working with the landscape architect to design grading plans that coordinate with the landscape design but ensure that the entire project site drains correctly, to designing parking lots, driveways and sidewalks, and storm water management systems for cases when the local storm sewer does not have enough capacity.

Architecture:

Often the first consultant hired for a building project, the architect helps an owner to program and shape their ideas and to create sketches and designs that take into account current codes, building standards, construction types, budgetary considerations, and project goals. First an architect develops a “program,” which in its simplest terms is a list of all of the needs of the building, including all rooms identified by name and required square feet. This list is summed and a “grossing factor”

is applied that increases the total square footage to account for non-program areas such as mechanical rooms, stair and elevator shafts, and even janitor closets. This program is used when the architect begins to develop alternative plans of the building, as well as cross-sections showing numbers of floors, and elevations of the exterior of the building. Over the course of the design phase and once an alternative has been selected, the architect refines these drawings and specifications adding more and more information based upon input from the owner and the contractor.

Construction Manager or Owner's Representative:

Hiring and managing all of these different consultants can be a lot of work, and for large projects, some owners sometimes hire a construction manager, a project manager, or an owner's representative. These consultants will help hire and manage the design consultants and the construction team on behalf of the owner.

Specialty sub-consultants:

In addition to these typical consultants, a project may require the services of any number of more specialized consultants including historic preservation, lighting design, security, special equipment, art broker, branding and graphic design (logos, identity, web-site, signage), public relations, sustainability, archeology, planting soils, arborists, and lighting, to name just a few.

CHAPTER 3 - FINANCE

3.1 Introduction



Figure 29. The donor recognition wall at the Commons in Minneapolis. Author.

Finance allows us to move economic value forward and backward through time. That enables humans to plan their lives, both individually and collectively.

– William Goetzmann, Money Changes Everything: How Finance Made Civilization Possible¹

1. Goetzmann, William N., Money Changes Everything: How Finance Made Civilization Possible, Revised Edition. Princeton: Princeton University Press, 2017

Introduction: Where does the money come from?

It takes money – a lot of money – to build, own, operate, maintain, program, and activate public places. Although some people think otherwise, it is just not as simple as sprinkling a little grass seed around and letting a goat loose to keep things nicely trimmed. The purpose of this chapter is to outline how public realm projects are funded. We will try to answer these simple questions:

1. How much will it cost to design and build and how will we pay for that big, one-time cost?
2. How much will it cost every year to operate, maintain, and program and how will we cover those costs every year in perpetuity?
3. How do you establish and maintain a project budget?
4. What are “sources and uses of funds” and what is “the gap”
5. How does the timing of cash flows affect project implementation and ongoing operations?

3.2 A Little History: How did it come to this?

For the first time in 100 years, people are moving back into the city – to downtown urban cores and to urbanizing first ring suburbs and main streets. People are craving community and place. Among other things, these new urban dwellers are seeking amenities that cannot be found in the suburbs and in towns and rural areas. Some people want more access to arts and culture and others are seeking out restaurants and nightlife.

The Millennial generation – a group that has so far eschewed traditional ownership of things like homes and automobiles – is looking for convenience and has been driving the rise of the sharing economy and services from Uber and Lyft to NiceRide, Bird, Lime, and AirBnB. But after decades – nearly a century in some cases – of disinvestment, people returning to our cities have found that our urban public realm is worn and tattered, incomplete, and just plain missing in some cases.

There are many reasons for this disinvestment and indeed, the public realm is in a similar condition as that of the rest of the country's infrastructure. The New Deal that followed the great depression helped get the country's economy back on track and put many people to work through a government funded building boom, but many of the projects and facilities that flowed from the New Deal and related post-depression era programs are now old and in poor repair. These include everything from port and transit infrastructure to dams, hydroelectric plants, and public housing. The 1956 Federal-Aid Highway Act (popularly known as the National Interstate and Defense Highways Act) led to the construction of 41,000 miles of interstate freeways over a ten year period at a then-

staggering cost of \$25B but those roads and bridges are all wearing out and there seems to be little appetite on the part of politicians and taxpayers to commit the funds required to adequately replace or repair them. The mixed results of Urban Renewal – the wholesale clearance and demolition of neighborhoods and their replacement with modernist superblock projects – led the Johnson administration to shift away from funding for these new projects to the Community Development Block Grant (CDBG) program in 1974, which was intended to support the redevelopment of existing urban neighborhoods. By the late 1970s federal funding for urban projects and for cities in general was in full retreat. Finally, with the passage of Prop 13 in California in 1978, that state's voters stripped their politicians of their ability to raise property taxes as a way to generate revenue for projects. Prop 13 ushered in the era of "no new taxes" (a term popularized by president George H. W. Bush in the late 1980s) that has been running now for over forty years.

The Rise of the "Public-Private Partnership" (PPP or P3)

This sentiment spread rapidly throughout the country and, with the constricting of public funding options, led to the rise of a new project financing model – the "public-private partnership" ("PPP" or "P3"). By the late 1970s and early 1980s, cities had realized they had to go it alone, and so they began funding urban redevelopment projects with a mix of public and private dollars, handing over economic opportunity to private enterprise while retaining some control of the development direction and much of the risk.

From the 1980s down to the present day, the PPP model has led to the development of a broad range of real estate

products and public amenities including commercial offices, housing, festival marketplaces, convention centers, stadiums, arenas, ballparks, urban waterfronts, aquariums, and so on. PPP has evolved to keep up with the times and trends in urban redevelopment and in the 21st century this model has been used increasingly for the creation of new outdoor public spaces. Millennium Park in Chicago and the Highline in New York City serve as notable examples but many other large and small new public realm projects throughout the US have been the product of the PPP model. Each PPP case is unique and is a product of its time, site, history, and local political, economic, and social culture and context. All PPP projects, however, have in common a combination of public and private funds, resources, skills, experience, and leadership.

The basic idea of the PPP is to combine the best of what the public and private sectors can each bring to the table to create a project that might not happen if just the government or a private company were to attempt to do it alone. The public and the private sectors have different goals and objectives when they consider entering into a PPP project.

Public Sector Goals

- Attract private investment
- Direct development – geographically, for specific parcels or properties, and in terms of product/project
- Create new jobs – both permanent jobs and temporary construction jobs
- Attract businesses and residents back into the city
- Attract visitors, tourists, sports fans, arts and culture patrons, college students, and convention-goers back into the city
- Increase the city's tax base

Private Sector Goals

- Enter new but risky and unproven markets that, once proven and mature, may become very lucrative
- Reduce risk by sharing risk the with the public sector/ government
- Obtain access to unique public assets and resources such as prime properties, sites, and historic buildings or assets
- Obtain subsidies that reduce the amount of private sector equity, debt, and risk required to implement a project

Risks of the PPP Project method

James McKeller and David L.A. Gordon ¹ studied a number of PPP projects in Canada (more building and real estate development-oriented, but still relevant) and wrote a paper summarizing the risk factors inherent in the government's sale of a public asset/opportunity to a private entity through a PPP project model. They summarized with lists for two types of risks:

- Risks that are difficult to transfer (from the public partner to the private partner)
 - Political Risk of Failure
 - Government will always be held responsible for delivering a required service
 - Governments cannot transfer environmental risks
- Risks that are transferable (to the private partner)

1. McKeller, James and David L. A. Gordon, "Discussion Paper on the RFP Process for the Disposition Of Publicly-Owned Real Estate Assets – With Literature Review And Annotated Bibliography," for the National Executive Forum on Public property, October 25, 2007.

- Design risk
- Construction risk
- Financial risk
- Market risk
- Operating risk

Unique Challenges of the RFP/Selection process for the PPP process

McKeller and Gordon also considered the unique challenges inherent in the selection process for PPP projects. They list two sets of challenges – marketplace challenges and operational challenges. Marketplace challenges have to do with how a unique PPP project may be hard to position and may not always attract interest. PPP projects are risky and always attract media attention, which may also reduce interest for some potential proposers. Operational challenges have more to do with how the government team sets up and runs the process and the setting of reasonable and achievable timelines and processes that will stand up to scrutiny but not be too onerous for potential proposers. If you make it too hard or too unrealistic no one will propose.

- Challenges in the Marketplace
 - Lack of interest
 - Lack of predictability
 - Scale
 - Costs
 - Transparency
 - Expertise
 - Media
- Operational Challenges

- Selecting the appropriate procurement model
- Making the process shorter and less expensive
- Moderating the level of detail required
- Setting the time horizon
- Reimbursement of costs
- Standardization
- Design detail
- Risk allocation
- Evaluation process
- Value vs. price

Lessons Learned from other cities and projects

Lastly, Gordon and McKeller offer a series of “lessons learned” that potential PPP partners might want to consider. I would argue that every single one of these lessons is 100% relevant to the selection process for a PPP urban public realm project:

- Spend the time to get it right up front
- Select the right business model
- Assemble the right team
- Select the appropriate procurement model
- View the RFQ/RFP as a marketing document
- Be respectful of your future partners
- Have an exit strategy on stand-by
- Finally, strive to maintain exemplary standards of ethical and moral conduct

In summary, although Gordon and McKeller are writing primarily about commercial real estate developers partnering with cities for development projects, many of his lessons are relevant to PPP projects for the urban public realm.

Last but not least, I would argue that every project in the city

today – from a new housing project to a road reconstruction to a public realm project – is, in effect, a PPP project. Every project has public and private funds associated with it and every project has public and private stakeholders. There is no clean separation between “public” and “private” in the city and there never has been.

3.3 From Ribbon Cutting to Reality: The Capital Project and The Operating Model

Implementation of an urban public realm can be divided into two discrete but inter-related parts. First, to substantially rehabilitate or create a new public facility requires funding for planning, design, and construction of the “capital project.” Second, once built, that new or renovated public facility will require ongoing annual funding to support operations, maintenance, and programming – the “operating budget” – for many years to come and, effectively, in perpetuity.

What is a “Capital Project?”

A design and construction project – for a building, a road, or a park, or a plaza – is usually called a “capital project.” A capital project is a big, costly, one-time project that, once completed, should result in a durable facility, improvement, or asset that will have a long “usable life” and provide benefits to the public for many years to come. “Usable life” may mean 20 or 30 years when it is associated with the term of the loan (bonds) used to finance it but in many cases a facility lasts much longer. Minneapolis City Hall, for example, is over 100 years old and although it receives capital investment from time to time in the form of plumbing and mechanical upgrades, new office

layouts, and so forth, the overall building has had a very long usable life and should last another 100 years.

A capital project may be an all-new project or the rehabilitation or “recapitalization” of an existing facility. Capital projects include city office buildings, police and fire stations, parks, plazas, roadways, water, and sewer infrastructure. The term “capital project” is also used in the private sector, where a typical capital project might be a factory, office building, warehouse, or distribution center.

Because it will provide benefits over that long usable life, a capital project is usually funded primarily with debt or borrowing – using the proceeds from the sale of bonds. The bonds are repaid over a fixed period of time – for example twenty or thirty years – with annual tax revenues. The idea is to use a little bit of income each year to pay for the benefits derived each year, rather than trying to pay for a big project all at once. Borrowing is also a way to spread the cost of the project over the useful life of the improvement and over all of the users who will benefit from the improvement over that useful lifetime. (You can think about your own auto loan, student loan, or home mortgage payments the same way: If you are going to benefit from the asset for a long period, then it may make more sense to pay for it a little bit at a time. You may also have difficulty paying for it all at once, too.)

PPP Public Realm projects are usually funded with a combination of government grants and private donations. A fundraising committee comprised of public and private sector leaders will be assembled for the purpose of soliciting funds from both elected officials and private donors. The people and agencies who raise and contribute the cash are usually honored at a ribbon cutting ceremony once the project is complete. Fundraising for the ongoing operations of a place presents a different set of challenges.

Routine and Non-Routine Capital Projects

Routine projects are those projects that happen on a schedule. They may include the replacement of the playground equipment in a park or the reconstruction of a street or the renovation of an old public building or public space. These kinds of projects happen all the time, all over the city.

Non-routine projects are big, new, one-time projects that are more complicated. Often these projects are the product of public-private collaboration and often they are promoted by and partially funded by the business community. Often they are downtown. Examples include a big new urban park where there had never been one before, a playground in a rapidly developing neighborhood, a pedestrian street, or a public plaza. Sometimes a real estate development project leads to increased private investment and redevelopment in the surrounding area.

What is an “Operating Budget?”

Once the project is complete, the costs do not go away. The owner and/or operator of the park or facility must pay ongoing costs. These costs can be grouped into three categories: Operations, maintenance, and programming.

Operating costs include the costs of the paid staff (full time or part time, direct staff or contract staff) who take care of the place. These personnel may include administrative staff as well as the people who provide security and pick up trash. Operating costs also include the costs of contracts with vendors to provide certain services such as lawn care, fountain and pool maintenance, snow removal, and landscape maintenance as well as utility charges like power, water, and

sewer. In some cases, all staffing is provided under contract by a single operating entity.

Maintenance costs include the regular and periodic costs of changing light bulbs, repainting wood trim on a building, repairing damaged turf or cracked concrete, fixing plumbing problems, and replacing dead trees, bushes and plants. Some maintenance is regular/routine/preventative and some is more infrequent – as in when something breaks. An underfunded operation is sometimes referred to as a “break-fix” model, where you do very little maintenance and only when something (important) breaks. Maintenance can be performed by staff or by contractors/vendors.

Finally, Programming includes the costs associated with activating a place. This part of the budget may include staffing, equipment rental, additional security, advertising, and other costs for specific events like a concert series and for ongoing programs such as pianos and Ping-Pong tables. Activation may also include concessions and food from a small ice cream cart to a fixed “bricks and mortar” café or restaurant.

The capital project and the operating budget must be developed in tandem as they affect one another. The potential future operations (including income potential from food, beverage, and events, for example) will require certain features from the design and, conversely, the design must accommodate certain anticipated uses and include systems and materials that are reliable and not overly expensive to operate and maintain once installed.

Operating budgets are funded with an array of sources of funds that might include annual allocations from a local government (typically the largest and most important share); rents and charges for use; charitable donations from private companies, foundations, and individuals; and corporate sponsorships. Parks that operate food and beverage facilities (for example, Sea Salt restaurant, in Minnehaha Park) can generate a share of operating funds from rents (space) and

percentage rents (% of gross sales) paid to the park by the food concessionaire. Some large public parks have “friends of” non-profit charitable organizations that hold annual fundraisers in support of the park.



Figure 30. Splash Pad at the Commons in Minneapolis. Hargreaves Associates.

One big challenge is that fundraising for the operating budget is less glamorous than a big one-time capital campaign that ends with a ribbon cutting, a donor plaque, and a photo op. Operating fundraising goes on constantly and the numbers are significant. For example, while fundraising \$10M for a new park may seem like a big lift, the total value (present value, or PV) of an annual operating budget of \$500,000/year for the same park could be as much as \$5M more, and that is a lot of money for which the funders receive relatively little recognition. Once the project is complete, people expect it to look wonderful and be fully activated in perpetuity and that shouldn't cost too much because all you really need is a goat to trim the grass, right?

Another funding challenge is that some people believe that if you design, build, and operate the park correctly, you ought to be able to make enough money to cover the operating costs – and even generate a surplus – through programming and food and beverage revenue. This vision of a park as a break-even or even a profitable business model is often driven by the private-sector business leaders who believe that you can just cut the government waste and professionally operate it like a profit-making business. This argument is also often used to justify project capital and operating budgets although the actual revenues rarely match the original, optimistic projections. Indeed, this model only works in a few, very special, typically very dense urban places, like Bryant Park in Manhattan, for example. Almost all other parks operate at a loss (from a business standpoint) and must be subsidized with public and private funds.

But another way to think about it is that parks have always been a valuable public amenity that require and are deserving of funding, similar to streets and sidewalks and other public infrastructure that is paid for with tax dollars. In the end, cities or other governments usually pay the majority share of a PPP park's annual operating budget, for example 75%. One challenge is that in the US, governments (like City Councils) are prohibited from implementing budgets that span into future administrations. The reasoning is that it would be unfair and unwise to tie future city leaders and their governments to costs over a long timeframe when they may need to have flexibility to adapt a budget to new or changing interests and economic trends. The point is, it is a big job coming up with the operating funds every year and it never ends.

Summary – Capital and Operating

When starting a public realm project, you must consider both

capital and operating budgets – the one-time project costs and the costs of operating it every year into the future once it is complete. The following is a simple summary of the differences between capital and operating.

- Capital
 - Large, one-time cost
 - Long-lived asset (For example, a useful life of 20-30 years or more)
 - Debt-financed (Long-term borrowing, for example bonds with 20-30-year terms)
- Operating
 - Annual costs
 - Payroll, contracts, leases, rents, utilities
 - Things you use up
 - Cash-flow (Funded from city and other annual operating budgets, private fundraising, and sometimes from a reserve fund)

3.4 How do Capital Project Budgets Get Established?

One of the most interesting aspects of capital project work is establishing the budget. Often, people think a great amount of research and study goes into “benefit/cost analyses,” design studies, and construction cost estimates, all as a way to predict what a project will cost. Typically, it is not that complicated.

There are two basic ways to estimate costs. The first way is to hire a design firm and other consultants to complete a study or pre-design or conceptual design that includes a conceptual budget. Then you use that study and those estimates to secure support for the project. The second way is to identify a similar recent project, scale its cost to the new project, and adjust that cost upward to account for inflation. The Consumer Price Index or “CPI,” which tracks annual inflation in the US, was 2.2% in 2019 and it has averaged between 1% and 3% per year since 2000.¹

For example, if you are doing a project that is similar to one completed five years ago for \$12.0M but your project is only 80% the size of the previous project, you would take 80% of \$12.0M to get \$10.0M. Then you would add on an inflation factor, for example, 3% per year through the completion of your new project. So, if that \$10M project were to take five years to

1. Consumer Price Index, 1913-, Federal Reserve Bank of Minneapolis.
<https://www.minneapolisfed.org/community/financial-and-economic-education/cpi-calculator-information/consumer-price-index-and-inflation-rates-1913>. Accessed August 2, 2019.

complete (plus five years of inflation since the last project was completed) then, assuming ten years of inflation at 3%, the new project would cost a total of about \$13.5 in today's dollars. When possible, it is best to do both a design study with a cost estimate and have some comparable data from a similar, recent project. Then you can compare and reconcile both of those conceptual numbers to arrive at a more refined estimate.

Beware of inflation! 2.2% may not sound like much, but inflation is not the same for all goods and services and it can increase during a booming economy. For example, while inflation was just 2.2% in 2019, for construction it was closer to 5% as labor and materials shortages drove prices up. For the example above, this would mean an increase from \$12.2M based on the 2019 CPI rate of 2.2%, to \$16.3M at 5% – a difference of \$4.1M or 40% of the original project cost estimate. During the housing boom in the 2000s, inflation between 2004-2008 reached 9% per year. This was crushing for developers who based their cost estimates and pro formas on 3% per year, because inflation compounds, and 9% over the four-year duration of a project (rather than the estimated 3%) increased costs and prices for housing by 25% or more. For some developers, the prices for the final housing units were so high that they could not attract buyers, the units went unsold, and the projects ended in default.

But “how much will it cost?” is not the only question. A second, equally important question is, “how much can we raise?” You have to be able to identify in a rough way all of the realistic potential sources of funds and estimate the amounts you may

be able to secure from those funders. This is part cold-eyed analysis, and part gut instinct. For example, “how much did the state give to that other park two years ago and can we get a similar share for this project?” Or “how much will City Council be willing to spend on this project in this ward considering how much we spent on that other project there last year?” Or “is there a private company or individual with a specific interest in this project who may be able to write a big check?” If you cannot figure out where the funds will come from at least generally, then the costs are not really important because you probably don’t have a live project.

For right or for wrong, project budgets often get established before a lot of detailed analysis has happened. This is because you have to take a swing at something before you have even had a chance to hire consultants. More important, when establishing a project budget, it is good to keep in mind the behavioral economics concept of “anchoring” – which is when you fix on something and then have a hard time moving off of it later when there is more information. This means that, whether or not the number had any basis in reality, if you convinced everyone to start a project by telling them it would cost \$15 million, then everyone is going to remember that number and it is going to be very difficult to change it later without getting a lot of angry reactions and media responses, unless there is a reason for the change that is good or justifiable, such as the addition of a desired feature.

Which is why it is good to pad your number a bit, if you can, because it is going to take longer than you think and there will be some costs you probably haven’t accounted for. A related way to think of it is that if the cost estimate is \$12,455,009, you may want to round up to a higher, easier to remember number. If you don’t, others will anyhow, so you may as well decide that number early. And one benefit of a big, round number is that, as things change, if you have to revise your estimate, that number looks preliminary and conceptual. So

\$15M sounds pretty good to start, and if you add a feature you may be able to justify later why the number has risen to \$16.2M. On the other hand, if the initial budget number is too high, the project will not gain any traction – in this case \$20M may just not fly with the project leaders and potential donors – because it does not pass the “how much can we raise?” question.

That is the balance: Your best estimate of a real number (with a little contingency in it) that civic and government leaders can remember and accept – and can imagine raising. The answer to the question “how much will it cost?,” is the best estimate of how much it will cost balanced with gut feeling of the highest possible amount the project leaders can imagine raising, or “how much can we raise?”.

“How much will it cost?”...and...“How much can we raise?”

If you cannot answer both of these questions – and the numbers should be close to one another – then you do not have a viable project.

Sources and Uses of Funds

For any major capital project, the first step in creating a budget is to make what is called a “sources and uses of funds” table. This table is simple: First, it lists and summarizes the uses of funds – the costs, or what you will spend the money on. Second, it lists and summarizes the sources of funds – the money you will use to pay those costs. Third, it identifies a “gap” if any, between the sources and the uses. Sources must exceed or equal uses, or you do not have enough money to do your project. Let’s begin with project costs or “uses of funds.”

Uses of Funds

The costs of a capital project include three broad categories: Land, construction, and fees and soft costs. Land might include the cost of purchasing the land, costs associated with survey and platting, geotechnical investigations, environmental testing, environmental cleanup, and soil correction. Construction includes all of the materials and labor required to build the project as well as related costs such as temporary power and water, sewer connection charges, permitting fees, or even the costs of temporarily closing traffic lanes and hooding and buying out parking meters during the construction period (fees paid to the city). Fees and Soft Costs includes fees for professional services such as architectural, landscape architectural, and engineering design, as well as project management, construction management, legal, brand and creative (logo, website), communications, and a host of other professional services. Together, these costs are the Total Project Costs, also known as the “Uses of Funds.” The following is a list of typical project costs:

Land

- Acquisition price
- Soils/geotechnical study
- Survey
- Platting/recording
- Environmental studies (for example, Phase I/Phase II Environmental Site
- Assessments, Environmental Assessment Worksheet or “EAW,” Environmental
- Impact Statement or “EIS,” and Alternative Urban Areawide Review or “AUAR”)
- Environmental cleanup
- Soil corrections

Construction

- Construction contract amount (The cost of labor, materials, bonds, and “general conditions” of the work such as temporary heat, water, sewer, permits, and fees)
- Construction contingency (An additional percentage of the construction contract, 5%-15% for example, to cover the costs of unknowns)
- Independent Testing and Inspections (a third-party laboratory that tests the quality and strength of concrete, steel and other project materials)
- Fixed furnishings and equipment
- Loose furnishings, signage, miscellaneous

Fees and Soft Costs

- Design fees (Architecture, Engineering, Landscape Architecture, etc.)
- Owner’s Representative and/or Construction Management (CM) fees
- Legal fees
- Financing costs including interest on principal of the construction loan, bridge loan, or mortgage
- Staff time dedicated to the project (salaries, benefits, etc.)
- Costs of leasing temporary space (in the case of a temporary relocation)
- Brokerage/RE fees (in the case of property acquisition/disposal related to the project)
- Marketing and promotions costs, including set up and branding of operations
- Capital campaign costs (costs of fundraising, for example, donor events including tent rental, food and beverage, and security)
- Design Contingency (an additional percentage of the construction contract to cover the costs of unknowns early

- in the design process)
- Owner's Contingency (an additional percentage of the construction contract to cover the costs of unknowns and unexpected conditions)

Sources of Funds

Once you have determined project costs, you have to determine how you will pay those costs. Many more routine projects are fully funded with public funds but for other, more complicated projects the sources of funds can be more complicated. As previously mentioned, since the 1970s, cities and the business community have turned increasingly to the Public Private Partnership (PPP or P3) model for the funding and development of projects that both sectors want but which the city no longer can solely fund with tax revenues.

Public realm projects can be large, small, simple, or complex. Funding varies too, between different types of projects. For example, funding for a park may come from one set of sources (such as state and local grants and private donations), while funding for a public street reconstruction project might come from another (federal, state, and local funds including assessments on property owners along the street). The following two lists identify types of FUNDS and types of FUNDERS:

Types of FUNDS

- Grants (Cash or proceeds from sale of bonds)
- Grants of land (Free or reduced price/discounted value)
- Clean-up grants (For environmental remediation/cleanup)
- Grants from bond proceeds (more to follow on bonds)
 - General Obligation or "GO" (Gee-oh) Bonds (backed by

- taxing authority)
- Revenue Bonds (backed by project revenues)
- Assessment Bonds (Right Of Way Assessment for standard roadway Street and sidewalks, trees, lights, etc., paid by property owners)
- Special Assessment Bonds (Right Of Way Assessment for enhancements above standard roadway, such as lighting, street furniture, art, etc.)
- Special Assessment Bonds (For a larger area or district)
- TIF Bonds (For a specific TIF project or district)
- Private donations and gifts
 - One-time donations
 - Timed gifts (e.g., a fixed amount each year for five years – for donor's tax purposes)
 - Sponsorships and naming rights (e.g., US Bank Stadium, Target Field) (Naming can be for a whole facility but in many cases a number of smaller features within the larger facility are named after individual donors, for example, the Bob Smith fountain at the Jane Jones park)

An example of how naming rights work over time: Peavey Plaza was named for the Peavey family, owners of one of the historic grain processing companies in Minneapolis, who donated a large sum to the completion of Peavey Plaza in 1974. Their rights to the name have effectively expired and there are no Peaveys living in Minneapolis anymore, although there are Peavey family members with other last/married names. Renaming the plaza after a new major donor as a part of the reconstruction

project that was completed in 2019 was considered and would have been possible, but there were no donors interested in having the plaza named after them. One challenge is that the plaza is on the National Historic Register of Historic Places as “Peavey Plaza” and, more practically, that is what everyone has called it for 45 years, so changing the name would likely create more confusion than clarity. If a major donor had wanted to have the plaza named after them, however, it could have been done, it just didn’t happen this time.

Types of FUNDERS

- Government
 - Local (General Purpose/City, Independent Park Board in MPLS)
 - County
 - Regional (In the Twin Cities, Metro Council, Metro Transit)
 - State
 - Federal
- Private Sector – Private Donations/Philanthropy
 - Corporations, e.g., Target Corp.
 - Corporate Foundations, e.g., Target Foundation, McKnight Foundation, Phillips Family Foundation, etc.
 - Private Individuals (Gifts)
- Non-Profit
 - Non-Profit Organizations (e.g., Trust for Public Lands – TPL)
 - Foundations (e.g., McKnight Foundation)

The “Gap”

Sources of funds must equal or exceed uses of funds. If there are not enough funds the project cannot be completed and probably should not be started. For example, for a private sector development, if you do not have enough money to begin your project, then you will be unable to obtain a commercial construction loan or mortgage from a bank. In the public sector, if you do not have enough money to begin your project, then the government sponsor of the project (for example, the City) will not authorize you to enter into a construction contract to begin construction. Similarly, a superior government (for example the state of Minnesota) may not be willing to execute a contract for a grant or to distribute the funds until the sponsoring government (the City) can prove that they have raised the balance of the required funds. In this case the state’s funds are the “last in” funds. You don’t get those funds until you can prove that you have the balance of the cash first.

The equation is simple: Sources \geq Uses. If uses are greater than sources, then you do not have a viable project unless you can raise more funds or eliminate costs on the project. Here is a very simple sources and uses (S+U) table:

SOURCES AND USES OF FUNDS

Sources of Funds:

Uses of Funds:

Cap. Sources Over/(Under) Uses

Viable Project

\$12,000,000

\$11,500,000

\$500,000

Dead Project

\$12,000,000

\$14,000,000

(\$2,000,000)

SUMMARY: Sources and Uses of Funds (S+U) and “the Gap”

The following generic example is for a public realm project based on a public-private partnership model. There are two sources of public funds (state and local) and also private donations. The uses of funds include several potential “alternates” that could be designed and built if the funds could be raised. At the bottom, you can see that the Sources exceed Uses for the base project but that there would be a gap/or shortfall if the alternates were to be included.

This table represents the summary tab of a spreadsheet that would have additional detailed tables for each of the line items listed, with each table including much more detail. So, for example, there would be tables detailing each of the different consultant fees and one for all of the construction costs and contingencies. There would also be a table listing all of private donations and another listing all of the different coded sources of city funds that sum up to the total sources. A project may start with a simple table or worksheet but by the end there will be a full workbook that might have six to twelve detailed tables feeding the summary table. This project budget reflects a “base” project – the minimum required to complete the project – as well as several “alternates” or enhancements that would improve the project if the additional funds can be raised.

SOURCES AND USES OF FUNDS

SOURCES OF FUNDS	% Total	Amount
State Government Grant (Bond Proceeds)	20.0%	\$2,000,000
City Capital Contribution (Bond Proceeds)	35.0%	\$3,500,000
Private Donations (Cash and timed Gifts)	45.0%	\$4,500,000
TOTAL SOURCES OF FUNDS	100.0%	\$10,000,000
USES OF FUNDS	% Total	Cost
Land		
Land	0.0%	\$0
Survey	0.1%	\$12,000
Geotechnical Study	0.1%	\$14,000
Phase I Environmental study	0.2%	\$18,000
Soils clean-up (one area with VOC's)	<u>0.3%</u>	<u>\$26,000</u>
Subtotal Land	0.7%	\$70,000
Construction ("Hard Costs")		
Construction	71.2%	\$7,000,000
Construction Contingency	<u>10.2%</u>	<u>\$1,000,000</u>
Subtotal Hard Costs	81.4%	\$8,000,000
Fees and Services ("Soft Costs")		
Landscape Architect Fees	11.2%	\$1,100,000
Owner's Representative Fees	2.0%	\$200,000
Construction Management (CM) Fees	2.0%	\$200,000
City Bond Counsel (Legal)	0.3%	\$25,000
Independent Testing	0.3%	\$25,000
Fundraising Costs	0.3%	\$25,000
Fundraising Consultant	0.5%	\$50,000
Fee Contingency/Misc.	2.0%	<u>\$200,000</u>
Subtotal Soft Costs	18.6%	\$1,825,000
TOTAL USES OF FUNDS	100.0%	\$9,825,000
Budget Target	<u>101.8%</u>	<u>\$10,000,000</u>
GAP/Contingency - over/(under)	1.8%	\$175,000
COST OF ALTERNATES		\$1,250,000
TPC W/ ALTERNATES		\$11,075,000
TOTAL SOURCES OF FUNDS	100.0%	<u>\$10,000,000</u>
(GAP)/Contingency w/Alternates	-10.9%	<u>(\$1,075,000)</u>

Figure 31. Sources and Uses table. Author

Below is a simplified version of the previous summary sources and uses table. What this table tells you is that if you can obtain all of the sources then you have more than enough money to complete the project although you do not have enough to compete the “alternates” from the previous table, which might include, for example, pavers instead of a poured concrete sidewalk or an extra feature such as a fountain. What it also tells you is that you better get to work raising \$4.5M in private sources as well as doing the political work involved in ensuring that you receive the two public grants. And what are those \$5.5M in bonds all about? What are bonds, anyhow?

SOURCES AND USES OF FUNDS

SOURCES OF FUNDS	% Total	Amount
MN DEED Grant (Bond Proceeds)	20.0%	\$2,000,000
City Capital Contribution (Bond Proceeds)	35.0%	\$3,500,000
Private Donations	45.0%	\$4,500,000
TOTAL SOURCES OF FUNDS	100.0%	\$10,000,000
USES OF FUNDS	% Total	Cost
Land	0.0%	\$0
Construction ("Hard Costs")	81.4%	\$8,000,000
Fees and Services ("Soft Costs")	18.6%	\$1,825,000
TOTAL USES OF FUNDS	100.0%	\$9,825,000
(GAP)/Contingency	1.8%	\$175,000

Figure 32. Simplified Sources and Uses (S+U) table. Author.

3.5 Debt Financing and Bonds

The quote at the beginning of the chapter says, “Finance allows us to move economic value forward and backward through time. That enables humans to plan their lives, both individually and collectively.” That’s the idea behind borrowing. Excessive credit card debt is a bad idea but borrowing to buy a car, home, or college education are examples of the idea of moving money back and forth through time and using finance to help plan your life. Imagine how much more challenging life would be if you had to pay cash every time you wanted to buy a car?

Although some owners or clients can completely finance a project’s total capital costs with cash, most cannot and many others choose not to. One reason to borrow is that you cannot afford to fund the project all at once, but for cities and governments another, more important reason to borrow is because it effectively spreads a very large one-time cost into a series of much smaller monthly or annual costs (payments) that reflect the use of the asset over time. In other words, if you will enjoy the use of a home for 30 years, why not pay for it a little bit every year over those thirty years – similar to paying rent (although you also benefit from the appreciation in value over time) – since this breaks down the total cost of the home and connects your use of it over time with your regular income over time.

Another way to think of it is that few people have the ability to plunk down \$266,000 for a home (the median home price in Minneapolis) but some people can afford to come up with a single down payment of 10% (\$26,600) and then pay \$1,400 per month for 30 years. The relative value of that payment drops over time as inflation and your income both rise, but the

payment amount stays the same, so the last payment feels pretty small when compared to the first one. (The added benefit of homeownership is that the value of your home rises over the term of the mortgage, too, so when you sell you profit from appreciation.)

Borrowing for capital projects usually involves the selling of investment instruments called bonds. Bond financing is used in both the public and the private sectors. For example, in the private sector, a company may sell corporate bonds to finance the construction of a new factory with the idea that the increased production capacity from the new factory will allow the company to sell more product at a lower cost per unit, increasing income and profits over many years to come. The company therefore agrees to repay those bondholders a little bit of their principle plus a percentage of income each year with the expectation that the factory is generating increased income and profits for the company. If things going according to plan, the company will be able to pay down the bonds and still earn greater profits than if they had never built the factory in the first place.

On a more personal level, debt financing of a major capital project is no different than taking out a loan to buy a car, home, or student tuition. Rather than paying cash when you buy something costly, you borrow the full amount and repay it over time. For education, your increased income over many years to come because of your education makes the investment worthwhile. Similarly, why pay for a car all at once if you can pay over time so that you have more reasonable annual costs that reflect the use of the vehicle over time?

The case is the same in the public sector, except that the income is tax dollars. Cities sell bonds backed by future tax revenues and they repay those bonds, a little bit every year, over the term of the bonds (20 or 30 years) with tax revenues from future residents/taxpayers. The city's annual operating and capital budgets take into account annual "debt service"

(repayment of debt, similar to a car payment, student loan payment, or mortgage payment) along with payroll and other annual operating costs.

The effect is that everyone who lives in the city and pays taxes at some point or another is paying for the share of the project that they may use during the time they live in the city. In this case if you live in the city and pay taxes for years 23-26, you are paying for a share of the project but the costs are spread out over time. The alternative would be to pay for a major capital project in one year, which would be unfair to the taxpayers who lived in the city in year one and who paid a whopping tax bill that year and who would be unfairly privileging all of the other people who don't have to pay it but get to enjoy the "asset" or "improvement" or "facility" for the next twenty-nine years.

The big idea is that investors purchase bonds that are backed by some future revenue stream that will repay the bonds plus a little income. The investors take a risk but for city bonds, and particularly General Obligation bonds, the risk is slight because the bonds are backed by the taxing authority of the city, which means that the city can always raise taxes, if it must, to service its debt.

Types of Bonds

A bond is an investment instrument sold by a government or corporation to investors who will receive a guaranteed payment over a period of time. Over the course of a 20-year bond, for example, the bondholder receives a regular fixed payment (monthly or annually, for example) that includes repayment of the original principal plus interest income. For public bonds, this income is not taxable, which lowers the cost of money for the city (the interest rate) while appealing to investors with wealth who are seeking to lower their tax

burden. Tax-exempt municipal bonds may earn 4% against 8%-10% in the stock market, but there is little volatility, the likelihood of repayment is very high, and you do not have to pay taxes on that 4%. Corporate bonds are sold by private companies, usually for the purpose of financing major, long-term investments such as a new factory but the interest income is taxable so corporate bonds must offer investors a higher interest rate, for example 6%. Both corporate and government bonds are used to finance long-term permanent capital investments. The repayment of the bonds is known as “servicing the debt,” and the monthly or annual payment is called the “debt service.” Refinancing or paying off bonds completely before they come due or their term is up (for example, paying off the balance of 20-year bonds after 15 years) is called “defeasing the bonds.”

Debt service is a part of a city’s annual operating budget, along with payroll, fringe benefits, leases, supplies and so forth. Cities sell bonds every year and so the city always has debt service on multiple bond issues, some new, some half-way paid off, and some that are about to be paid off or defeased. Cities usually take on new debt as they defease old debt so that debt service is always a part of the budget. For example, the City of Minneapolis is about to complete repayment of debt on the central library – and take on approximately the same amount of new debt for the purposes of funding a new city office building and renovations to City Hall. Around election time you may hear a lot about ballot questions in suburban cities for large bond issues for new schools. Taxpayers may worry that their taxes are about to go up but often the new debt is just replacing old debt, and won’t change your tax bill much.

Municipal or “Muni” Bonds

People invest in bonds because they expect to be repaid the principle and earn an additional tax-exempt income (say 4%) for taking the risk of investing. Government bonds are usually considered to be low risk because governments rarely default on their bond repayments. This is because government can use its taxing authority to generate the income required to repay the bonds or, in other words, it can raise taxes if necessary to repay its debt. If the city has trouble repaying its debt or if it defaults on its payment, the rating agencies (Moody's, Fitch, and Standard and Poors) will downgrade the city's credit rating from, for example, a Fitch rating of “AAA” (the best), to a rating of “AA+,” which signals to investors that the risk is higher.¹

When the risk is higher, investors will require a higher rate of return to justify the higher level of risk of the investment. Anything rated BB+ or lower is investment grade or “junk bonds,” that offer a much higher return but a much higher risk, including the risk of the total loss of the investment. Cities do not want their credit rating lowered because lower ratings mean higher required returns from investors and increased costs of borrowing in the future – basically paying more to get the same thing. For example, if a AAA bond rating means it costs \$1.04B to borrow \$1B in bonds, and a AA+ rating means it costs \$1.05B to borrow the same amount – a difference of \$10M – the City is highly incented to maintain that AAA rating because \$10M is a lot of money.

People invest in assets that are backed by a future stream of revenues that ensure the likelihood of repayment. For example, you might invest in corporate bonds because you are assuming

1. For more, see “Bond credit ratings,” on wikipedia, https://en.wikipedia.org/wiki/Bond_credit_rating accessed August 2, 2019.

that the company you are investing in will grow in value and income and be able to repay you and the other bondholders. For your own mortgage, the bank is assuming that your employment history and income is a good indicator of your ability to repay a thirty-year loan from your ongoing income. However, in the case of a home mortgage, the loan is also secured by the value of the asset, the home, so if you default, the bank can foreclose and then sell the home to recoup the loaned funds (the bank's depositors' funds) from the proceeds from the sale. So, people invest or make a loan when they know there is something other than wishful thinking giving you the idea that you will be repaid. The big idea is that bonds are backed by an estimated or projected future stream of revenues – profits, taxes, rents, fees or charges. There are many different types of bonds, so here are the basic types:

General Obligation or “G.O.” (“Gee-oh”) Bonds

There are two basic types of bonds that are often used for public projects: General Obligation (“GO”) Bonds and Revenue Bonds. Every year cities sell GO bonds backed by a future stream of projected tax revenues. The city's bond rating is important because it establishes the cost of money (the income on the principal) so most cities will do anything – including raise taxes if necessary – to cover debt service payments. That is a really powerful guarantee of repayment and because they are so safe, GO bonds earn a lower interest or income rate – say 4%. Income from G.O. bonds, however, is tax exempt, so for people with wealth who are trying to minimize their tax burden, they can trade a lower income for the tax-exempt status of the investment. For example, a 6% bond that

is taxable may be yield a similar net return as that if a 4% bond that is not taxable.

Revenue Bonds

Revenue bonds are typically also issued by a government but they are project-based and are backed by a projected future stream of revenues from specific user charges, fees, rents, or tolls. Revenue bonds are used to build toll bridges and tunnels, public aquariums, ballparks, parking facilities, convention centers, and other things for which users can be charged directly. (Compare to tax-based G.O. debt-financed facilities that anyone can use without paying a charge, like a park, street, or library.) Revenue bonds are considered the second safest type of bonds after G.O. bonds and the reason they are not as safe is because repayment is backed by specific project revenues and not by taxing authority. Further, the revenues are not guaranteed and projections are often overly optimistic, so risk varies based on the project. For example, a toll bridge is very safe investment if there are only so many routes across a river. However, a highly speculative tourist attraction such as an aquarium, can be much riskier. Because there is more risk involved, investors in revenue bonds may expect to earn more like 6% as opposed to 4% for GO bonds (the income is still tax exempt). In a local example, the Saint Paul Port Authority developed parking ramps using revenue bonds. Another variation is Industrial Development Revenue Bonds (IDRBs), which may be used for projects such as converting old polluted industrial land into new light manufacturing and warehouse uses to create new jobs and generate new taxes from underutilized property.

“Moral Hazard” and “Moral Obligation”

Bonds

An important concept surrounding revenue bonds is the idea of “moral hazard” or “moral obligation.” Revenue bonds are often issued by special purpose governments like public authorities (such as the Saint Paul Port Authority), rather than by general-purpose governments (the city or state). However, despite being back by a future stream of revenues from a project and not by taxes like GO bonds, investors and Wall Street perceive revenue bonds as being nearly as safe because in the case of poor performance or default, the unwritten expectation is that in the end the city will cover the debt – with taxpayer dollars. The reason for the city to cover the debt is that, in the end, in the case of default, the bond rating agencies may move to downgrade a city’s credit rating if one of its agency’s or affiliated government’s bonds default.

This is why Revenue Bonds are sometimes called “moral hazard bonds.” Revenue bonds can shift the risk to cities and taxpayers if the project fails. If, for example, a city’s economic development authority uses revenue bonds to finance an aquarium and the bonds are backed by ticket sales that never materialize, the city may end up bailing out the aquarium to avoid having its own credit rating damaged. This is more of an issue in cities that have numerous special purpose governments such as parking authorities, industrial development authorities, and so forth. The Saint Paul Port Authority (SPPA) and the Saint Paul Housing and Redevelopment Authority (HRA) are both examples of independent local authorities that issue bonds but are also both entwined with the city (several city council members also sit on the port authority board and the HRA board is the complete council with a different council member serving as chair).

Tax Increment Financing (TIF) Bonds

TIF Bonds are backed by the future tax revenues that will be generated by the new project or projects within a TIF District. The district can be a single parcel/project or it can be a large section of a city where all projects contribute to the district. The difference between tax revenues from a current parking lot and a future high-rise office tower on that lot (for example) is called “the increment.” The city agrees to forgo receipt of that increment for some period (ten or twenty years, for example) and instead uses those future real estate taxes to repay the TIF bonds. TIF bonds are usually used to subsidize a private sector development project or a PPP but they are meant to be spent on public amenities, such as parking, street furniture, and the public realm surrounding the project. “Public purpose,” however, can be interpreted broadly. In Philadelphia during the 1990s, a number of early 20th century historic office buildings were TIF’d and re-purposed as hotels. The amount of subsidy required was so great that the public portion of several new hotels included not just the streetscape and public parking, but also extended into the main lobby, the elevator lobby, the elevator lobbies on all floors, and the corridors on all floors – all the way up to the doors of the private rooms.

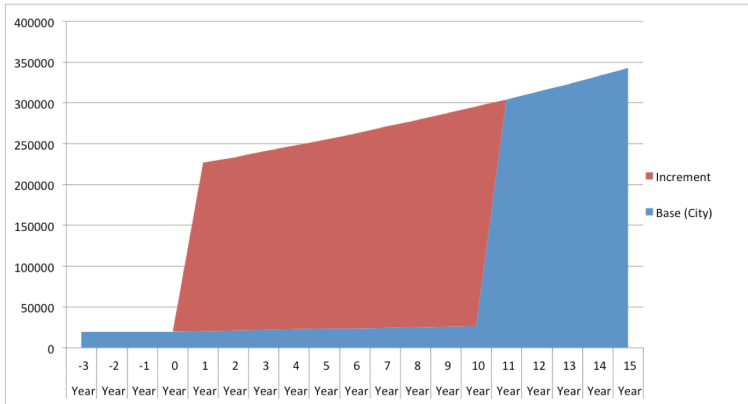


Figure 33. Tax Increment Financing (TIF). Author.

“A TIF Example: The total amount of a TIF contribution to a project is based on the present value of the incremental increase in property taxes due to the improvement (investment) for a specified period. That estimated amount or value is used to size and sell a note or bond to investors. The investors will be repaid with the new tax revenues generated by the increased property value over some term such as 10, 20, or 30 years. The example above is based on a ten-year TIF bond. The increase in real estate taxes in year 1 is based on the development of a new building on a vacant lot. Years -3 through -1 show the taxes based on the valuation of the property as a vacant lot prior to the completion of the new building. Taxes go up in year 1 because the new building is worth much more than the lot. The first ten years of increased taxable

value (above the value of the lot) – shown in red – is the “increment.” Bonds worth the value of these increased taxes over ten years are sold in year 0 and the proceeds are used to build the project. The bonds are repaid over 10 years with the annual tax revenues. In year 11, after the bonds have been fully repaid, the city collects the entire value of the property taxes – base and increment – going forward and can use those tax revenues for whatever purposes it deems necessary. The idea is that the project may not have been possible but for the additional funds created by monetizing of future tax dollars to subsidize the project in year 0, but in the long run, once the bonds are paid off, the city collects more taxes from year 11 onwards than if the project had never been completed.

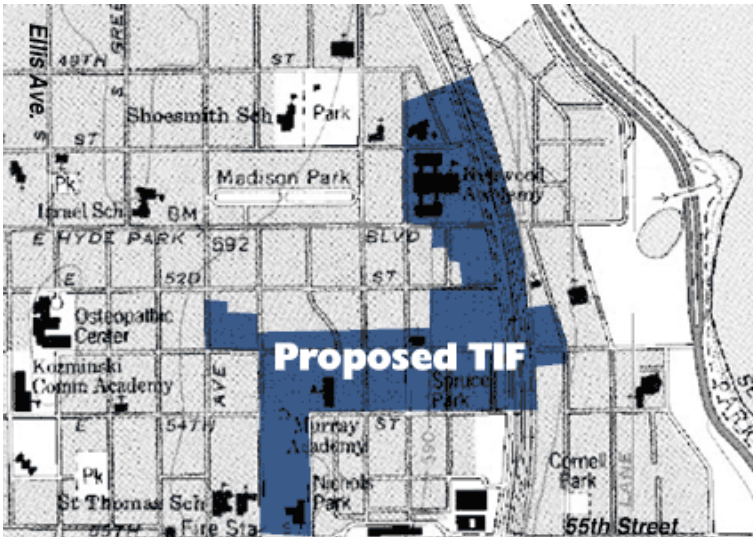


Figure 34. Map showing a TIF district in a Chicago. Increased property values on all properties in the district result in higher future taxes and those are used to repay bonds sold today to fund public improvements within the district. <http://www.hydepark.org/hpkcnews/tifmap.htm>, Accessed August 6, 2019.

Assessment Bonds

A city may sell assessment bonds to finance a road or a water system or some other improvement or facility that serves a specific group of property owners who are then assessed. The assessment appears on the property owner's tax bill. The bonds are backed by the collected assessments. The diagram below shows how assessments are calculated based on a share of the footprint (in square feet) of the property facing the street.

DEVELOPMENT OF THE INFLUENCE AREA ASSESSMENT METHOD **MINNEAPOLIS DEPARTMENT OF PUBLIC WORKS**

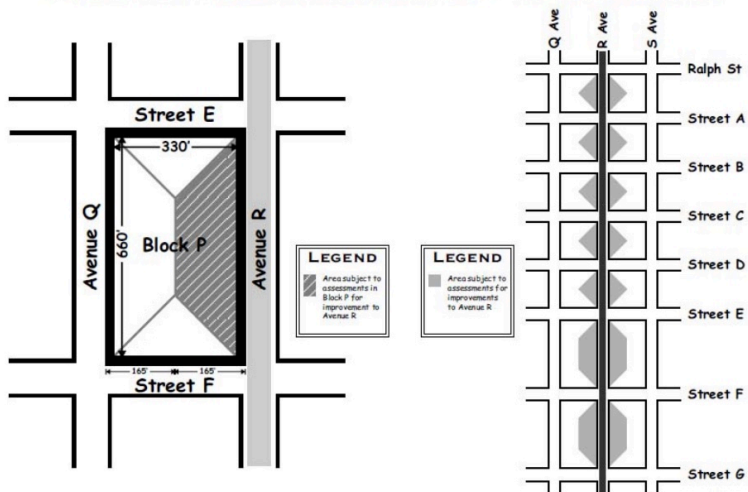


Figure 35. How to determine assessments for a basic roadway project. The amount of the assessment for a property owner is based on a portion of the footprint of the property (the influence area) and the frontage of the property on the street. Example from the 26th Ave. N. reconstruction project in Minneapolis, <http://www.minneapolismn.gov/www/groups/public/@publicworks/documents/webcontent/wcmsp-180522.pdf>, accessed August 6, 2019.

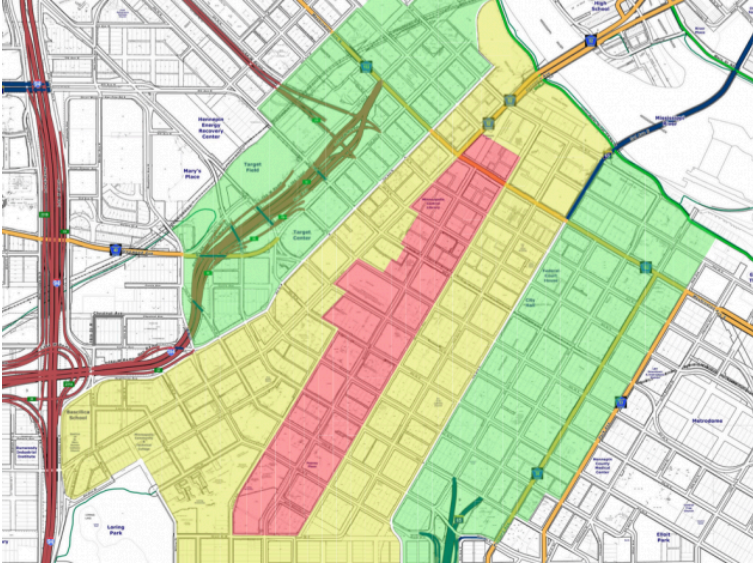


Figure 36. The area-wide assessment map for the Nicollet Mall project in Minneapolis. The assessment area comprises 7,000 properties in three tiers (payment levels), from adjacent to the project to the far end of the assessment area (from the center out – from red to yellow to green), and there are eight types of properties across the three tiers that are assessed at different rates. City of Minneapolis.

3.6 The Operating Budget: An Example

Once the capital project is complete, normal operations begin. Unlike the capital project, ongoing operations require constant funding. While raising millions for a big project one time may seem like a big hurdle, raising several hundred thousand dollars a year in perpetuity can be as difficult or even more so – because it never ends. The following operating budget is based on two models – a “base budget” that reflects the minimum costs (and funds required) to fully operate the park. The second “add'l income” budget is based on an increased amount of contracted and rental programming as well as an increased amount of sponsorship and charitable support. The bottom line shows the gap between income and expense. In this case, the base budget is balanced but the add'l income budget – a larger budget based on more income-generating programs and events that requires more funding – does not attract enough funds to cover costs.

OPERATING BUDGET	BASE BUDGET		ADD'L INCOME	
EXPENSE	ITEM	TOTAL	ITEM	TOTAL
Overhead/Administration				
Payroll				
Manager (\$70k x 75% + Fringe)	\$68,250		\$68,250	
Assistant (\$60k x 50% + Fringe)	\$0		\$39,000	
Admin. (\$50k x 25% + Fringe)	\$16,250		\$16,250	
Rent (shared/reduced rate)	\$5,000		\$5,000	
Misc. Office/Consulting/Insurance	<u>\$15,000</u>		<u>\$15,000</u>	
Subtotal		\$104,500		\$143,500
Programming				
Contract	\$20,000		\$40,000	
Subtotal		\$20,000		\$40,000
Operations & Maintenance				
BID Management Charge (ongoing)	\$17,500		\$22,000	
Ambassadors (1.0 peak; 0.5 events)	\$80,000		\$120,000	
Landscaping	\$25,000		\$40,000	
Maintenance (Elec, Plumb., GC)	\$25,000		\$40,000	
Trash Removal	\$5,000		\$15,000	
Snow Removal	\$16,000		\$20,000	
Furniture repair/replacement	\$10,000		\$20,000	
Operating Contingency	\$20,000		\$30,000	
Utilities	<u>\$27,000</u>		<u>\$40,000</u>	
Subtotal		\$225,500		\$347,000
TOTAL EXPENSE		\$350,000		\$530,500
INCOME	ITEM	TOTAL	ITEM	TOTAL
Source				
City Contribution	\$250,000		\$250,000	
Food Concessions	\$100,000		\$100,000	
Permits/Fees	\$0		\$5,000	
Event Rental (Institutional)	\$0		\$50,000	
Event Rental (Other)	\$0		\$50,000	
Sponsorships/Promotions/Events	\$0		\$25,000	
Operating/Programming Grants	\$0		\$10,000	
Philanthropy	\$0		\$10,000	
TOTAL INCOME		\$350,000		\$500,000
INCOME LESS EXPENSE Over/(Under)		\$0		(\$30,500)

Figure 37. A conceptual operating budget. Author.

Types of Operators

There are a number of different operating models for public places based upon the type of facility, use, operating and maintenance needs, and a variety of other factors. Typical operators of public places include:

- City Government (or special district, county, state, federal government)
- Parks Department of City (Saint Paul Model)
- State and Federal parks departments (for example, the US Department of the Interior owns and operates some parks along the Mississippi River)
- Independent Park Board (Minneapolis model)
- Non-profit Park Foundation (for example, the Minneapolis Parks Foundation, although the MPF's primary mission is to raise funds in support of MPRB park projects)
- Business Improvement District or "BID" (For example, the Minneapolis Downtown Improvement District or MDID)
- Non-profit Conservancy (For example, Green Minneapolis)
- Private Property Owner ("Privately Owned Public Spaces" or "POPS," such as Mozaic Art Park and Pedestrian Bridge in Uptown Minneapolis and Xcel Energy Plaza in Downtown Minneapolis)
- Other/Combination of several of the above

"About The Minneapolis Park and Recreation Board (MPRB)

Minneapolis is unlike many other cities when it comes to the ownership, management, and stewardship of the park system. In most cities, the local "general purpose government" – the city – owns, operates, maintains, and funds the park system. This is how the park system is operated in Saint Paul, for example, and in most American cities. But in Minneapolis, over one hundred years ago, our city's leaders decided to create the MPRB as a separate unit of government with its own elected board of directors – the Park Board. The Park Board

is funded by its own share of local taxes. The City levies these taxes and collects them but is required to pass them through to the park system. The idea is that the city cannot choose to cut funding to the parks in lean times. It's not necessarily a good or bad structure, it is just different and it presents different challenges and opportunities.



Figure 38. Jenga in the Commons. Author.

3.7 Cash Flows

One last, but very important financing issue to consider is that of cash flows – both for the capital project and for the ongoing operations. For the capital project, as mentioned, you typically must have all funding in place before commencing construction. I mentioned above that other governments (the feds and state) will not execute a grant agreement or distribute funds to a project until the sponsoring government (the city) can prove that it has collected all other required funds for the project. (The Commons in Minneapolis is an example of a project where this was not the case. Because it was PPP and developed and built by a private developer as a part of a larger private development project using a combination of public and private funds, the construction started while fundraising was ongoing. Because the fundraising fell short of its target, several features of the design had to be deferred in real time, during design and construction, to reflect changing and diminished expectations for fundraising – an ever changing “Plan B”.)

The capital project will also require seed capital or start-up funding of some sort – usually city dollars – to hire the designer and develop a vision, concept design, and conceptual budget. This capital is at risk similar to a private developer’s early capital investment. If the project does not go forward these spent funds are lost. A recent example is the first Peavey Plaza redesign, where the city funded full design (completed in 2012) of about \$1.0M, only to have the project end in a lawsuit. That money was a total loss and a “sunk cost” for the city. The city paid another \$1.0M for an all new design that was completed in 2018 and the plaza was finally opened in 2019.

Another cash flow challenge is a “timed gift” when, for example, a donor (for their own tax or cash flow reasons) makes a gift of one million dollars – spread over five years at \$200,000

per year. The problem is that you need the whole \$1M the first year. In this case the City (or a commercial lender to the city) may need to make a “bridge loan” – loaning the funds to the project on a short-term basis so there is enough money to pay the contractor, then collecting the funds in the future years and repaying itself.

Cash flows also matter on the operating budget because every year the operator must solicit funds from the government and private donors to ensure that it can continue to operate at a certain minimum level. Cash flows matter when it comes to paying staff and contracting with service providers and vendors.

3.8 Funding Challenges and Typical Problems

Last but not least, below are a few common funding challenges that public realm projects face.

- Can't raise enough capital. In this case you must plan to phase the project or complete some elements at a later date. At the same time, you have to make sure that the project looks and feels complete even if some elements must be deferred or eliminated.
- Cost overruns during construction. Construction budgets all include percentage based "contingencies" (extra money in case something goes wrong) but some things cannot be predicted. What will you do if costs rise above the amount of funds raised? Can you raise more funds? Or will you have to cut someplace?
- Overly optimistic fundraising goals. It is easy at the beginning of a project to believe that the idea is so good that it will be easy to raise all of the required funds. In fact, it is very hard, and it gets harder when multiple, similar, competing projects are all trying to raise funds at the same time. For example, in Minneapolis between 2015 and 2019, fundraising efforts were ongoing for the Waterworks, the Commons, and Peavey Plaza, all at the same time. It is important to have realistic expectations for fundraising because it is easy to remove valued features during design and early construction but these losses may weaken the vision and be out of alignment with expectations and promises to the public and the funders. It is also

increasingly difficult to raise funds for the deferred features later, when time has moved on and people are focused on other new shiny projects.

- It is very difficult to fundraise for deficits and operating losses in the case of a project or program that has gone wrong somehow. No one wants to throw money at a big problem that was caused by over-optimism, incompetence, or malfeasance, particularly when it may be too late to fix, which is often the case.
- Last but not least, no one wants to pay to fix old pipes or other broken things you can't see – there is nothing sexy about it. Offer to let people fund the large, visible features, like the revitalized fountain or the new benches or trees. In these cases, distribute a share of the costs of providing invisible pipes to the toilets into the visible fountains and increase/round-up these value for fundraising purposes.



Figure 39. Grand Opening of Peavey Plaza, July 2019. Author.

CHAPTER 4 - POLITICS

4.1 Introduction



Figure 40. Chess on Nicollet Mall. Author.

“Moving swiftly between different arenas like politics, architecture or commercial design is what I would consider definitive of my generation. I am looking at reality and playing fast and loose with it.”

Sarah Morris¹

Design is at the center of everything – it brings together the purpose and vision; the stakeholders and engagement process; the project leadership, electeds, staff, and users; time and money; and brand, communications, public relations, the media, and events. Everyone cares about design, everyone has an opinion of what “good design” means, and we all use the language of design when talking about how to create places – but these design conversations take place in a political arena. The purpose of this chapter is to explore this arena and consider how politics – of all types – play out and influence the implementation of projects for the public.

1. “Sarah Morris,” Interview by Philippe Parreno, Interview Magazine, 9 March 2017, <https://www.interviewmagazine.com/art/sarah-morris>, accessed August 12, 2019.

4.2 A Little Story

In 2014, the project team responsible for the redesign of Nicollet Mall in downtown Minneapolis was confronted with a difficult – and potentially explosive – political problem related to a small group of very important stakeholders. The problem had to do with a key design element that was, in many ways, the most visible part of the concept design – and they did not like it.



Figure 41. The stair in front of an important office building, from the winning Nicollet Mall competition entry. JCFO.

The design team was selected through a competition process (see chapter two). The winning team had included in their design vision a grand stair from the street up to the skyway level of an important office building. Once the competition was over and the team had been selected, it was time to actually start doing the real concept design – the work of applying

the ideas from the winning competition entry to the actual conditions on the street.

The process started with a large number of stakeholder meetings involving different interest groups. These included meetings with different types of property owners (actual owners as well as building managers) and other meetings with different types of businesses (bars and restaurants, hotels, retail stores, non-profit institutions, and government). The team also held “block by block” meetings, inviting all of the stakeholders from one block to the same meeting. They did not all come but many did and there was a mix of interests in the room at each of those meetings. The block-by-block meetings were very helpful to the design team in the early days because each block had its own unique features, qualities, and character, and learning about and accommodating those differences was important.

Details matter, so the challenge was how to take a design concept that has been generally applied over a twelve-block, mile-long street and adapt it to reflect the actual conditions at the doorway to one small restaurant on one block, and then the next one, and the next one, and the transit shelter, and the entrance to the office building, and the entrance to the parking ramp, and so on.



Figure 42. Island scheme with relocated stair rising up to meet the skyway. JCFO.

Not surprisingly, in the early meetings the team learned that the owners of the big building did not like the design with the stair going up to their building. It is easy to understand why – it would have blocked an important strip of retail frontage and changed the entrance to the building lobby. The project team leaders were not too worried and assumed that this feature would go away after the competition was over and once detailed design had started. And it did, sort of.

After learning of the building owner's displeasure with the stair, the design team came back with a proposal that became known as "the island." This was a scheme where the two traffic lanes (one each way for bus traffic only) would split for two blocks to create a big traffic island and from this island two grand stairs (one on each of two blocks) would rise up and connect directly to the two skyways on these two blocks rather than connecting directly to any of the buildings themselves.

But still, those key stakeholders did not like it and they could

not seem to tell us why. The owners of the four big buildings that each take up one whole block face between 6th and 8th streets began meeting and talking and so the project team leaders met with them, showing them different versions of the new design, modified to address the issues raised in the previous meeting. The property owners expressed a variety of concerns about safety, security, and livability as well as perceived safety on the stairs, how the public stairs would connect with the privately-owned skyways, and issues from snow removal to the potential for homeless people to sleep on the stairs. These meetings took on a kind of “Goldilocks” quality, where nothing was ever quite right, as the project team leaders and designers tried to modify the drawings to address their concerns.

Finally, in a small meeting, two project leaders pressed the one property owner hard and came to understand the magnitude of the problem: That property owner was completely opposed to the design and no design modifications would change their position. The closing statement was “we will sue the City if the design goes forward.” It took longer than it should have to get to the answer, but at least the project team now knew exactly how that property owner – and the other three – felt and the lengths they were willing to go to oppose the feature.

This presented several problems. First, a big, image part of the design was at stake and it was something that had received a lot of publicity and a lot of people liked it – it looked cool. In truth, it had some flaws and some members of the team were genuinely and rightly concerned about pedestrian safety and bus operations with a divided road and a big island with cars and buses on three sides. Second, and more important, the four biggest commercial office buildings – which together would be contributing a very large share of the assessment required to pay for the project – were unanimously opposed to the main element that was going to affect their

buildings on their blocks. But at a higher level, the whole unified public-private partnership was at stake. Until this point, the business community and the major property and business owners on Nicollet Mall, along with the City leaders, had all been generally happy with the process and the design. Now the team faced a choice – try to ram it through or change it.

The City did briefly consider the implications of pressing forward, using its leverage over the property owners on several technicalities. For example, the skyways are actually privately owned by the buildings (half of each is owned by each of the buildings on the two sides of the street) but they are allowed by the city, which grants air rights over public Right Of Way (ROW). So, the city could have moved to revoke those air rights and threatened to make the building owners tear down the skyway. But imagine how that would actually turn out. The property owners would lobby the elected officials, they might still sue, the public would hate the idea, the City would look like the bad guy, and little good would come of it.

More important, the value of a unified group of property owners and business leaders was immeasurable and the project team could not afford to lose that. Particularly because at the same time the team was busy lobbying city leaders and, more important, key members of the Minnesota legislature as well as key house and senate capital committees. In fact, a Minnesota state representative – the former DFL minority leader and former Speaker of the House, whose support was required to obtain the grant, had offices in the most important building.

So, instead of going head to head with the big property owners, the project team leaders decided to redesign. They called the lead designers, told them the island and stairs were out for good, and asked them to take the weekend off, bring a big box of donuts to work on Monday, lock themselves in a room, and develop two or three new ideas for a major feature on those two blocks. It was hard on the design team because

they loved that design element and many people had memorized the image of that stair – indeed, people still ask when the stairs are going to be built. But the whole project could have failed over that. Instead, the team quickly re-tooled, and redesigned the street for those two blocks.

Some people feel that the final design is less dramatic and that may be so, but on the other hand, one could argue that the first design was too dramatic and perhaps not realistic. Still, it was so compelling that once the rendering had been published and broadcast to the public, it was impossible to get the genie back in the bottle. In other words, the idea helped with the competition but it may not have been viable.

The change in direction cost about four months on the project schedule and additional design fees. On the other hand, the project team successfully dodged a big bullet. Rather than fighting for a design feature, the team focused on keeping the coalition of stakeholders together. Indeed, that decision ultimately strengthened relations with those property owners, who understood what it cost to make that change in mid-design and also appreciated the respect shown to them by a project team that listened.

And in the end, even if the team had proceeded with the stair and island and found a way to keep that fraying coalition together (doubtful), it seems in retrospect that those stairs would have been very expensive and would quite likely have pushed the project over budget – so perhaps it all worked out for the best.

4.3 What Do We Mean When We Say “Politics?”

For the purposes of studying the implementation of urban public realm projects, I propose a definition of “politics” that goes well beyond just electoral politics. Politics is about people and it means everyone from the mayor down to that one unhappy resident or business owner who will call the newspaper or the councilmember if they don’t like what is happening. So I also propose that politics falls into three broad categories: Capital “P” politics (related to elected officials and bodies of government); small “p” politics, which includes almost everyone else and broadly includes stakeholders, community members, and special interests; and bureaucratic politics, which has to do with inter-and intra-governmental relations between individuals, departments, agencies, and governments.

Capital “P” Politics

Capital “P” politics is politics that have to do with actual elected officials. For really big projects that are citywide assets or large enough in scale or budget, the most important elected official is usually the mayor. The mayor may not be as involved in a small neighborhood park but could choose to promote and lead a project that can be argued will benefit all city residents. For really large and important urban public realm projects, the mayor’s support and leadership can be critical to success, as it

will help with engagement, approvals, design and fundraising. A project that does not have the mayor's support may face longer odds of success.

After the mayor, and for community scaled projects, the most important elected politician typically is the City Councilmember whose ward or district the project is located in. Whether or not the district councilmember supports or opposes the project is probably the most important thing of all, as other forms of support or opposition follow. In many American cities there is a historical tradition called "Councilmanic Prerogative" (in Philadelphia, for example) or "Aldermanic Privilege" (in Chicago, for example), which means that the rest of the council members defer to the wishes of the councilmember in whose ward the project or issue is taking place.¹

In other words, councilmembers don't try to influence things in other wards because if they do, other councilmembers will seek to influence what's happening in their ward. The idea is that each councilmember has unique knowledge of the issues in their ward and relationships with those constituents, so their opinion carries more weight. In practice this means, "you support me on issues in my ward and I'll support you on issues in your ward" or, sometimes, "you stay off my turf and I'll stay off yours."

Typically, council usually will vote with, or at least not oppose, the district council member when the whole council must vote on a project. The relations amongst city council members also

1. Councilmanic Prerogative and Aldermanic Privilege are sometimes associated with the potential for graft, corruption, and inside dealing in cases where individual council members influence real estate transactions involving city-owned land within their districts. See for example, <https://billypenn.com/2019/04/15/councilmanic-prerogative-in-philly-what-it-is-who-benefits-and-why-its-hard-to-change/>, accessed August 8, 2019.

matter over the long run, too, because over time council may be voting on numerous actions for one project, such as a vision, design, funding, designer and contractor contracts, capital and operating funding, or all of those things.

For projects that will rely on approvals and funding from superior governments (the county, state, and federal governments as well as other regional governments such as the Met Council in the Twin Cities), then those politics come into play as well. For large projects with a statewide benefit it is common to seek grants (bond funding) from the state, which may require lobbying the governor's office and members of the legislature for support – and being willing to solicit and integrate their feedback if you hope to receive their funds.

Prior to starting any project, it is important to understand which elected bodies and individual elected politicians will be involved as well as those who may be interested and to begin talking to those people as soon as possible. Elected politicians include but are not limited to:

- Mayor
- District Councilmember
- City Council Committees and Committee Chairs (Public Works, Economic Development, etc.)
- Other city council members with specific interests, such as jobs, sustainability, the environment, equity, affordable housing, access, bikes, cars, downtown business, public safety, etc.
- City Council as a body
- County Commissioners
- Governor, governor's office, state administration
- State legislators (senators and congressmen/women) – individuals, committee chairs and co-chairs, committees, and the house and senate as voting bodies
- Metropolitan Council members (in the Twin Cities)

Example – Mayoral Politics and the Media

In the summer of 2017, the Nicollet Mall project was in its second year of construction (third if you count preliminary utility work) and the local elections were on the horizon for that fall. One mayoral candidate who was challenging the incumbent chose as their primary election plank the fact that the Nicollet Mall project was a disaster, had taken too long, was off schedule, and that it was the fault of the incumbent mayor and her administration. The incumbent lost but the challenger lost too, and another candidate was elected mayor. It is not clear that the Nicollet Mall project construction duration was the reason for the outcome of the election but it does not seem to have played a major role in public opinion. The long construction period, however, did create a lot of stress for businesses and property owners and after a while, fatigue had set in. In the end, the project was basically on schedule but a different narrative had taken shape around the perceived endlessness of it and the constant delays.

² <https://www.minnpost.com/politics-policy/2017/08/no-really-say-minneapolis-officials-new-nicollet-mall-track-be-finished-nove/>, accessed August 9, 2019. Towards the end of the project, after a lot of

2. See, for example, Peter Callaghan, “No, really (say Minneapolis officials): The new Nicollet Mall is on track to be finished by November,” in Minnpost, August 9, 2017

media attention, one Star Tribune reporter made fun of himself and his media colleagues saying, “and Nicollet Mall has taken 12 years to finish!” The fact is, perception becomes reality and big disruptive projects can influence careers and elections. The ten-block-long Hennepin Avenue in downtown will be under construction from 2019-2022, so we will see if that project becomes an issue in the next mayor’s race, in 2021.



Figure 43. Minneapolis Mayoral Candidates – 2017. Photo from “The students’ guide to the 2017 Minneapolis election,” Minnesota Daily, November 2, 2017, <https://www.mndaily.com/article/2017/11/election-hub>, accessed August 8, 2019.

Example – Fundraising and Which Mayor?

For a big project, a group of business leaders were putting together the fundraising committee. They needed to raise a lot of money, they had a big business leader ready to serve as co-chair, and they wanted to ask a former mayor to be the other co-chair. Then someone asked, “before we ask the former mayor, shouldn’t we ask the current mayor first?” The committee felt that the former mayor was more invested in the project, would take more interest in the fundraising role than the current mayor, and would be more effective at fundraising. But not asking the current mayor could be offensive and might backfire if that mayor chose to withhold support for the project. So, the fundraising committee asked the current mayor first – and they accepted the invitation. The fundraising goal was not reached (whether or not it was ever realistic) and some features had to be removed from the project. Some believe that if the former mayor had been involved more money might have been raised but no one will ever know.

Example – Bonding and Statewide Elections

Sometimes you don’t know how lucky you are until later. In 2012 the City of Minneapolis requested a state grant from the legislature to help fund the reconstruction of Nicollet Mall, based on the argument that it was an economic engine for the entire state and that it effectively served as the

State's main street and primary business address. The legislature did not make a grant and the feedback was that it was a large number and that there was little vision – they couldn't understand what they were getting other than a street, and streets are typically funded locally. Later that year, The mayor, several elected city and state officials, and a group of city business leaders developed a plan to use a design competition to promote the project and create a vision that would help sell the idea and attract the state funds. The competition work started in March 2013 and ended in September 2013 when James Corner Field Operations (JCFO), the designer of the Highline in New York City, was selected to design the new Nicollet Mall. In December, JCFO signed their contract with the City and began work on the concept design – taking their competition entry and developing it to reflect client, stakeholder, and community input. With JCFO on board, the project team also began to lobby the state heavily – from January until May 2014, when the Legislature included a grant of \$21.5M for the project – a statewide benefit and economic engine – in its bi-annual bonding bill. With that grant, the project went from speculative to real in one day. Six months later, in the November election of that year, the legislature flipped from democratic majority to republican majority and with that flip, support for city-related projects and initiatives shrank as interest in out-state spending grew. The legislature typically takes up a bonding bill only in even numbered years, so if the project

had not received that grant in 2014, it is very unlikely that it would have received funding in 2016 or 2018. In the election of November 2018, the house flipped back to being majority democrat (the senate stayed republican and the new Governor remained a democrat, like his predecessor) so under the best of circumstances, state funding for the Nicollet Mall project might have become possible again in 2020 and, if awarded a grant, the project might be completed by 2023 or 2024, nearly a decade later.

Small “p” Politics/Stakeholder Politics

There are many different types of stakeholders and I personally think of stakeholders as comprising a type of “Russian Doll” of influence. One way to think about stakeholders is that they are all important but some are more important than others. The following is a partial list of stakeholders

- Elected politicians (see above)
 - Councilmember within whose district the project is/ will be located
 - Other councilmembers with specific interests (e.g., sustainability, the environment, finance, economic development, etc.)
 - The Mayor
 - Superior government elected officials and staff (county, regional, state, federal, and local and regional special district governments, such as watershed districts and park districts)

- The Downtown Business Community (organized and powerful business leaders acting together, as represented by organizations such as the Chamber of Commerce. In Minneapolis there is a chamber, but the Minneapolis Downtown Council is the organization that has historically played the major role of representing business)
- The local “Growth Machine” members (Big companies, the business community generally, sports teams, educational and medical institutions – “eds and meds,” arts and culture institutions, and media companies – print, television, radio, and online)
- The Neighborhood Association or other community organization where the project is/will be located
- Nearby neighbors who will be most affected by the project
- The Business Association where the project is/will be located
- Nearby affected property owners (office buildings, apartments, condos, hotels, restaurants, libraries)
- Nearby affected business owners (office buildings, parking garages and lots, bars and restaurants, and retail, for example)
- Single issue interest groups (Audubon Society in the case of bird-safe glass; Clean Water Action in the case of water quality, various environmental groups in the case habitat protection – birds, bees, bats, turtles, etc. – and, for example, pollinator-friendly plants and flowers)
- Accessibility/mobility related interest groups (bicycle, pedestrian, and disabled communities)
- Operator (the city or other government, business improvement district, or non-profit operator of the facility who will be responsible for operations, maintenance, and programming/activation)
- Key individual promoters of the project (politicians, business leaders, community members, institutions)
- Donors (corporate and private donors may have an

interest in the design)

- And last but not least, the users (The people who you hope will come to the place, including nearby residents, patrons of nearby businesses, nearby employers and workers, visitors, tourists, and all residents and taxpayers of the city)
- The project team members (the success of the project will depend upon them and their reputations and opportunities will be influenced by how successful the project is)
 - City project team leader
 - City staff running the project
 - Designers and other key consultants
 - Contractors
 - Consultants

Example – That one little Restaurant

Road projects can be very disruptive and damaging to businesses that are served by the street that is being reconstructed. Unfortunately, roads in Minnesota's climate need to be reconstructed every 25-30 years and there is no easy, quick, or non-disruptive way to do it. Road projects are even more difficult and time-consuming when old or inadequate underground utilities deep in the ground must be replaced or reconstructed. The New Hennepin Avenue Downtown project will require the replacement of a storm sewer that is 20' below the street, requiring a big trench, because the sewer was built in 1884, when Chester Arthur was the President (ever heard of him?). So, a big part of

stakeholder engagement on road projects is with the property owners, residents, and business owners that line the street. On one recent project, the owner of a small restaurant (a tenant in another property owner's building) attracted a lot of media attention during a mayoral election. The restaurant owner complained to the district council member, the mayor's office, and other city agencies and then decided to vocally support one of the incumbent mayor's competitors in the upcoming election. The owner received a lot of media attention and sympathy and lot of exposure in print and on television. There is no doubt that this business owner and many others suffered during the project but in the grand scheme of things this was perhaps the smallest – yet most vocal – of many other restaurants and bars that were affected. No one was ever able to determine the individual's true motive – the alleviation of pain, the hope for some form of monetary assistance from the city, a genuine interest in mayoral politics, or something else.

Example – What are they doing in Miami?

Donors are important stakeholders because, if they are interested in donating, they are also likely to be personally interested in the project, will want to be involved, and may want to influence the

design. In some case key donors may have an idea or want to point to an example. On one project, an institution was considering acquiring technology that would allow for outdoor programming and help to attract larger audiences. One donor was a potential provider of the technology and others were interested in seeing it implemented as a way to improve the public project as well as the institution's programming offerings. One similar institution in Miami had successfully implemented a similar outdoor program using the same technology, so a small group of donors and project design team members made a trip to see it. The trip helped all parties understand better how the program and technology worked, but travel and meals together also strengthened relations between the leaders of the institution, potential donors, and those designing and implementing the project, all in a way that made future conversations and negotiations more fruitful. In many ways, the trip ended up being more about relationship building and helping the project team develop an esprit des corps and work better together throughout the duration of the project.

Example – Accessibility vs. Preservation?

There are many different interests surrounding

Peavey Plaza, but an over-simplified version of the story is that there was a simple (some would argue a “false”) choice to be made between preserving an important example of a late mid-century modern “brutalist” urban plaza, and making the place accessible and compliant with the Americans with Disabilities Act (ADA) of 1990, which was enacted after the plaza was built in 1975. As is often the case, things are more complicated and less black and white. Regarding preservation, many surrounding neighbors had lived nearby for decades and, over the years, had taken their children, grandchildren, and even great-grandchildren to the plaza since its opening in 1975. These neighbors were interested in seeing the plaza rehabilitated and improved – but not completely replaced. Two non-profit historic preservation advocacy organizations, the Preservation Alliance of Minnesota (PAM) and the Washington, DC-based Cultural Landscape Foundation (CLF), were the original plaintiffs in the lawsuit, when the first design, for the complete replacement of the plaza was unveiled in 2012. These groups succeeded in having the plaza placed on the National Register of Historic Places in 2012, which, in turn, put the plaza under the jurisdiction of the US Department of the Interior, whose standards are interpreted by the Minnesota State Historic Preservation Office (SHPO) – the state agency responsible for regulating historic preservation. Despite their shared interest in preservation, there is not always complete agreement amongst these different groups and the individuals who represent

them, as even preservation advocacy, design, and regulatory folks have slightly different perspectives. Similarly, accessibility is required under ADA but there are different voices in the accessibility community too. In Minneapolis, these interests are represented by the Minneapolis Advisory Committee On People with Disabilities (MACOPD), which advises and provides recommendations on public projects. This committee includes people with mobility, sight, hearing, and other impairments. In the past, mobility impaired people had a difficult time experiencing Peavey Plaza because it was sunken and had many steps and terraces but no ADA-compliant ramps – people simply had difficulty getting in, around, and out of the plaza. Sight-impaired people had a whole different experience, as the plaza for them was one big potential trip-and-fall opportunity. With so many stairs, many sight impaired people just stayed far away from the plaza. So, even in what can oversimplified as a false choice scenario (preservation vs. accessibility) there are many more shades of gray on both sides and as many different perspectives and opinions as there are individuals involved. And beyond preservation and accessibility, there were many other important issues including lighting and public safety, water usage in the fountains, design for operations and maintenance, the provision of infrastructure for event use, and the balancing of all of these needs with costs. In the To manage and integrate these interests, the City's project team created a "technical committee" that included the

design team and city staff as well as members of both the preservation and accessibility communities to work through the details of the design. In the end, much of the plaza was preserved and restored to its original condition and most of the “character defining features” were retained. In several areas where changes had already been made, new ADA-accessible ramps were inserted. The one big change was that the former 2'-6" deep reflecting pool – a very big character defining feature – was changed in a way that made the plaza more accessible and safer. A new surface of black granite was installed flush with the surrounding sidewalk was installed. A thin layer of water – $\frac{1}{4}$ " – covers the granite which turns dark and reflects the blue sky. The reflectiveness makes the basin look very much like the original sunken basin but anyone can walk – or roll their wheelchair or stroller – across it. Most important, the ability of all of these people to come to agreement led to the completion and reopening of the plaza after a decade of operating with the fountains off. If there had not been agreement, there could have been more delay, and even other lawsuits – from both the preservation and disabled communities. So, the politics of this project had a lot to do with arriving at a design that would accommodate the needs of both of these key interest groups.



Figure 44. Peavey Plaza Grand Opening, July 2019. Author.

Bureaucratic Politics

Never underestimate how important and powerful people within (and between) bureaucracies can shape a project – for better or for worse – based on their own personal and professional interests, motives, agendas, and perspectives. Staff work for the elected officials and must do what they are directed to do, but that doesn't mean that they can't make things easier – or harder – depending upon their own ideas and their own relations with other staff, design team members, and stakeholders. Bureaucratic staff include:

- Department head for the department implementing the project
- Project team leader and staff assigned to the project
- Department heads
 - Finance
 - Public works
 - Economic development
 - Planning
 - Administration
 - Procurement/Purchasing
 - Mayor's office/staff
 - Council offices/staff
 - Sustainability
- Other governments
 - Park Board (in Minneapolis, the Minneapolis Park and Recreation Board or MPRB)
 - Special District Government (For example, the Mississippi Watershed Management Organization or MWMO)
 - County
 - Regional government (In the Twin Cities, Met Council, including Met Transit)
 - State (Administration, economic development, Department of Natural Resources, etc.)
 - Federal (National Park Service, Department of the Interior, Army Corps of Engineers)

**Example – Intergovernmental Relations (IGR)
and Bonding**

In 2010 the Minnesota Legislature included in the Bonding Bill for that year a \$2M grant to the City of Minneapolis to be used in the rehabilitation of Peavey Plaza. The project stalled and the grant was renewed in the 2014 Bonding Bill and in 2018 the project finally began construction. Once a bonding bill is passed, the State of Minnesota Department of Employment and Economic Development (DEED) is the agency responsible for working out the details – the terms and conditions – and executing an agreement between the State and the City. No funds can be disbursed until there is an agreement and once there is an agreement, DEED reviews and approves each monthly request for payment from the city. So, it is very important to get that agreement finished and signed. For this project, this required diligence and perseverance particularly on the part of City staff and the City Attorney, who found state staff to be difficult to reach, slow to respond to emails and phone calls, and sometimes overly thorough (picky). For more than a year city staff gently and persistently worked with the one key state staff person (who, to be fair, was likely busy with many other competing priorities) to finalize the details of the agreement, get it executed, and ensure that payment would follow. This is an example of how relations and style matter, because as in any other part of life, if you aggravate a key civil servant, they can slow things down and make things very difficult. So, the lesson is, “keep your eyes on the prize,” be patient, persevere, and don’t

unnecessarily aggravate key people or escalate problems until you absolutely have to.

Example – Bureaucrats vs. the Elite Design Team

For Nicollet Mall, the City's award-winning designer wanted to design custom light and signal poles for the whole one-mile length of the street. Throughout the City the public works department has two typical light poles (high for the street, low for pedestrians) and a typical signal pole. The bottom ten feet of the typical signal pole, at intersections, is always painted yellow and green (Green Bay Packers colors – who knows why). So, the design team asked the city project team if they could design signal poles and light poles that were the same and all of which would be painted the same custom gray color from top to bottom (not yellow and green). The question started at the bottom with signal shop staff who said, "No, this is how we always do it." The project team then asked if there were state statutes, city ordinances, or safety conventions that dictated these colors and, after some digging, the answer came back, "no, not that anyone can find, but this is how we always do it." So, finally the project team and the design team took the question up to the head of the street lighting and signals department and then finally up to the Director of Public Works who ruled: "You don't have to paint the poles yellow and green." This is an example of intradepartmental

politics, where it is best to start with staff and work your way up rather than jumping to the top too early. By the time the Director made the decision the subject had been thoroughly discussed and everyone had had a chance to participate and offer their opinions. No one was surprised by the final answer and everyone was ok with it because they saw how thoroughly the issue was considered and how the final decision was made.



Figure 45. An all-gray Nicollet Mall Signal Pole. Author.

Example – The Commons

In 2012, the Minnesota Legislature passed what is commonly known as the “Stadium Legislation” for the purpose of building a new NFL stadium in Downtown Minneapolis. The legislation created the Minnesota Sports Facilities Authority, or MSFA (replacing an older agency), and gave it responsibility for developing what is now the US Bank Stadium. The stadium legislation also included a number of specific requirements related to the stadium development including provisions for parking and for a shared public park that could also be used periodically for stadium and NFL events. The Ryan Companies, a private developer, came forward with a related proposal for an adjacent five block area that included office space (now housing Well Fargo), a hotel, a parking garage and space for the park. Together, the MSFA, Ryan, and the City of Minneapolis collaborated in developing these projects, which were linked by a complex series of agreements, funding sources, and bond covenants. When work began on the park, now known as “The Commons,” the original concept was that the Park Board (MPRB) would work with Ryan, the City, and the MSFA to develop the Commons and then own and operate it when it was completed. The MPRB, however, was concerned because the Commons was going to be a very different model than the typical MPRB park, requiring significantly more operating funding. At the last minute, the MPRB decided not to lead the development of the Commons so the City and Ryan stepped in and

completed the design and construction of the Commons together. Once completed, the MPRB owned the land under the Commons; the City had paid for and owned the “improvements” on the land (the physical facilities from grass to trees to lighting and drinking fountains – everything you can see); and Green Minneapolis, a non-profit operator, ran the park under contract to the City. It’s an unusual example of an intergovernmental arrangement (state, MSFA, City, MPRB) arrived at under pressure and as time was running out. (It is important to remember that the park was a requirement of the stadium legislation and had to be completed.) The Commons opened in August 2017 and for 2017 and 2018 seasons, the City contracted directly with Green Minneapolis to operate the park. A recent lawsuit, however, called that arrangement into question. The suit contended that the City did not have authority to operate a park in Minneapolis and that only the MPRB had that power. The judge agreed and the City has appealed that decision. Meanwhile, and as a result of that decision, the MPRB has contracted with Green Minneapolis to operate the park for the 2019 season.



Figure 46. Development surrounding the new stadium from left to right. Wells Fargo office towers on the left, fronting on the Commons; apartments at the left end of the Commons, the Commons (grassy oval), and the parking ramp with skyway connection to US Bank Stadium. Ryan Companies. <https://www.ryancompanies.com/project/downtown-east>, accessed August 12, 2019.

4.4 Politics and the Law: The First Amendment

The Constitution of the United States of America: The First Amendment:

One very important political perspective in the production and use of public space is the law, beginning with the First Amendment to the Constitution, which guarantees freedom of speech and the right to assemble in public. The exact text is as follows:

Amendment I

*Congress shall make no law respecting an establishment of religion, or prohibiting the free exercise thereof; or abridging the freedom of speech, or of the press; or the right of the people peaceably to assemble, and to petition the government for a redress of grievances.*¹

1. <https://constitutioncenter.org/interactive-constitution/amendments/amendment-i>.

Local Laws and Ordinances: “Loitering and Spitting”

Over the years many American cities have passed laws designed to restrict some activities that have been perceived as impinging on the rights of others such as loitering (with ill or criminal intent), spitting (gross, and potentially a public health problem), aggressive panhandling, and panhandling near ATM machines.

One perspective is that these types of laws respect the first amendment while tinkering with it at the margins, all with the hope of increasing public safety and enjoyment of a place for all members of the public. Another perspective is that these types of laws are applied unevenly and unfairly to specific groups. For example, in Minneapolis a couple of years ago, City Council voted to repeal an existing law that allowed police to stop and question people who were loitering. Some people believe that the law gave police the ability to stop drug deals and other nuisance and quality of life crimes (particularly around downtown and at bus stops) while others felt these laws were disproportionately used to target young African Americans, which is the reason the law was repealed.

Are the skyways public or private?

In Downtown Minneapolis, the Skyway system presents a uniquely gray area with respect to the first amendment. The skyways and the second-floor space in the office buildings that are connected by the skyways are all private property. At the same time, the skyway system is widely used by the

general public as a way to get around downtown Minneapolis, particularly in the winter. Because they are private, however, the skyways are policed by private security companies who work for the building owners, rather than by Minneapolis Police Department officers, who patrol the streets below. So, do you think you have first amendment rights inside the skyways? Some people receive different treatment in the skyways than they do on the public street – is this right?

In the production and operation of public places, the owners and operators of such places (governments, non-profit organizations, and private companies) must constantly seek to strike a fine balance between perceived ideas of “quality of life” and “livability” in public spaces and the rights of all citizens and users of the public realm. This may be one of the greatest challenges facing the production and operation of public places today.

Crime Prevention Through Environmental Design (CPTED)

Crime Prevention Through Environmental Design (“CPTED”) is an approach to designing the built environment to enhance public safety. CPTED relies on a combination of natural surveillance, territorial reinforcement, access control, and maintenance. Natural surveillance means designing a place so that there are always people watching over it – the so-called

“eyes on the street.” Territorial reinforcement means designing a place so that there is a clear delineation between public and private space while also signaling ownership. Access control limits the number of access points to a place by using fencing, plantings, or other features to a place, also delineating between public and private and controlling both ways in and ways out, which matter both to potential criminals and to potential victims. Maintenance shows that a place is owned and cared for, which deters criminal behavior and quality-of-life crimes.²

CPTED has its own section in the new 2040 Plan for Minneapolis (the “Comp Plan”). Through community meetings and feedback, CPED staff learned during the first draft of the 2040 plan that minority community members believed that CPTED principles as drafted were directed at minority groups, so CPED staff re-wrote the section, now titled “Public Safety Through Environmental Design.” Below is the summary with a link to the full document:

[Crime Prevention Through Environmental Design \(CPTED\)](#) is a commonly-used term for designing the built environment to contribute to a sense of safety. The four elements of CPTED are: natural surveillance and visibility; lighting; territorial reinforcement and space delineation, and natural access control. The City of Minneapolis requires all new development to be designed using CPTED principles and encourages the renovation of existing development to conform to CPTED principles. This includes development projects that are both publicly and privately owned as well as those that impact the public realm such as open spaces and parks.

2. For more on CPTED, see https://en.wikipedia.org/wiki/Crime_prevention_through_environmental_design, accessed August 12, 2019.

4.5 Stakeholder Engagement Process

I covered the stakeholder engagement process in Chapter 2 – Design, but since it is such an inherently political process, I want to repeat here that planning and implementation for stakeholder engagement is one of the most important things to get right when it comes to planning and design for the urban public realm. People are more sophisticated than ever and can smell a non-genuine or “box-ticking” engagement approach from a mile away. More important, a good stakeholder engagement process can do a number of great things for a project – and a place – from improving the design (with genuine user and stakeholder feedback) to cementing political support (“P”, “p”, and “bureaucratic”) and attracting funding. Most important, the stakeholder engagement process cannot be rushed.

A Recent Example – Who cares?

For the Minneapolis Public Service Building or PSB, a new City office building located across from City Hall that will be completed in 2020, the project team was not sure who, if anyone, would be interested in the project. Members of the public often are interested in design and aesthetics as well as massing and height but in truth, there were no real nearby neighbors or property owners who seemed concerned about this major project. Still, when complete, the PSB will be a facility that is open to

the public and that will consolidate all public-facing city business into one building with a grand lobby. Further, there will be a conference center that may be used by the public and a public art program as well. The City's project team created a plan and schedule for stakeholder engagement that ran roughly in parallel with the major milestones of the design for the project, spread over six months and three major public meetings. Below is the stakeholder engagement schedule for the new PSB. In addition to using social media and other outlets to reach the broader public, the team focused on communicating with the two neighborhood associations and the one business association that operated in the area (the project is on the border between neighborhoods) as well as on the general public.

The program was based around three big public meetings, two months apart each, with briefings of the neighborhoods and business association in advance of each public meeting. All of the meetings were open to the public. The three major public meetings were held in the same location, the in lobby of the Mill City Museum, in one of the neighborhoods and a few blocks from the project site. Approximately 35 people attended each of the three big public meetings and about half of them were members of the project team, so about 18 members of the public – and mostly the same people for all three meetings. Compare this to around 200 for the public meetings for the Commons, which were held in the same room two

years before. Prior to the meetings, the project team had no idea how many people would come, who would come, and if there was any natural constituency interested in the planning and design of the project. The City ordered nine tables and 90 chairs for the first public meeting and by the third meeting the numbers had been reduced to 50 chairs and coffee and cookies for 35.

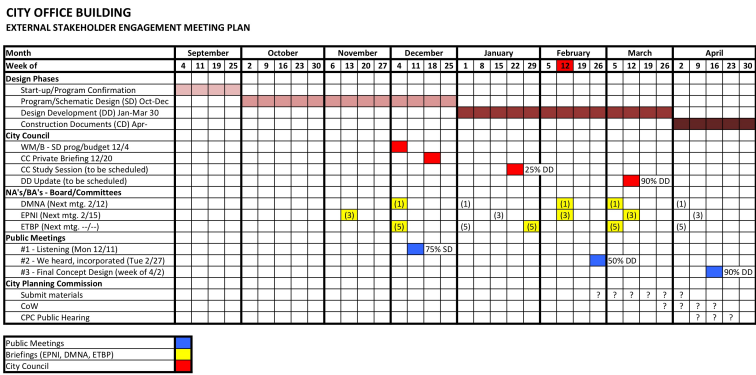


Figure 48. PSB Stakeholder Engagement Meeting Plan. Author.



Figure 49. PSB Stakeholder Engagement – the second public meeting, February 2018. Author.



Figure 50. The new Public Service Building, exterior facing City Hall. HLA.



Figure 51. The new Public Service Building, interior lobby. HLA.

4.6 Summary: How Do Things Really Work?



Figure 52. A Lockheed U2 Spy Plane. U.S. Air Force, <https://www.af.mil/About-Us/Fact-Sheets/Display/Article/104560/u-2stu-2s/>, accessed August 9, 2019.

Graham Allison and the Essence of Decision

At the height of the cold war, in the fall of 1962, an American U-2 spy plane flying over the Island of Cuba took photos that, when analyzed, showed that Russian missile bases had been constructed there, just 90 miles off the coast of the continental United States. During a tense two weeks, Russian and American leaders – President John F. Kennedy and Russian

Premier Nikita Khrushchev – and their governments found themselves in a tense standoff and had to find a way to work together to extricate themselves from a difficult situation and avoid nuclear disaster.

Graham Allison was a PhD candidate at the Kennedy School of Government at Harvard University in the 1960s when he wrote a dissertation on the events that became known as “the Cuban Missile Crisis.” He rewrote his dissertation as book called *Essence of Decision: Explaining the Cuban Missile Crisis*, which was published in 1971 and became a bestseller and a critical success. (Allison published a revised, second edition in 1999.)¹

Allison was interested in how governments function and how decisions get made but he found existing theories to be lacking in explanatory power so he devised a brilliant study. He created three detailed case studies of what happened during those two weeks in October 1962, each looking through one of the three different existing theoretical lenses. Reading the book is like reading the same story three times – yet each version of the story is different from the others but still completely true and relevant. Only when considering all three stories together do you get a sense of what actually happened – a kind of 3D picture over time.

Allison’s book was important because it offered a critique of the weaknesses of the three competing theories of foreign relations and exposed the flaws and blind spots in each theory. By using the events of October of 1962, he was able to illustrate how the three theories, when combined, had more explanatory power. Allison’s study considered the three predominant theories at the time, which he characterized as: the “rational

1. Allison, Graham T. and Philip Zelikow, *Essence of Decision: Explaining the Cuban Missile Crisis, Second Edition*, Pearson, 1999. See also Kennedy, Robert F., *Thirteen Days: A Memoir of the Cuban Missile Crisis*, New York: Norton, 1969.

actor” theory, the “organizational process” theory, and the “governmental politics” theory. These theories apply as easily to local governmental processes and decision making today as they did to foreign policy in the 1960s. Here they are.

Rational Actor

The “Rational Actor” theory is based on the idea that states behave like individual human beings and that they are rational actors. This theory personifies large organizations, states, and countries but it oversimplifies and misrepresents decision-making and action by dismissing how fragmented large organizations are and how they are made up of bureaucratic groups and key individuals with different and often competing or conflicting interests. For example: “Cuba allowed Russia to build missile bases on the island, Russia shipped missiles and supplies to the bases, and the US responded by imposing a naval blockade surrounding Cuba.”

Applied locally, “The City proposed this, the designer drew that plan, and the neighborhood group reacted by opposing a part of the plan.” It presumes that groups are unified and speak and act as if each group is a, single, integrated, individual rational human being. It is an elegant model and easily used for shorthand, in the news for example, when you hear reports that, “China and America are engaging in a trade war.” But Allison’s point is that this is a dangerously simplistic model that leaves out much of what happens within and amongst bureaucratic agencies and with key individuals.



Figure 53. The “Rational Actors” included the US, the USSR, and Cuba. This map shows the range of Soviet medium range and intermediate range ballistic missiles, if launched from Cuba. <https://www.cia.gov/library/center-for-the-study-of-intelligence/csi-publications/csi-studies/studies/vol46no1/article06.html>

Example – Whose Park?

Consider the example of the Commons, from earlier in this chapter. The “rational actors” were the Minneapolis Sports Facilities Authority (MSFA), Ryan Companies, the City of Minneapolis, The Minneapolis Parks and Recreation Board (MPRB), and the state of Minnesota Legislature. Yet within each organization there were both staff and elected

leadership (commissioners, council members, mayor, legislators) and many other stakeholders. The outcomes were not driven just by these five individual agencies each acting like a rational individual, but by many other actions and interactions between and among agencies and individuals.

Organizational Process

The “Organizational Process” theory argues that decision-making and action revolve around bureaucratic organizations – agencies within government – that rely upon “standard operating procedures” (known well in bureaucratic organizations such as the military as “SOPs”) for much of their work. An SOP-based answer to the question “why?” is, “because we always do it this way.” SOPs are fine for typical and often repeated conditions but ill-fitted to more unique situations and contexts. Failing to adapt SOPs to different and sometimes inappropriate contexts without too much questioning can lead to real problems. Here is a “we always do it this way” example from the Cuban Missile Crises: The USSR’s bureaucratic missile base planning department relied on SOPs and designed and built a standard-issue Russian Missile base on Cuba – missiles here, transports here, launchers here, storage sheds there, barracks over there. It is literally a cookie-cutter pattern.

The problem is that from 70,000 feet up in a U2 spy plane, all Russian Missile bases the world over look the same and the US intelligence analysts who review the photos taken from

the plane's cameras know that pattern when they see it. A creative thinker in Russia might have said "hey, let's make this missile base look different and maybe try to hide it since it will be so much closer to the US and they will know what it is when they fly a U2 spy plane over it." But when organizational processes and SOP's dictate, there is no room for creativity, so despite Nikita Khrushchev's bold idea (missiles 90 miles from the continental US – that should change the balance of power!), it was effectively defeated by a bureaucratic apparatus over which even Premier Khrushchev had little power.

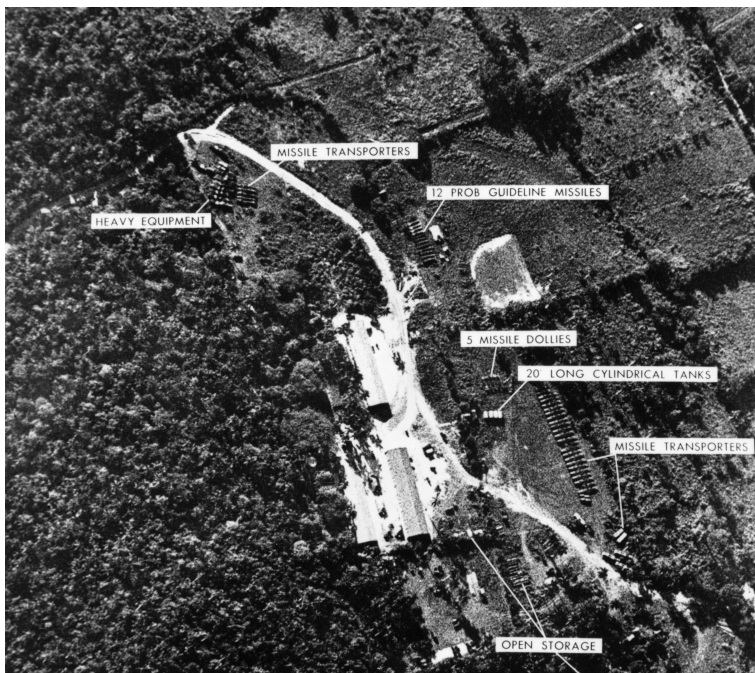


Figure 54. Soviet bureaucrats using SOP's designed a missile base that looked like any other cookie-cutter Soviet missile base, inadvertently ensuring that it would surely be discovered.

Lots of the public realm is streets and sidewalks and public

works departments all over the world have SOPs. That said, public works people are sometimes willing to try new things (really!). But on the other hand, just because the mayor (or Khrushchev) says “I want it this way” doesn’t mean it will happen that way.

Example – Minneapolis Signal Poles, Part II

I previously mentioned how on the Nicollet Mall project, the Director of Public works gave the team permission to design signal poles that were not painted green and yellow. Two years later, the shop drawings for the poles were passed through for review prior to actual fabrication. This is a routine bureaucratic step where the architect, lighting consultant, engineer, and client (the city lighting department) review and make any red marks to the fabricator’s detailed drawings to make sure that they are providing what was ordered before the material gets produced. One team member who had been around during design, two years before, happened to be in the room when some staff had off-handedly been discussing the fact that the lighting department guys had marked up the drawings to require yellow and green paint. They were not trying to be purposeful or insubordinate, they just did not know or remember – and it was their SOP to do it that way. They probably thought someone had forgotten to specify the green and yellow paint and they were correcting that mistake. No one else there had been there two years before and so that team member said, “wait, they are not supposed to be painted that way” and the drawings

were corrected. If that one person had not been in the room that day, the poles would not have been what the city leadership and all of the stakeholders who had worked on the project for four years had wanted to see on the project. If you believe that details matter, you can begin to imagine how this kind of thing can happen – all the time.

Governmental Politics

Finally, the “Governmental Politics” model focuses on the politics and negotiations that occur between individual political leaders within governments and it assumes that much of the action is driven by a handful of key individuals with their own unique perspectives and objectives as well as personalities, egos, and interests – for example staying in power. Khrushchev put missiles in Cuba, Castro encouraged him to do so, and Kennedy responded to the Soviet Union’s aggression with a naval blockade.

In fact, Kennedy and Khrushchev used a back channel – a Russian operative speaking through a close aid of the Kennedys – to carry communications between the two of them because as the days passed, they both became increasingly at risk of losing control to their own governments. Khrushchev wanted to find a way to get out of the mess he had created but he did not have support from the politburo, which was becoming increasingly hawkish as the days passed, so he needed Kennedy to help him find a face-saving solution to offer to his colleagues.

In the end, Kennedy agreed to remove some obsolete

missiles from Turkey – on the edge of Russia – which gave Khrushchev the appearance of a win and the political cover he needed with his own government to remove the missiles from Cuba. In this model, individual political actors with lives, careers, and their own perspectives and interests drive all of the action and the decision-making.



Figure 55. Nikita Khrushchev, Fidel Castro, and John F. Kennedy in the fall of 1962. “55 Years Later: Lessons of the Cuban Missile Crisis,” American University School of International Service, 3 November 2017, <https://www.american.edu/sis/news/2017/11/03-55-years-later-lessons-of-the-cuban-missile-crisis.cfm>, accessed August 9, 2019.

Example: Find the Money

On a recent local project, some members of the business community led by one business leader had promised to raise a certain amount of funding for a public-private project. They had not yet met their goal and it began to look like the city would have to

make up the difference (the city already had committed a large share of money to the project based on the promise of private fundraising). The city staff person running the project briefed the Council Member who then had a lunch meeting with the business leader where it was made clear that the city's share depended upon the private share being fully raised. Those two people had their reputations at stake and wanted to see the project successfully completed, so they brainstormed and thought of several more potential donors. They went together to ask those potential donors and one of them made a significant gift while several others gave as well, effectively completing the raise. In this case, the key individuals who had been publicly promoting the project had reputations to protect, egos, and a shared interest in seeing the project successfully completed and had to work together to find a solution – and they did.



Figure 56. Leslie Gilbert Illingworth's "JFK vs Khrushchev: Cold War Political Cartoon," was published in the British Newspaper, the Daily Mail, October 29, 1962. Image from <http://glikennedy.weebly.com/arm-wrestling.html>, accessed August 13, 2019.

Allison's three lenses are just as useful for viewing local political action – and projects – as they are for considering foreign affairs. So, for example, a typical project may have this combination of these three types of actors:

Rational Actor	Organizational Process	Governmental Politics
The City	Mayor's Office	Mayor/Mayor's Chief of Staff
County	City Council	District Council Member
Park Board	Public Works Department	PW Director
State	Parks Department	Parks Director
Federal	Finance Department	Finance Director
Transit Agency	Planning and ED Department	Director of Planning & ED
Chamber of Commerce	Chamber Committee	Committee Chair
Big Corporation	Big Corporation's Foundation	CEO of Big Corporation
Neighborhood Association	Neighborhood Z&P Committee	Vocal nearby neighbor(s)
Design Firm	Design Firm/Subconsultants	Lead Designer
Media	Star Tribune, WCCO TV	Journalist
Users	User Groups/Organizations	Actual Individual Users

In the work of implementing any public project, you may find it helpful to think in terms of all three of Allison's lenses. First, which government(s) and private organization(s) are involved and what are their roles and powers? Second, which agencies – the staff doing the work – are responsible for executing the project and what are their SOP's and bureaucratic cultures? Third, who are they key people involved and what are their professional and personal interests in and beyond the project? And last, once you have answered those three questions, how do you overlay the answers to create a picture of who's doing what and why? How can you use that three-dimensional political picture help you to plan for and implement your project?



Figure 57. Biking across Peavey Plaza. Author.

CHAPTER 5 - VISION

5.1 Vision

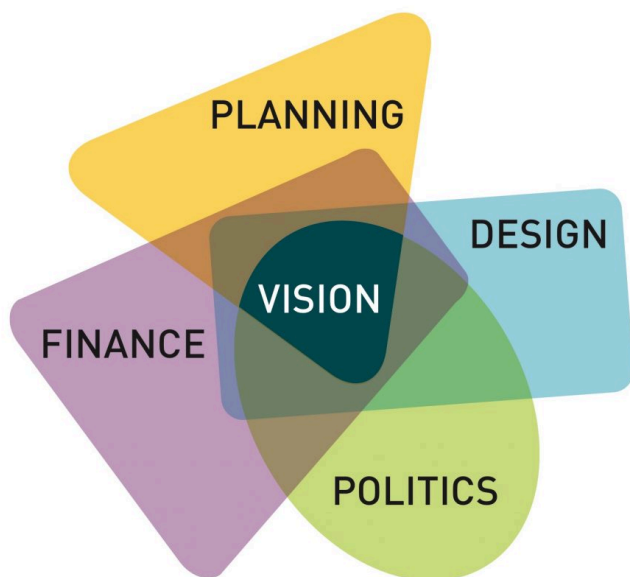


Figure 57. Planning + Design + Finance + Politics = Vision

Some concluding thoughts

The title of this manual includes the words, “field notes,” which are, by their very nature, incomplete. While I am fully confident that the model and framework I have introduced here is broadly applicable to other locales and to other types of projects, it will require interpretation and adaptation to be of use to other practitioners. Further, there are several topics that I have not covered enough here but that I think need to be recognized and studied further. Below are some summary

comments to the text and a few thoughts on subjects that warrant future consideration.

Project Planning

How you finish has to do with how you start:

For those interested in the successful implementation of a public realm project, the most important thing you can do is to “plan the work and work the plan,” every single day, from the very beginning of a project’s inception through completion, start-up, and ongoing use. Every day you will get a new piece of information that will affect the budget, the schedule, or relationships between stakeholders. You must constantly add those little pieces to your plan, revise, tinker, and change course. You may go three degrees left or two degrees right, but you have to keep moving forward while adapting to new forces and information: Always forward, never straight. Your plan is a work in progress that will change every day, if you are paying attention.

Project planning as a collaborative effort:

Project planning and implementation should be treated like an internal form of community engagement for the project team. You must demonstrate to your team members, partners, and stakeholders how you plan to implement the project. Then you must seek and incorporate their feedback, and continue to communicate with them along the way. Involve everyone in your planning, and give everyone ownership of the plan. This also makes it harder for people to say, “I told them it would never work.” The best situation is for the entire project leadership team to own the project plan – that increases the chance that everyone will stick together when the going gets tough, rather than fragmenting and blaming one another. As Ben Franklin said, “We must, indeed, all hang together or, most assuredly, we shall all hang separately.”

Anticipate problems:

Woody Allen once said, “just because I’m paranoid doesn’t mean everybody’s not out to get me.” A successful project manager is a paranoid project manager. You have to try every day to see around the corners, anticipate problems, and resolve them before they get too big. You will still have blow-ups that you did not anticipate and that will be hard to control, but if you anticipate and tamp down most of them before they happen, you will still have the energy to deal with the few that do grow into larger issues. If everything becomes a problem, you will always be distracted and exhausted and confidence in the project will shrivel up.

Know where you are going:

I understand that when learning to ride a motorcycle, one of the first things you are taught is to look in the direction that you want to go, because that is where you will go. So always be looking down the road and toward the goal (not to the right and off the edge of the cliff).

Design

Consensus over Genius:

There is a long tradition of the “solitary genius” model of design, where a single, brilliant, highly talented designer develops a vision for a place with little or no input from the client or users. This model is flawed in almost all cases and it certainly does not work with public projects, where the expectations for genuine engagement are so high. Indeed, design and many other processes and products are almost always improved through collaboration and the contributions of many people and perspectives. Numerous research studies have shown that groups making consensus decisions outperformed their most proficient group member in almost all cases of decision making. Consensus is the best approach

for design and particularly for design of the public realm, but it is also important for the design of all of the plans and processes, ranging from schedule and work plan to planning for communications with the media.

The Cultures of the Professions:

As groups, the various design professions that create our public realm have distinctly different cultures. The lead designer of a public realm project might be an architect for a building, a landscape architect for a park, or an engineer for a street, but on some projects, two or three may play key roles in the design. The style of the lead designer, however, will be based on their training and experience and on the ethos of their individual profession. What follows are some personal observations on how the design professions differ, distilled into simple stereotypes.

Architects:

Architects are concerned with form, style, composition, materials, and program, as well as use and budget. High Design architects are interested in seeing their individual creative visions realized and are often less open to client or user feedback. Service oriented architects are lower ego and focused more on solving the client's problem by using feedback from many people to understand and improve upon the design. Architects who typically do private sector projects sometimes find that public work (like public realm projects) presents new challenges in terms of the sheer volume of meetings, the politics, the complexity and uncertainty of the stakeholder engagement process, and how many different opinions must be genuinely heard, acknowledged, and integrated into the design.

Landscape Architects:

Landscape architects are trained to think in terms of systems – soils, water, landform, vegetation, materials –

and many of them consider people, users, and clients to be another, equally important system that must be analyzed and understood. Some landscape architects focus on private or institutional work but others focus on public work because public projects are often large, important, prominent, interesting, challenging, and they command larger fees. LA's who have done a lot of public work understand public process, politics, PPPs, project funding and fundraising, and can be good partners on public realm projects. Like architects, some landscape architects are High Design types but even they understand that the project must work for the users and the client.

Engineers:

Engineers are typically dispassionate, low-ego problem solvers who see much of their work as using their expertise to provide technical solutions to technical problems. There is more art and judgement in engineering than others may realize and high-level engineers are often balancing subjective matters, funding, politics and stakeholder concerns. Public works engineers must often make difficult decisions with high cost impacts in real time, sometimes in response to a failure or an emergency. Still, many engineers are just as happy answering a question with a number that is the product of a calculation.

Finance

Where will the money come from?:

The condition and quality of the urban public realm hinges on money. There are several obstacles to the creation of an equitable, complete, and connected public realm, the first of which is the general lack of funding that is due largely to the

long-running era of “no new taxes” that began with California’s Prop 13 in 1978. Lower taxes means reduced public spending, and for public realm projects, an increased reliance on public-private partnerships, which leads to three related challenges.

Challenges with the PPP Model:

The first challenge is that there is only so much private sector capacity to fill gaps previously filled by government, so projects will compete with one another for scarce public and private dollars and some will simply go unfunded and will not be completed. More important, need and fairness may not be the deciding factors in which projects are completed. A second and related problem is that PPP projects tend to be concentrated in downtowns and wealthier urban and suburban centers where there are motivated business leaders and wealthy private individuals who can bring funds to projects they are interested in seeing implemented. This means uneven funding of the public realm across the metropolitan region. Third, public-private partnerships inherently grant significant discretion in the decision-making processes related to projects to a few private business leaders and funders.

Fairness and Equity in the Provision of Public Realm:

Despite what you think about big government and high taxes, when taxes are low and PPP becomes the only way to provide goods and service above a very basic level, that means a small group of private individuals and business leaders may end up playing an outsized role in deciding where spending will occur and what the projects will look like. This raises questions about the equitable distribution of resources throughout the community and about the function of democracy itself. There is a longstanding idea that, in America, business and government are each too weak alone to be effective and therefore need one another: Government wants business to invest, while business wants government to offer a favorable

regulatory and tax regime.¹ The question of how much government must rely on business – and who leads major initiatives – is like a pendulum that swings back and forth based on tax levels: High taxes and resources gives government more say; low taxes gives business more say. In our current low tax/high-PPP environment, private sector business leaders and individuals have significant influence over what the urban public realm looks like.

Politics

Equitable engagement:

An ongoing struggle for planners and designers who hope to complete public realm projects is: How to get all different types of community members engaged in the process? If a park is meant to serve all city residents, how do you get input from low income community members who live farther away and are too busy with work and child-rearing responsibilities to be able to attend a community meeting? Technology has made it a lot easier to use on-line surveys and advertising in small community newspapers and media outlets may draw a few people to a meeting but the challenge remains. Different projects require engagement from different types of stakeholders but when it is important to hear from the community members and residents, you must figure out how to meet people at a time that is convenient to them, on their ground, and on their own terms. One engagement expert with experience in lower income communities recommends holding meetings in churches, when people will be there for services, and bringing food.

1. See for example, Elkins, Stephen L., *City and Regime in the American Republic*, Chicago: University of Chicago Press, 1987.

Increasingly sophisticated activist community members:

One of the most interesting challenges facing urban public realm projects is the growing sophistication of the public and their rapidly increasing expectations for a larger and deeper role in engagement. One planner recently described a situation where a neighborhood group insisted on being allowed to actively participate in the drafting of design guidelines for a development project, despite this being a very technical task traditionally completed by planning and design professionals. The planner's concern was that there is potential risk to all parties when members of the public attempt to play a leading role in a type of work that requires genuine training, knowledge, and expertise that they lack. This story highlights another larger problem, which is the ever-growing lack of confidence in "expertise" generally in society and particularly with government employees and civil servants. Sometimes people just don't trust government and don't believe that government employees actually know what they are doing, are acting in the community's best interests, and have critical skills that the average interested citizen lacks. More so than ever before, the engagement process is dominated by increasingly interested and confident citizens who distrust experts and overestimate or overvalue their own knowledge, skills, and expertise.

Social media:

A related challenge is the role that the media and social media play in publicizing, promoting, criticizing and otherwise influencing projects. Motivated individuals and interest groups have become increasingly sophisticated at using social media to shape and in sometimes distort discussions around projects. The news media publishes or broadcasts dramatic stories that sell advertising space but that may not accurately represent the situation. These types of stories often require the project team members to scramble in response and attempt to get the facts straight even after the story has already gone viral and

the critical comments have started to pile up. Worse are the comments people leave at the bottom of online news articles. Planners and developers know not to even read the comments after a particularly negative story.

The tyranny of the minority:

While some people may be genuinely interested in helping improve a project by suggesting alternatives that may improve the design or mitigate historic, environmental, traffic, and other concerns, some people who oppose a project completely may use those types of arguments as a “Trojan Horse” with the hopes of killing a project and avoiding change altogether. In these cases, a single individual or a small group may attempt to stop a good project that would provide benefits to the entire community. Social media has enhanced the power of the tyranny of the minority. One planner coined the term “weaponized historic preservation” in response to a situation where an interest group sought to kill a project with a weak but vocal appeal to a historic preservation argument.

Fatigue and burnout for planners and staff:

Last but not least, a growing challenge is staff and project team member fatigue. Some planners have even started to talk about the emotional abuse they suffer as a group.² Many planners grow used to taking criticism in public and community meetings and are good at compartmentalizing it, but some meetings are worse than others, people can become very uncivil, and planners often bear the brunt of the public's anger and fear. The risk is not just to the mental health of individual planners but also to our government institutions that rely on talented staff with years of experience. If turnover

2. See for example, “Let’s talk about the emotional abuse of planners,”

Lisa Schweitzer, posted 7/31/2018. Accessed June 23, 2019.

<https://lisaschweitzer.com/2018/07/31/lets-talk-about-the-emotional-abuse-of-planners/>.

in planning agencies were to increase, cities could lose their ability to provide the very best service to the public. The same situation applies to all city, state, and federal level government agencies and the stability of our governmental institutions.

Conclusion

These are my thoughts on implementing urban public realm projects. Please let me know what you think generally, and what you think is unclear, missing, or just plain wrong. Send your comments to peter@peterhendeebrown.com. Thank you.



Figure 58. Piano on Nicollet Mall. Author

My sincere thanks to Kristi Jensen at the University of Minnesota Libraries, for her interest, optimism, and encouragement, and for taking a 100-page rough draft written in eight weeks and making it into a terrific looking book in just six.

Thanks also to Carissa Slotterback, Associate Dean of the Humphrey School of Public Affairs at the University of Minnesota, for indulging me by allowing me to teach a new course on the subject of the urban public realm. I also want to thank the thirteen students who were brave enough to sign up for the class the first year that I taught it, in 2018. It was a grand experiment and I think we all agreed in the end that it was both fun and worthwhile. My sincere thanks to Todd Austin, Mary Cutrufello, Katherine Dekrey, Muna El-Taha, Lusine Ghushchyan, PeggySue Imihy, Kowsar Mohamed, Katriona Molasky, Megan Reineccius, Kathleen Russell, Leoma Van Dort, Aaron Westling, and Ally de Alcuaz. I dedicate this book to them, and to all of my future students, who I hope will read it.

Last but not least, I want to thank Minneapolis City Council Member Lisa Goodman for introducing me to Chuck Lutz, the Deputy Director of the Minneapolis Department of Community Planning and Economic Development. Chuck hired me to work on the revitalization of Peavey Plaza in 2011 and that project led to many other great opportunities to help rebuild the urban public realm in Downtown Minneapolis. This book would not have been possible without that first opportunity and all of the projects and learning that flowed from it.